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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

ON

H.R. 4461 and 5426/S. 2536

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2001, AND FOR OTHER PURPOSES

Department of Agriculture
Food and Drug Administration
Nondepartmental witnesses

Printed for the use of the Committee on Appropriations

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, FEBRUARY 10, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:30 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Specter, Bond, Gorton, Burns, Stevens, Kohl, Harkin, Dorgan, Feinstein, and Durbin.

DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

STATEMENT OF DAN GLICKMAN, SECRETARY OF AGRICULTURE

ACCOMPANIED BY:

RICHARD ROMINGER, DEPUTY SECRETARY
KEITH COLLINS, CHIEF ECONOMIST
STEPHEN B. DEWHURST, BUDGET OFFICER
DOUG SHUMAKER, UNDER SECRETARY, FARM AND FOREIGN AGRICULTURE SERVICES

OPENING STATEMENT OF SENATOR THAD COCHRAN

Senator COCHRAN. The subcommittee will please come to order.

We are under some tight time constraints this morning, and I apologize immediately to the Secretary and his colleagues who are here to present the President's budget request to us for our review this morning.

We have a vote that is scheduled to commence on the floor of the Senate at 11 o'clock, and that gives us a chance, maybe, to make some opening comments and hear from the Secretary, and probably we will not have a chance for many questions before we have to go vote.

So, I am going to abbreviate my comments, and if we start on time, that may also give us a head start on those who might have arrived a little later. I know there are other Senators who are going to come over for the hearing. With everyone's cooperation and understanding, we will proceed.

Let me just make a couple of observations about the budget request as I have reviewed it. It seems to me that the things we should notice right off include the fact that the President is asking

for discretionary appropriations from this committee that will amount to a 9 percent increase over this year's spending level.

And one other thing that I noticed right away is that the budget request includes proposals for the Congress to impose user fees, which in my view, user fees are new taxes in disguise, of $568 million. The people who are going to pay these are the producers of food and agriculture products, the processors, and the handlers. The grain inspection process will be hit, among others.

Another thing that strikes me as noteworthy as well, the budget includes $153 million to create the New Delta Regional Authority to assist the Lower Mississippi Delta region.

This proposal includes $30 million in new resources to create the new authority, and the definition of how the funds are going to be spent is very vague.

Now, there is a phrase that I remember from law school where something could be "void for vagueness". If there is any truth in that, it may be reflected in the description of how the funds are going to be used.

And I am suspicious, to be honest, about whether this is going to really provide the benefits that are advertised by this Administration to help lift those who are in poverty and who are having a hard time in the delta region of the United States.

I am not going to make any assumptions about who gets the money, but creating a new authority with $30 million sounds like a lot of money to me to hire people to help others. You are going to be helped if you are hired, but if you are not hired by the new Delta Regional Authority, you are probably out of luck. That is my concern. I really hope the Administration will take a hard look at an alternative.

For example, using the resources at Delta State University, at Mississippi Valley State University, at Alcorn State University, where research is being done, where efforts are being made to educate, to try to help lead and other new initiatives that will uplift that entire region, I think the money could be better spent if it is given to those universities and those educational institutions where they have a proven track record of success, where they understand the problems of the Delta better than a Washington person who comes down there to run a program. And in my view, we would be a lot better off if that is the way that program is run.

There is another big concern that I have, and I think the Department of Agriculture is doing a better job than many other agencies of our government, and that is to break down these barriers to trade, trying to get to the bottom of the suspicions and the allegations that are being made internationally about the dangers of our seeds and our food products that are being exported all over the world because of genetic modifications, because of changes that have been made through the use of technology to protect the environment, to promote efficiency, to try to deliver to the consumer a healthier product.

All the good things that have happened because of biotechnology and many other technologies that are used today in the production and processing of food and food products is all being lost in this din of controversy and criticism and demonstrations and riots in Seattle. I think the Department of Agriculture is doing a good job in

this area, and I hope the other agencies of the government will support the initiatives of this department.

So, I know you are working hard on this, Mr. Secretary, personally, but I want to encourage you. In my judgment, those are the problems in agriculture that are going to require additional spending this year, and you recommend here $11 billion over 3 years for new legislative costs, not new appropriations, I notice, but new laws, to provide a safety net initiative to protect producers from counter cyclical changes and the fall off of revenues and profits.

That is just a drop in the barrel as to what it is really going to cost if we are not able to overcome these misguided, uninformed, but nonetheless very real, attacks against American agriculture.

I ended up talking too long, but I feel very strong about those issues, and I hope that the other members of the committee will forgive me for those comments.

I am going to recognize senators in the order in which they came to the hearing.

Senator Dorgan.

STATEMENT OF SENATOR BYRON L. DORGAN

Senator DORGAN. Mr. Chairman, thank you very much. And I will be mercifully brief, recognizing that we have an 11 o'clock vote.

Mr. Chairman, I want to welcome the Secretary and his team. They are good to work with. They have had about as tough a job as you can have in this country, administering a farm program that, in my judgment, is not a very workable farm program during periods of collapsed prices. It simply does not provide the safety net necessary to give family farmers a chance to make a living during price collapse.

Again let me say to the team that Secretary Glickman has: You are working hard and we appreciate that. We need to give you some help. We need to change the underlying farm program.

Now, one feature in this proposal, Mr. Chairman, that I think is a significant step is a proposal that says, "Let us move towards some counter cyclical help for family farmers."

It is, I think, a move, following your statement, Mr. Secretary, that we need significant changes in the farm program. I think your budget proposal is a significant step in the right direction. Is it far enough? I do not know. But is it in the right direction? Absolutely.

And that is a breath of fresh air, and you are going to find a lot of support from people here on Capitol Hill especially people like me who feel that you are moving in the right direction.

We have, in many ways, the worst of all worlds at the present time. This committee, the Appropriations Committee, has had to pass two successive emergency bills essentially to cover the deficiencies in the Farm Bill, which is not designed to help, during price collapse.

And I just want to show one chart, that in my judgment, shows the combination of the worst possible results. This chart shows that at the same time that we have had less income for family farmers, we have had more spending by the Federal Government. I mean this is a combination of the worst of all worlds, more spending by the government and more misery for family farmers.

We can certainly do better than that. And I hope that your recommendation, in this budget saying, "Let us move to a counter cyclical approach to helping family farmers during tough times," triggers action here in Congress that says, "Yes, let us do that. Let us do it together."

PREPARED STATEMENT

This is not about Republicans or Democrats. There is no partisan way to go broke on the family farm. And when prices collapse, we need a decent farm program to help, and your recommendation is a step in that direction.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BYRON L. DORGAN

Rural America—particularly family farmers—is facing the greatest crisis in decades, but instead of recognizing the importance of those who grow our food, we've all but ignored their situation. The crisis, now in its third year, is driven by many things. But at its core is the current farm policy that has failed our producers. We've enacted two major disaster bills to try to help as many producers as we could make it through these horrible times with no safety net. And yet, there are those who still refuse to acknowledge the failure of their policy and find something that will work.

We've been told that the Freedom to Farm program is fine, and family farmers can reply on Congress to pass disaster programs to prop up income. That is simply illogical. In 1998 and 1999, government payments to producers exploded and net farm income still decreased.

I've held the first in a series of hearings to outline the impact this failed policy has had in rural America. These hearings are necessary for a variety of reasons, but foremost among them is the continued refusal of the Senate Agriculture Committee to schedule hearings. The Chairman of the House Agriculture Committee acknowledges there are serious problems with the program and has scheduled such hearings. Family farmers certainly know it has failed. And now, the President, speaking through the Secretary of Agriculture, has acknowledged that the program has failed and must be re-written.

In response, I plan to soon offer a farm proposal that will act as a counter-cyclical safety net. The administration has offered a similar and immediate response.

In its elemental form, any successful plan must target family farmers through counter-cyclical methods to help them in times of low prices. Conservation programs must be addressed and crop insurance must be improved to eliminate abuse and fully compensate producers for losses. Finally, a plan must include tools for rural communities to succeed and reap the benefits of our rolling economy. The Administration's plan includes these elements, and though it must be expanded to be truly beneficial and successful, the plan is a good start.

This initiative recognizes that Freedom to Farm has failed and underlines the need to provide immediate replacement. The Administration lays out a framework for assistance. Now we need to match it with a substantive plan.

PREPARED STATEMENT

Senator COCHRAN. Senator Burns.

Senator BURNS. Mr. Chairman, I have a prepared statement, but in the essence of time, may I submit my statement, and as well include my comments in the question and answer?

Senator COCHRAN. Without objection, your statement will be printed in the record. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF SENATOR CONRAD BURNS

Mr. Chairman, thank you for holding the hearing today in such a timely manner. It is only February 10 and you have started the ag appropriations process rolling. I commend you for starting the process early. I know that Montanans are anxious to see what we can do to help agriculture this year. I would also like to thank the Secretary and other witnesses for coming to appear before us today.

I have some real concerns with this budget. In another year of projected bad prices for agriculture, I am concerned that this budget was put together without any input from Congress, or from producers. There is an obvious failure to implement many of the focus areas that farm-state senators have been consistently pushing for. There are cuts to export programs, to Rural Utilities, to APHIS and to ARS. These programs have been a focus for funding to assist agriculture for many years.

First of all I don't understand why this administration is asking for less money than last year. It is abundantly clear that prices are not going to be better for farmers this year. Emergency spending was a major portion of the expenditures last year. It is time to take a close look at where the markets are, and decide what we are going to do to actually help the producers who are faced with low commodity prices.

I also have some major concerns with the new Farm Safety Net USDA is proposing. I'm glad the president has come to the table with a proposal but a $30,000 cap on payments is ridiculous. How can producers support their families and stay in business on $30,000? The answer is: they can't. 18 percent of producers in this nation account for 85 percent of production. I find it hard to believe that this proposal won't hurt more producers than is currently anticipated.

$1.3 billion for conservation in the farm safety plan is a fairly large increase over last year's budget. I am hopeful that this is not a move to lock more land out-of-production or to promote an environmental agenda that is not in the best interest of the agricultural community. The Administration's budget includes $236 million as part of the Land's Legacy Initiative. Of that, $130 million will be used to acquire lands for recreation, wildlife habitat, & watershed protection. A portion will be used to establish & expand community forests and open spaces. The "A" in USDA stands for "agriculture"—not "acquisition of lands". Setting aside such sums of money for purchasing land for wildlife habitat is not my idea of assisting our producers.

To add to that, these new programs increase the need for FSA staff. Without a significant price upswing during the upcoming 12 months we will again see a high level of activity in FSA's LDP and price support programs. Also, as part of the farm safety net initiative, CRP acres will be increased from 36.5 million acres to 45 million acres, meaning there will be more contracts to administer. What's more, this administration is also proposing a farm facility loan program. These programs will accomplish nothing with the current staff levels USDA has estimated.

Nearly every export program was cut. The Public Law 480 program was cut drastically as was the Section 416 program. The export subsidy program shows a decrease in funds of $154 million. At a time when we are fighting for a place in the world market why are we cutting funds for important export programs?

Farm-states like Montana depend on export programs for their agricultural economy. My farmers and ranchers need to have these markets open. They have been virtually cut off from over 10 percent of the world market, due to sanctions and under-funded and under-utilized market development programs. The disregard by this administration to use these programs allows our competitors an open door to those markets.

In times like these our producers need every available marketing option open to them. We cannot afford lost market share. The Market Development Program (MDP) and the Export Enhancement Program (EEP) especially, provide much-needed help to farmers and ranchers to create new product markets. Let's use the tools we have.

Wildlife Service funding was decreased again this year. I have been trying consistently to get more funding for predator control. Year after year, this administration takes it away. The re-introduction of the wolf has caused severe predator problems in Montana. Yet, I had to include line-item funding in the budget last year to take care of my livestock producers because the USDA won't fund the clean-up for the mess they made. I am more than a little frustrated to see that this administration continues to disregard the well-being of agricultural producers for predator control. Not to mention, that to fund this program would improve wildlife habitat considerably. The coyotes and wolves continue to kill not only sheep and calves but deer and other wildlife as well. We don't need more conservation programs to save wildlife. We need to fund predator control.

I have been a major proponent of bringing telecommunications to rural areas. Bringing Internet access to Montana farmers and ranchers increases market opportunities. It provides valuable information on agricultural research. A vast amount of information is made available to better their farm operations and improve their bottom line. The Internet is becoming an increasingly valuable tool for agricultural producers and Rural Utilities Service (RUS) funding is an important part of that. Farmers and ranchers cannot afford to take the prices given them. They must utilize new avenues of marketing and expand their horizons. Telecommunications provides that service. Let's help them use it, not take it away from them with a cut in RUS funding.

ARS is this year trying to cut the funding I was able to include for the Northern Plains Research Lab in Sidney, MT. This funding is to be used for by three new scientists on plant pathology, irrigation and value-added crops. This funding is vital for innovation in agriculture. As I stated earlier, producers need new avenues and new methods to market their products. USDA, who is supposed to be a proponent for agriculture, surely doesn't want to take that away.

On that same note, the Economic Research Service (ERS) budget was also decreased. ERS provides important market information to agricultural producers. Many Montana producers rely on reports issued by ERS for cattle numbers and market reports. Again, the USDA is not giving producers a fighting chance to make their own way in the global market.

The Administration's budget suggests that there is strong support for USDA Civil Rights activities. Unfortunately, I find that very difficult to believe. The USDA has not proved their commitment to the civil rights issue. In Montana, we have cases that have been languishing at the Office of Civil Rights for years. These cases must be solved and they must resolved quickly. I am failing to see the action if this is indeed a high priority for the USDA.

Thank you again Mr. Chairman, I look forward to hearing some answers from the USDA, and more importantly to working with you in the coming year to improve the economic situation for the American farmer and rancher.

STATEMENT OF SENATOR ARLEN SPECTER

Senator COCHRAN. Senator Specter.

Senator SPECTER. Thank you very much, Mr. Chairman. I have just a very few brief comments.

And first, let me welcome my long-standing friend, Dan Glickman, we hale from Wichita, Kansas together. Our tenure in Wichita did not overlap. I left in 1942, and he arrived there——

Secretary GLICKMAN. In 1944.

Senator SPECTER [continuing]. In 1944 at the Saint Francis Hospital.

Secretary GLICKMAN. Wesley.

Senator SPECTER. Wesley Hospital.

Secretary GLICKMAN. Frederick County was blessed——

Senator SPECTER. I am not sure if they were blessed.

Secretary GLICKMAN [continuing]. Not by Arlen leaving, but by my coming.

Senator SPECTER. He has always been quick on the uptake. He beat me to the punch there again.

Two areas that I want to mention very briefly, and as usual, it is a very heavy morning. Secretary Slatter is testifying on Transportation, and Judiciary has some important matters on the agenda, and we have the early vote.

But I want to comment about the problems of milk pricing in my State, Pennsylvania, where the price per hundred weight is down now under $10. A year ago it was $17, in December of 1998. It was $9 plus in December of 1999, and those variations just make it impossible.

We have lost 300 to 500 farms in Pennsylvania a year in the time period of 1993 to 1998. We do not want to see America with

solely agricorps. We have a big regional battle between Wisconsin, Minnesota on one hand and area compacts. We worked out a compact for the northeast, but as a matter of fairness, it ought to extend to states like Pennsylvania. And we really need to find some way to deal with these cataclysmic variations in pricing.

The other comment I want to make is about the disaster matter. The Mid-Atlantic States suffered $2.5 billion in disaster last year. Pennsylvania had $700 million. While we had a farm bill of $8.3 billion in emergency disaster assistance, only $1.2 billion went for disasters, which included Hurricane Floyd and flooding in the Midwest, losses to livestock and fishery. And that again is an issue which we have to address.

I know that you are doing an excellent job, Mr. Secretary. Herculean efforts against so many, many problems, but I wanted to focus on those two problems which are really not just Pennsylvania problems, but national problems.

Thank you very much, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Senator Gorton.

STATEMENT OF SENATOR SLADE GORTON

Senator GORTON. Thank you, Mr. Chairman. I join with you in welcoming the Secretary of Agriculture whom I believe is not only highly competent, but energetic and caring. It is, therefore, with deep regret that I express my extreme disappointment in the budget that the Administration has submitted for the Department of Agriculture.

It seems to me to accelerate a trend which has already been too evident in turning the Department of Agriculture from a department interested in the producers and the produce of farms of the United States into another welfare department. We have significant increases in expansions in this bill for things like food stamps.

We have disguised the methodology of accepting the protocols through monies spent by the Department of Agriculture. We have empowerment zones. But what we do not have is a promotion that oversees the sale of our commodities.

You know, we, in the Pacific Northwest, have lost a substantial portion of our market in Pakistan for our wheat when the Foreign Agriculture Service told Pakistan it was not available when it was stacked up everywhere. We have a budget that continues to ignore foreign market development.

With respect to the farm safety net plan which has some positive qualities, it ignores minor crops. You helped these to a certain extent last year with that, but we have gotten no cooperation from the Department of Agriculture on it at all. And I am just increasingly frustrated that what we have is a Department of Agriculture that seems to be interested in almost everything other than agriculture itself, and hope that we can reverse that direction.

Again, the Administration has presented you with a great difficulty on university and locally oriented research, something you have always supported very strongly, and that the Department of Agriculture wants to centralize, if to do it at all.

So, I am afraid you and your ranking member, Mr. Chairman, have a great deal of work to do to turn this into a decent agricul-

tural budget. But I must say that my experience is that you have the competence and ability to do just that.

Senator COCHRAN. Thank you very much, Senator.

Senator Bond.

STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Thank you very much, Mr. Chairman. I join with my colleague from Washington in expressing our confidence that we will be able, in this committee under your leadership and that of Senator Kohl, to restore and write the priorities that this committee and the departments should be pursuing.

Mr. Secretary, I appreciate your being here today, and we do have many areas of mutual interest. I think everyone here understands the farm prices are very low. Congress has responded in preceding years with significant supplemental assistance, roughly $15 billion.

We hope conditions will improve, but I am not that much of an optimist to think they will, and we are going to have to respond again and we look forward to, and I hope to have more leadership this time, and more information from the USDA on the scope of the problem so we can craft the emergency appropriations relief in a manner that reflects the best information used and your offices can obtain.

One of the driving forces influencing market practices and market prices is trade. It was a pleasure to see you in Seattle. I know you were there. I managed to wash the pepper spray out of my face after a few minutes. I subsequently got behind Senator Burns, and I figured I would let him take the pepper spray, because he would be a better target.

Secretary GLICKMAN. I may just say he was with me the last time we were assaulted by somebody throwing bison guts on us. You do not want to stay too near him.

Senator BURNS. We draw a lot of attention.

Senator BOND. I have—Mr. Secretary, I have a very able former college wrestler, great athlete, who is my AG–LA and he was off at the store making photocopies when we got into the problems. So, we have had to train him on staying on task when we get into those situations.

But we did see there the kind of hysteria, the kind of impediments, that are being thrown in the way of trade, that are being thrown up by the Europeans to prevent competition, from better equipped, more technologically advanced American farmers. And the GMO nonsense is now being spread in the United States.

And I know, Mr. Secretary, you have spoken on behalf of the farmers, of scientists, of health professionals, and consumers of using the technology to provide these extraordinary benefits that biotechnology can provide for human, health and the environment, and we all know more sustainable production and more nutritious food, new medicines, vaccines and other energy and industrials products.

I have here a letter that I took to Seattle signed by over 500 scientists supporting biotechnology, and expressing their scientific confidence in the current regulatory scheme administered by FDA and EPA and USDA. The letter has a statement from the National

Research Council of the National Academy of Sciences saying that GM crops pose no distinct risk distinct from normal breeding.

The FDA has said the same thing in the Federal Register. FDA is not aware of information that would distinguish genetically engineered foods as a class of foods developed through other methods of plant breeding, and that the agency does not require that such food be specifically labeled to disclose the methods of development.

We have, for years, used hybridization and cross-breeding. That is an unspecific effort to achieve a favorable mutation. One could cross-breed a greyhound and a pit bull and get a dog that could not run and would not fight, but with genetic engineering, specific traits can be selected, and we can learn, we can have a certainty in advance what is being developed.

I also have a declaration here supporting biotechnology and endorsing the current methods of regulation signed by over 1,000 scientists including Nobel Prize winners James Watson and Norman Borlaug, and I have a policy statement from the American Medical Association endorsing biotechnology, urging physicians to be public spokespersons for agricultural biotechnologies.

And finally, even more interesting, an interview with Patrick Moore, a Ph.D. in ecology, admonishing that this new era where pagan beliefs and junk science are influencing public policy—he cites GM Foods as an example where policy is being influenced by arguments that have no basis in fact or logic. Dr. Moore was a founding member of Green Peace, and he has left that organization.

Nevertheless, we still see a vocal, aggressive, and in some cases, lawless group of advocacy organizations and competing businesses, as well as European protectionists who seek to discredit and eliminate biotechnology. And we have just seen that biotechnology can provide the nutrition that developing countries need through the insertion of the beta-carotene, Vitamin A gene into rice.

I am going to ask, for the record, a series of questions like, for example, "Is this a largely untested technology?" I would like your responses. I want to work with you on that.

And finally, as you may recall, I have contacted you again about the Foreign Agriculture Service office in Singapore, which is a linchpin in that country. I will be following up.

Mr. Chairman, I apologize for the length of this statement, but I want to be working very closely with the Secretary and the other regulatory agencies in this area in the years to come. Thank you.

Senator COCHRAN. Thank you, Senator.

Senator Durbin.

STATEMENT OF SENATOR RICHARD J. DURBIN

Senator DURBIN. Thank you very much, Mr. Chairman. I understand we are going to try to keep our remarks brief here so that we can be off to a vote in a few minutes.

I want to welcome the Secretary, my friend and former colleague, as well as his team. Secretary Glickman, you have done a great job, and I am glad that you decided to stay in public service and to perform this role, for all of us across America are concerned about the future of agriculture.

Over the last 4 years, freedom to farm has fizzled and failed. If I had to give it a grade, I would give it an F, and I voted for it. But I did not think I had voted for a bill, or a law, that was written in stone.

We have been spending more federal money trying to bail out farmers than ever in our history. Yet we in Congress refuse to take a look at the law that is governing these payments. And frankly, we lurch from year to year with emergency appropriations containing provisions which many of us will never be able to defend if we are put on the spot for specifics, instead of looking at the big picture.

Some of my colleagues believe trade is an important part of this. I do, too. But I think there are other elements. When a State like mine has reports from the University of Illinois that about a fifth of the State's 73,000 farms will not cover their 1999 operating expenses, and the majority will not make enough to cover family living expenses, this is a true disaster, because Illinois is a pretty strong state when it comes to farming. We usually do not catch a cold the first time around, and others suffer before we do.

So, I hope we can work on, perhaps, addressing some chances in freedom to farm that really will help farmers over the long haul.

The last point I would make, Mr. Chairman—and thank you for this opportunity. I just returned several weeks ago from Africa, and my visits there have had such dramatic impact on me, having seen the devastation of the AIDS epidemic.

[The statement follows:]

PREPARED STATEMENT

Food assistance that the United States is sending is critically important in dealing with what could be the greatest moral challenge of our time. And I also want to tell you that the agricultural research that we have been involved in Africa has reaped benefits far beyond what we can measure in continuing to provide foodstuffs for people who are living merely on the edge of life. I hope we can continue that. I have entered some legislation to move along that line.

I thank you for being here today. Thank you.

Senator COCHRAN. Thank you, Senator.

[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD J. DURBIN

Chairman Cochran, thank you for holding this important hearing this morning. I look forward to working with you and Senator Kohl on the fiscal year 2001 Agriculture Appropriations bill.

Mr. Chairman, it's always good to have Secretary Glickman before this Committee. I've had the pleasure of serving with him in the House and working with him in his capacity as Secretary and find him to be dedicated, energetic, and responsive. We're lucky to have him at USDA. Mr. Secretary, welcome back.

I would like to take a few minutes this morning to talk about some very important issues that affect the Department.

First, I am encouraged by the Administration's proposal designed to improve the farm safety net. A quick review of that proposal suggests that it would be a significant boost to Illinois farmers. In fact, it would mean more than $140 million under USDA's Supplementary Income Assistance Program, over $60 million for conservation programs, and more than $64 million in new risk management assistance for Illinois farmers in the first year alone.

Obviously, our farmers need help. According to a University of Illinois study, about a fifth of the State's 73,000 farms won't cover their 1999 operating expenses

and a majority won't make enough to cover family living expenses. Farm net worth is expected to drop about 15.5 percent on average. The Illinois Farm Bureau predicts that about 18 percent of Illinois farms will have negative 1999 net incomes and about 22 percent are in danger of going out of business.

Mr. Chairman, since 1989 the Federal Government has spent $27 billion in emergency funding for farm-related disasters, 60 percent or $15.9 billion in the last 2 years alone.

I think it's important for all of us to realize that the 1996 Farm Bill, Freedom to Farm, was not written in stone. It can and should be changed. I believe we must start now by reforming Freedom to Farm because clearly it has failed to meet the most basic needs of producers. Restoring the farm safety net, targeting payments to farmers in need, and ensuring that livestock producers are not left behind should be the first steps. And, Mr. Secretary, I believe you have opened this critical dialogue with your proposal.

I also believe that we should begin a bipartisan effort to expand markets for American agricultural products so that farmers can take advantage of the immense buying capacity of developing countries. And, reforming crop insurance should be on the top of everyone's "to do" list.

We must also work to broaden the market for alternative uses of agricultural products. More specifically, I hope that my colleagues in Congress, and the Clinton Administration, will make every effort to expand the role of ethanol in the reformulated gasoline program. Knowing what we know about MTBE, this should be a top priority. I believe expanding ethanol's role is a win for our farmers, a win for the environment, and a win for the rural economy.

We have a great deal to do and a very short year in which to accomplish these initiatives for rural America and our farm families. It's time for Congress to roll up its sleeves and get to work.

Now at the risk of repeating myself, let me mention food safety.

Our country has been blessed with one of the safest and most abundant food supplies in the world. We have the science and know-how to make it even safer.

Currently, our food safety system is fragmented with at least 12 different federal agencies, 35 different laws governing food safety, and 28 House and Senate subcommittees with food safety oversight. With overlapping jurisdictions, federal agencies often lack accountability on food safety-related issues.

As you know, I've introduced legislation—the Safe Food Act of 1999—that would replace the current fragmented federal food safety system with a single, independent food safety and inspection agency. This new agency would be funded with the combined budgets from the 12 federal agencies which currently have jurisdiction over food safety. A single, independent agency would create a streamlined food safety system and lead to improved enforcement of food safety and inspection.

I hope the Department will continue to explore this idea and work with me on ensuring that our food supply is the safest in the world.

Mr. Secretary, I want to take a minute to thank you and the Department for your fine work in Chicago and the surrounding suburbs with regard to the Asian Longhorned Beetle.

As you know, the City of Chicago and the State of Illinois have been battling these pests for over 2 years now. Both APHIS and the Forest Service have been invaluable partners in this effort. I'm pleased to see that the President's Budget includes $29 million, a fivefold increase in funding, for emergency efforts to fight Beetles in Illinois, New York, Vermont, and Pennsylvania. It is my understanding that Illinois may receive up to $7 million for Beetle eradication and tree replacement in fiscal year 2001. I know my colleague Senator Kohl from nearby Wisconsin is watching anxiously as the State and City continue to battle the Beetle.

Mr. Secretary, I'm concerned that the Department chose to recommend cutting a number of important ARS projects at the University of Illinois Urbana-Champaign and at the ARS lab in Peoria, in particular, regarding soybean diseases. Further, ARS does not include any funding for modernization efforts at the Peoria lab. I'll be working with my colleagues on this committee to address these omissions.

Allow me to touch briefly on Africa. As you probably know, I was in Africa in January and had an opportunity to see U.S. food aid programs in action. I was impressed and heartened by direct feeding programs as well as programs that sell U.S. food products at low cost to finance development projects. But I was overwhelmed by the impact of AIDS on Africa—particularly by the millions of children being left orphaned by the epidemic and the devastating impact on African countries' economies. I believe U.S. food aid could be used to target communities heavily affected by AIDS. I introduced a bill to target $50 million of U.S. food aid for nutritional assistance for people living with AIDS, for families and children affected by AIDS, and for development projects for communities heavily impacted by AIDS.

I would like to get the Department's views on the potential for U.S. food aid being used to help those children, families, and communities affected by AIDS in Africa and elsewhere in the world.

Finally, Mr. Secretary, I included language in last year's bill calling upon the Administration to specifically request funding in fiscal year 2001 to implement the U.S. Action Plan on Food Security. Instead, I found a 17 percent drop in Public Law 480 funding (from $1.23 billion to $1.02 billion), and no specific program funding for the Action Plan. I'm very interested in an explanation on this matter.

Mr. Chairman, again thank you for the opportunity to raise these issues this morning.

Senator COCHRAN. Senator Kohl.

STATEMENT OF SENATOR HERB KOHL

Senator KOHL. Thank you. Mr. Chairman, I am pleased to join you again as we review the budget proposal of the Department of Agriculture. It is apparent to me that this subcommittee will continue to face growing challenges. Initially the last 2 years, we have had to pass multi-billion-dollar emergency agriculture packages. This year, farm income is projected to fall again and again, but we will be called on to mend the farm safety net.

To help meet this challenge head-on, the Administration has proposed a spending program of approximately $11.5 billion through the next 2 years.

Mr. Secretary, when I looked at this package, I was stunned, for as you know, there is nothing of any significance for dairy. And, Mr. Secretary, this is not acceptable. Low milk prices and federally sanctioned price discrimination have devastated the dairy industry in my region.

Is it not an emergency that we have lost more than 10,000 dairy farms in Wisconsin since 1990? Does the Federal Government owe nothing to the family dairy farmers who you have beat almost out of existence with a skewed, anti-competitive Federal milk pricing system?

Now, I know that you worked hard to bring about modest reform for the milk market order system last year and to end the Northeast Dairy Compact. But, as you know, by the end of the year, the Administration accepted the complete revocation of those reforms and an extension of the Northeast Dairy Compact. And now you want help passing another multi-billion-dollar farm aid package that ignores dairy. Well, Mr. Secretary, not this year.

The Administration will have my support when it produces a farm package based on something other than what crops and regions it thinks are most politically popular. You will have my support when you bring up a package that is fair and redresses some of the grave wrong that has been done to honest and productive dairy farmers, and not until then.

The budget proposal before us deals with these and many more issues such as feeding programs for the poor and bases it on fair trade, food safety conservation and rural development.

These programs are not only important to Wisconsin, but to America's farmers. They are important to all Americans, and I certainly hope we can find a way to work together on all of this as the year progresses.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Senator Harkin.

STATEMENT OF SENATOR TOM HARKIN

Senator HARKIN. Thank you, Mr. Chairman.

Again, I want to join my colleagues in thanking you, Mr. Secretary and Mr. Rominger, and your team for the outstanding job you are doing. It is just superlative in the face of some real problems out there on the farms.

I will try to be as quick as I can. First, I want to applaud the Administration for its agriculture conservation proposals that we see in the budget. Particularly the funding for the conservation security program, which I proposed, and I think this could really be an area where we can really put some more safety nets under those farmers out there in a good, beneficial manner for the country.

The increase in the wetlands reserve program, the EQIP program, and the farm land protection program and the wildlife habitat incentives program, all great. I applaud you for putting that money in the budget.

Secondly, the bio-based product and the bio-energy initiatives at USDA and DOE and the proposed tax incentives in the President's budget, again, very positive. Again, I hope that you will continue your strong support and your department's strong support for those.

How we can marry DOE and USDA together to provide for more bio-based deals similar or like the project that we have in Iowa, I will not go into that.

I also strongly support the $9 million budget request for designing a bio-containment facility at the ARS's National Animal Disease Center in Eames, Iowa. This center, this national center, is a premiere center for research of diseases of animals important to agriculture.

You, Mr. Secretary, and I toured that, as you know, in December. And this $9 million item is a first step in upgrading the ARS and the APHIS veterinary facilities which are badly—I might say, Mr. Chairman, I would like to invite all the Senators to come out and look at this national asset that we have out there. It is old. It has been there 50 years now, I guess, 40 years, something like that—it is the 1960s, I am told, so about 40 years.

And they are scattered around and they just need to be upgraded, and I applaud you for putting that in the budget.

Again, I just want to reiterate, back to what Senator Durbin just said. I am at this point with Catholic Relief Services. And I have watched them at work from every place from East Timor to Africa to Macedonia.

And again, the issue of food comes up. And they are working in places where they really need foodstuffs, and this is just one of the NGO's. The Mennonites, the Lutheran church, they are all doing great things out there.

There is certainly some way with soybeans, the surpluses we have in pork, in wheat, we are flooded with surpluses. And, as you said, Senator, these people are starving over there, malnourished, and we have got the NGO's, the people who do not charge an arm and leg, and with whom you can trust and deal, to deliver these services.

We have got to break this down some way, Mr. Chairman and Mr. Secretary, and get more food stuffs to these ND's that are out there doing a great job.

Thank you, Mr. Secretary. Thank you.

Senator COCHRAN. Thank you, Senator.

Senator Stevens.

STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Mr. Secretary, I look forward to having a discussion on specific items that affect my State in particular, as these hearings go along.

But I have come today to make a suggestion to you. I was a solicitor in the Interior Department in the Eisenhower Administration. We helped work out, at that time, some land exchange programs with the Forest Service and BLM, which led to expanding lands for Tucson and Phoenix and other places that had real problems about expansion.

This year, we are going to spend $450 million, according to the President's budget, to put land back into federal ownership. But there is substantial land out there that has substantial value that is adjacent to many Western States that is owned by the Federal Government, and actually, it can have no further Federal purpose.

I would urge you to go back and look at the concept of exchanging lands owned by the Federal Government, but not necessarily by the same agency.

I was just visited by people from Alaska. This is a little particular issue, but some of the places in southeast Alaska do not have enough land to put in air strips. They used to be dependent on amphibious planes.

Now, most of the planes that are being used are not amphibious and they need air strips, but they have to fight with the Forest Service to get land. I think we ought to find some land that the Forest Service wants to acquire and exchange it.

But basically, I would urge you, we have got to stop spending $450 million a year to, according to the Administration's budget, put land back into Federal ownership. The Federal Government already owns too much land, in my judgment. And we are land poor in the West as far as the States are concerned.

I would urge you to think about some way to alleviate this strain on the budget from this annual increase the President is asking for in terms of dollars to acquire land.

Now, I know you do not have a chance to answer, but my point of view is that we ought to use land exchanges to the maximum extent possible and only use cash when it is absolutely necessary.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Stevens.

Mr. Secretary, I thank you for your patience in listening to our comments and observations about the President's budget request. You may proceed.

STATEMENT OF DAN GLICKMAN

Secretary GLICKMAN. Okay. Thank you very much, all of the Senators. I appreciate your kindnesses.

My team is here. Deputy Secretary Rominger is here, of course, with Keith Collins, our Chief Economist. Steve Dewhurst, our long standing and perennial budget director—and I say that in a positive way, because perennials always come back and look better each year—Gus Schumacher, who is our Under Secretary for Farm and Foreign Agriculture Services.

I have a long statement, which will be part of the record, and I just thought I would make a couple of comments and perhaps address some of the comments that were made, because I know you are going to have to leave fairly soon.

FARM ECONOMIC SITUATION

It is clear the farm economy in many quarters is in serious shape, and what we have done in our budget proposal is to give you, early on, an idea of what we can do to augment the current farm bill—I repeat that, augment the current farm bill, so that we can have early debate on what not only the emergency proposal ought to look like, but what the next farm bill ought to look like as well. What we have proposed is $11.5 billion package of assistance containing three general pieces.

FARM SAFETY NET PROPOSAL

One is a counter cyclical income assistance piece that will help producers when times are bad, but will not trigger-in relief necessarily when times are good. That is different than the Freedom to Farm Bill. While we propose doing this in an emergency context, our proposal is on budget and paid up, as you know, quite frankly, I would have liked to have seen more money in the proposal.

We will work with Congress on that, but given the fact that this was presented in the context of a balanced budget proposal of the President, we did the best we could under the circumstances, and we want to work with you on the numbers that are there. But the principle of counter cyclical farm assistance, we think needs to be part and parcel of both the emergency relief as well as the next farm bill.

In addition to that, we proposed a significant conservation piece, and it was based on an idea that Senator Harkin proposed. But what it does is to pay producers, not on a cost share basis, but on a direct basis, based upon certain conservation practices that producers carry out on their land to protect their resources.

The theory here is there is more to farming than just producing the crop. There is value in the land itself, so that we can continue producing crops for the next generations to come, so we have the significant conservation piece which values the land separately from what is produced on the land.

The third part is the risk management system where we propose additional funds. And just to comment on what Senator Gorton says, a major proposal is included here to get rid of the area-wide trigger in the non-insured assistance program under current law—this is particularly true on specialty crops—there has to be a wide-based geographical loss in order for an individual producer to get anything out of the program. We are proposing ending that with this proposal.

That will have profound effect, particularly in areas of the country which have significant individual losses, but may not have a massive hurricane or other widespread catastrophic loss.

We think that these three pieces I've outlined here, taken together will be helpful to the form section over the next 2 years.

DAIRY PRICE SUPPORT

We are also proposing that the dairy price support program be extended because it will end at the end of this year. Senator Kohl is right, there is nothing more for dairy producers, and we want to work with you on that.

Quite frankly I got burned last year when I tried to venture into the dairy debate, but there is no question a lot of dairy farmers are hurting.

The proposal we have put forward would just continue the dairy price support program, otherwise the price could fall considerably further. We would be glad to work with you on some additional dairy legislation.

In addition, we have frozen loan rates. They would have come down if I had not taken that step. There was a lot of pressure on us to reduce the soybean loan rate. I was not going to do it. I was not going to reduce any loan rates given the economic condition of agriculture.

FARM STORAGE FACILITY PROGRAM

We have also proposed to begin a new farm storage facility program. We used to have a program like that year ago. We give farmers low interest loans to build on-farm storage. Why? In this era of identity-preserved agriculture, GMOs, all the niche marketing, farmers should have the ability to store on farm, so they can be able to market on a more individualized basis. We think that this is also an important program.

So what we have got here is a targeted, national-in-scope program that will act as a bridge to the new farm bill, and we want to work with you on these proposals. You have challenged us, and I think correctly, we have got to put our money where our mouth is.

We have tried to do that within the context of the President's balanced budget, but we know that we will have to work with you on perhaps making modifications where necessary.

In terms of exports, I want to make a couple of comments there. Last year, the Department programmed 8 million metric tons of food assistance, the highest in the last 25 years. What Senators Harkin and Durbin said is correct, it is disgraceful that there is a huge number of hungry people out there, and we have resources available here to help.

EXPORT CREDIT GUARANTEE PROGRAM

Sales under the CCC export guarantee program exceeded $3 billion, and we have got to continue those efforts on the trade policy front. This budget provides about $5.8 billion for international programs including $3.8 billion for the CCC export credit guarantee program which can be increased if necessary. I want to repeat that

we will not be locked into that number internally within our CCC authority if we think more is necessary.

We are requesting, for a third year in a row, authority to use unspent EEP funds for food assistance and market development purposes. If we do not use the EEP money, we would like to be able to use it in other market development activities. We would like that kind of flexibility.

The budget also supports opening three new agricultural trade offices. And of course, we are trying very hard to get the WTO China Agreement through, because as you know, China has made an initial agreement with us to reduce their tariffs on our products to levels, in many cases, below the levels Europe has in place. This is something that is an extremely important part of trade policy and U.S. agriculture.

MARKETING AND INSPECTION

I am not going to go over everything, only a few critical things. In marketing and inspection, we have asked for additional monies to deal with mandatory price reporting, so we can implement that program beginning this summer. That is a high priority with many members of this committee.

We have asked for additional authority so we can have additional resources in our GIPSA market concentration activities concerning livestock and poultry. We have asked for significant additional money in inspection at the borders, as well as dealing with problems like citrus canker, Asian longhorn beetle, medfly, hog cholera. And we have asked that some of these funds be converted from CCC emergency spending to appropriated spending in the budget for the year 2001.

RURAL DEVELOPMENT

In the rural development area, our budget will support over $12 billion in loans, loan guarantees and grants and technical assistance, which is $1.3 billion more than the year 2000 for housing, waste and water programs, dealing with the digital divide that is part of the continuing support for rural electric and communications and funding for helping rural businesses.

RESEARCH

In the research area, the budget proposes an increase of 3 percent, funding these research activities at $2 billion, and a lot of that has to deal with the emerging threats from weeds, pests and diseases. Again, that invasive species problem is a very, very serious one.

FOOD SAFETY

In the food safety area, as you said, the budget does contain additional fees, and I am sure that we can talk about this as we have done every year since I have been up here. But in addition to that, we are increasing monies directed at the President's food safety initiative and enhanced implementation of the HACCP systems.

I just spoke to a group this morning about this, and the incidence of salmonella in poultry is down 50 percent since HACCP has gone

into place. Safe food sells. If people have confidence the food system is safe, they will buy it, and we have the safest food in the world.

A lot of these programs in the food safety area are geared to giving people confidence that the food is safe. And if they believe it, we can deal with some of the hysteria that is out there both domestically and on the international front as well.

FOOD NUTRITION

In nutrition, the budget provides for full funding for food stamps, child nutrition and WIC. Based on proposed legislation, the food stamp eligibility would be restored to over 200,000 eligible people.

For Food Stamp participants one of the things we are doing is increasing the value of their vehicle to make it easier to qualify for the program. It has not really changed much since the 1970s. It is still at around $4,600 per year, for the maximum value of their vehicle. A lot of working poor people cannot qualify in that kind of circumstance.

NATURAL RESOURCES MANAGEMENT

Management of natural resources has been mentioned before. The farm safety net proposes a new conservation security program, and we have additional funding for EQIP, technical assistance, the clean water action plan, as well as the global climate change and the land legacy program. An important piece is the bio-based fuels and bio-energy program, which we can discuss in detail.

CIVIL RIGHTS

We continue to work on our civil rights problems, as well as proposing $10 million for the 2501 grant program to reach out to help socially disadvantaged farmers. We are trying hard to improve customer service by streamlining and restructuring the county offices to support one-stop USDA service centers, but we have got to have the tools to do that, including the common computing environment, as well as other service center modernizations and e-Commerce-related capabilities for the Department.

PREPARED STATEMENT

I have indicated other things in my formal statement that we need for the whole Department, but in the interest of time, I just wanted to highlight those items as kind of a summary of the major items that need your attention.

Senator COCHRAN. Thank you very much, Mr. Secretary.

[The statement follows:]

PREPARED STATEMENT OF DAN GLICKMAN

Mr. Chairman, Members of the Committee, it is a privilege to appear before you to discuss the 2001 budget for the Department of Agriculture (USDA).

The President's budget proposes $66.4 billion in budget authority for 2001 for USDA compared to a current estimate of $72.3 billion for 2000 and $67.8 billion for 1999. Budget authority for discretionary spending, which accounts for about 25 percent of USDA total budget authority, increases slightly from $16.3 billion in 2000 to $16.7 billion in 2001. The request before this Committee for discretionary spending is $14.4 billion.

The Department's 2001 budget request provides the necessary resources that will enable USDA to meet its ongoing program responsibilities as well as focusing on some key Presidential initiatives. These key initiatives include:

—A new Farm Safety Net Initiative that will provide over $11 billion in additional assistance to the rural economy from 2000 through 2002. The initiative includes proposals for new legislation to provide supplementary countercyclical income assistance payments targeted to producers actually facing reduced prices and revenues and to reform the crop insurance program to provide better protection from production losses. Other legislative proposals include a new Conservation Security Program, expansion of the Conservation Reserve and Wetlands Reserve Programs and other conservation programs. This will strengthen farm income support for those producers most in need of assistance due to depressed prices and natural disasters while also stimulating achievement of major environmental benefits through better management of farmland.

—A continuing Food Safety Initiative for improving the Federal food inspection system from farm-to-table through better surveillance of foodborne illnesses and ways to combat them, strengthened Federal-State partnerships, and expanded research and consumer education. The budget includes increases of $27.5 million in five USDA agencies to support the Initiative.

—A Biobased Products/Bioenergy Initiative to expand markets for agricultural and forestry products to reduce U.S. dependence on oil imports, expand rural business opportunities, and cut our pollution and greenhouse gas emissions. The budget includes increases totaling nearly $90 million to support these activities.

—A continuing Lands Legacy Initiative that proposes $1.4 billion for a national program to protect great places and provide the tools for localities and States to plan for smart growth and open space presentation. Of this total program, $300 million would be allocated to USDA to carry out work by the Forest Service and the Natural Resources Conservation Service.

The budget also focuses resources on the following other high priority areas:

—Providing adequate funding for Food Stamp, Child Nutrition, and WIC programs, increased funding for Farmers' Market Nutrition program, new assistance for the Colonias, and legislation to improve child care food program management as well as make it easier for Food Stamp families to own a car and restore Food Stamp benefits to certain groups of legal immigrants.

—Meeting the urgent needs for water, housing and jobs in rural communities.

—Supporting research, education, technical assistance and inspection activities to improve agricultural productivity, competitiveness, and small farm viability; help solve pest and disease as well as environmental problems; and provide a safe and nutritious food supply.

—Expanding domestic and overseas markets through aggressive promotion and a reduction in trade barriers.

—Continuing an aggressive civil rights policy, providing for quality customer service and efficient program delivery particularly by county-based agency service centers, and effectively managing financial, human, information and other resources.

The Department also will propose legislation that could affect the appropriations process because of the discipline imposed on the 2001 budget. User fees for the Food Safety and Inspection Service, the Animal and Plant Health Inspection Service, and the Grain Inspection, Packers and Stockyards Administration are again included in the budget. Legislation is also proposed for a number of mandatory programs, including farm safety net legislation, which also provides for crop insurance reform, legislation to expand eligibility for the Food Stamp Program, and improve Child and Adult Care Food Program management, as previously mentioned.

I would now like to discuss the President's budget proposals, as they relate to each of the Department's mission areas.

FARM AND FOREIGN AGRICULTURAL SERVICES

The mission of the Farm and Foreign Agricultural Services area to secure the long-term vitality and global competitiveness of American agriculture has surely been tested by the tough times farmers and ranchers have been encountering over the past couple of years. While planting flexibility provisions of the Federal Agriculture Improvement and Reform Act of 1996 (the 1996 Act), strong export and trade policy programs, and other program initiatives already underway have helped many crop and livestock producers, it is clear, as the President indicated, that the farm safety net still needs to be reinforced.

The Administration and the Congress worked together over the past 2 years to provide emergency support for farmers in areas hit hard by declining prices and production losses. However, this emergency assistance has been expensive and not well targeted to those producers who need it the most.

The budget includes several legislative proposals for farm, conservation, and crop insurance programs, coupled with new initiatives to be undertaken using current authorities, which will provide $11.5 billion in additional assistance to farmers, ranchers and rural communities from 2000 through 2002. These initiatives to improve the farm safety net would provide about $7 billion in additional direct farm income assistance over this period. This includes proposed legislation for the 2000 and 2001 crop years to provide $5.6 billion in supplementary, crop-specific income assistance to producers of wheat, feed grain, rice, upland cotton and oilseeds suffering from low prices and revenue. The proposed legislation also includes an extension of the dairy price support program and a new program to fund livestock processing cooperatives to improve income opportunities for producers. The Administration's initiatives under current authorities will also include maintenance of maximum levels for marketing assistance loan rates for the 2000 crops, a new program of incentives to encourage increased use of farm commodities for biofuels production, and a new farm storage facility loan program to aid producers to expand on farm storage capacity to be better positioned to effectively market their crops.

Continued efforts to expand and improve programs which help producers manage risk will also be emphasized, and it will be necessary to work with Congress to further reform the insurance programs for crop and livestock producers. Over $1 billion is included for crop insurance and related reforms. This includes a proposal to make noninsured crop disaster assistance more accessible to producers by replacing the requirements for an area-wide loss before assistance can be made available to producers with a less restrictive disaster declaration.

Enhanced conservation initiatives totaling nearly $3 billion, a $1.3 billion increase over authorized levels for 2001 and 2002, including a new Conservation Security Program at $600 million per year for 2001 and 2002 are proposed. The conservation proposals are also a critical component of our farm safety net improvements to assist producers in maintaining environmentally sound practices during these economically troubling times. The budget proposes legislation to increase the Conservation Reserve Program (CRP) acreage cap to 40 million acres. It also promotes the continuous, non-competitive signup that has been underway to enroll land in filter strips, riparian buffers, and similar special conservation practices to enhance achievement of water quality objectives by providing additional incentives under current authority to enhance participation. The proposal also would expand other conservation programs funded by the Commodity Credit Corporation (CCC) but administered by the National Resources Conservation Service (NRCS) including the Wetlands Reserve Program (WRP), the Environmental Quality Incentives Program (EQIP), the Wildlife Habitat Incentives Program (WHIP), and the Farmland Protection Program (FPP).

These initiatives will serve as the basis for more permanent and effective assistance to help producers cope with continuing economic stress at less cost to the taxpayer. Unlike previous Ad Hoc (off-budget) emergency assistance enacted late in the year, the proposal is fully paid for in the context of a balanced budget. It is presented as a part of the regular budget process so that Congress can take action early in the year allowing farmers and their creditors to plan ahead. This proposal will enhance and improve the safety net during the remaining 2 years of the 1996 Farm Bill and provide a bridge to a new farm program. There also will be continuing efforts by the Department to work to expand opportunities for small farmers and others who traditionally have been under served in our farm programs.

Commodity Credit Corporation

Changes over the last decade in commodity, disaster, and conservation programs have dramatically changed the level, mix, and variability of CCC outlays. CCC outlays increased from $10 billion in 1998, to $19 billion in 1999, and are projected to increase to a new record high of about $27 billion in 2000. The increase in CCC spending for 2000 is accounted for by higher marketing assistance loan program outlays, expenditures related to various Administration initiatives, and emergency spending authorized by the 2000 Appropriations Act that provided about $9 billion in emergency assistance.

Projected CCC outlays for 2001 under current law are estimated at over $15 billion, including nearly $800 million for initiatives planned under current authority. Approximately $4 billion in additional CCC outlays would occur in 2001 based on the proposed safety net legislation.

Conservation program outlays account for a significant portion of CCC expenditures as well. The 1996 Act authorized direct CCC funding for CRP administered by FSA and several new conservation programs administered by NRCS.

CRP provides landowners annual payments and half the cost of establishing a conserving cover in exchange for retiring environmentally sensitive land from production for 10 to 15 years. The 1996 Act authorized the program through 2002 and set maximum enrollment in the program at 36.4 million acres. About 34.6 million acres in total will be enrolled in the program in 2001 up from an estimated 32.3 million acres in 2000.

Finally, the budget addresses problems with section 4 of the Commodity Credit Corporation Charter Act which caps CCC expenditures for computer equipment and section 11 which limits total allotments and transfers to State and Federal agencies for administrative support services to the 1995 expenditures level. The latter provisions impose significant restrictions on the availability of CCC funds for transfers and reimbursable agreements used to fund conservation technical assistance and other support services for the conservation, commodity, and export programs. The budget proposes an adjustment to these limitations to permit additional funds for the technical assistance needed to carry out the conservation programs authorized in 1996 as well as newly proposed programs.

By 2001, the amount available under the section 4 computer cap will be fully exhausted, preventing CCC funding of data processing and related activities needed to support efficient and timely delivery of FSA programs. If the cap is not raised, a portion of the appropriated funds for salaries and other expenses will likely have to be diverted to maintaining legacy systems thereby impacting staffing levels. The loss of CCC funds for information technology and data processing also will impede needed investment in streamlining and Service Center modernization initiatives, restricting the Department's investment in much-needed technology to implement ongoing business process reengineering efforts. USDA needs these investments to improve service to its customers and reduce program delivery costs, but the high cost of operating and maintaining the current legacy systems that serve our customers precludes investment in modernization without additional funding.

The budget for 2001 includes a legislative proposal to raise the limit on CCC expenditures for computer equipment by $35 million per year for the period 2001 through 2002. The increase in the multi-year cap is essential if CCC is going to meet its most basic ongoing computer operations and maintenance costs for the farm programs.

Farm Loan Programs

Traditionally, USDA's role in the farm credit market has been to provide a safety net for farmers who are unable to qualify for credit from private lenders. The Department supplies about 4 percent of farm credit. Private lenders, including the federally-chartered Farm Credit System, supply the rest. Although the amount of farm debt has been rising, the portion supplied by the Department is about half of what it was in 1994. The Department's farm loan programs help farmers who are experiencing financial difficulties due to adverse market and production conditions, as well as socially disadvantaged, beginning, and limited resource farmers.

Changes in market conditions impact the willingness of private lenders to make new loans. Thus, the number of applicants seeking USDA program assistance increases dramatically during an economic downturn. This occurred in 1999 and is expected to continue through 2000 and 2001. As long as commodity prices remain low, farmers will have difficulty presenting positive cash-flow scenarios to their lenders, and many will not be able to qualify for credit.

The trend in recent years has been a shift to more guaranteed loans, as opposed to direct loans. Especially during an economic downturn like this one, loan guarantees play an important role. Loan guarantees provide private lenders with a way in which they can minimize their exposure to risk while continuing to provide credit to their borrowers who are experiencing temporary financial difficulties. A loan guarantee with interest assistance allows borrowers who temporarily cannot meet cash flow requirements to continue to be served by their current lenders. USDA has streamlined its guaranteed loan making regulations in order to encourage more private lenders to participate in the program. Guaranteed loans have lower subsidy costs, and lower administrative costs since much of the loan making and servicing actions are handled by private lenders.

The 2001 budget request for farm loans is based on the assumption that the farm economy will begin to recover in 2001 and that the supplemental funding provided in 2000 will reduce the backlog of loan applications. Specifically, the 2001 budget request includes about $1.1 billion in direct farm loans and $3.5 billion in loan guarantees—a total of $4.6 billion. This is $1.2 billion less than the $5.8 billion that will

be available in 2000, but the 2000 total includes over $2 billion provided through emergency funds. Because interest rates have been rising, subsidy costs for the direct loan programs are higher this year. This means each dollar of direct loans made in 2001 will cost more than in 2000. Overall, subsidy costs for 2001 total $186 million, $83 million less than in 2000.

For farm operating loans, the 2001 budget includes $700 million in direct loans, $2 billion in unsubsidized guarantees, and $478 million in subsidized guarantees—a total of $3.2 billion. The availability of farm operating loans provides farmers with short-term credit to finance the costs of continuing or improving their farming operations, such as purchasing seed, fertilizer, livestock feed, and equipment.

For farm ownership loans, the 2001 budget includes $128 million in direct loans and $1 billion for guaranteed loans. The availability of farm ownership loans provides farmers with long-term credit to finance the costs of enlarging, improving, or purchasing a family farm. In addition, the guaranteed farm ownership loan program allows farmers to use real estate equity to restructure debts. The direct farm ownership loan program cannot be used for this purpose.

In addition, the 2001 budget includes funding for the boll weevil eradication program, Indian tribal land acquisition loans, and emergency loans. Due to numerous natural disasters in recent years, demand for emergency disaster loans has been very high and supplemental appropriations have been needed in order to adequately fund the program. The request for emergency loans for 2001 is $150 million, which includes loans that would be made to larger-sized farms at higher interest rates, under our proposal to close the "eligibility gap" between USDA and the Small Business Administration emergency loans.

Farm Program Delivery

The weakened farm economy has challenged our efforts to improve customer service while improving efficiency in the Farm Service Agency (FSA) and the other county-based conservation and rural development agencies. The increasing demand for CCC marketing assistance loan programs and disaster assistance has dramatically increased workload and placed new burdens on county office staff. The higher workload, particularly for the marketing assistance loan programs, is projected to continue into 2001.

FSA Federal and county staffing since 1993 has declined by about 6,000 staff years, from over 22,500 staff years at the end of 1993 to about 17,200 staff years at the end of 1999. Additional funds appropriated in 1999 and 2000 have allowed the agency to avoid reductions-in-force and to hire and maintain additional temporary staff to meet pressing workload needs. The proposed program level in 2001 for salaries and expenses of $1.1 billion is estimated to support a ceiling of 5,901 Federal staff years, and 10,766 non-Federal county staff years, assuming proposed legislation is enacted allowing for CCC to cover a portion of FSA's computer operations and maintenance costs for the farm programs. The workload requirements to deliver projected current programs and proposed new programs in 2001 is expected to require over 16,600 staff years as well as continued investment in modernization of the delivery system. The current high level of costs of operating and maintaining current legacy computer system will continue to be incurred in the short run until the common computing environment is operational, if FSA and the other field service center based agencies are to provide necessary and adequate customer service. As recommended in the Civil Rights Action Team report, legislation will be submitted to convert all FSA employees to Federal status this year.

Crop Insurance

Crop Insurance is fast becoming a primary source of risk protection for our Nation's farmers. Participation has increased to about 70 percent of the insurable acres—more than half of which is insured at higher levels of coverage that producers select, and the rest at the premium-free catastrophic coverage level of 50 percent of approved yield and 55 percent of expected market price. The program is operating on an actuarially sound basis, and the concern that farmers had about the high cost of premiums has been addressed by providing approximately a 30 percent discount in premiums in 1999 and about a 25 percent discount in premiums in 2000 as part of the emergency assistance package that was enacted for those years.

More work needs to be done in this area and the Administration is prepared to work with the Congress toward this end. Based on the response received for discounting premiums, the budget includes a proposal to increase the premium subsidy on buy-up coverage for the 2001 crop. This new legislative authority would also address the problem of multi-year coverage and establish a pilot program for livestock. In addition, the proposed legislation would expand the risk management education program and provide incentives, such as royalties, to developers of new insurance

products. The legislative proposal also includes a provision for replacing the area-wide trigger on eligibility for the non-insured crop disaster assistance program with disaster declarations, beginning with the 2000 crop, so that producers with individual losses on crops for which crop insurance is not offered will be better positioned to receive assistance.

The 2001 budget requests that "such sums as necessary" be appropriated for all costs of the crop insurance programs, except for Federal salaries and expenses. This is consistent with prior year appropriations and offers the flexibility necessary to meet increases in the demand for insurance. The budgetary impact of our legislative changes will be reflected on the mandatory side of the ledger.

As for Federal salaries and expenses in the Risk Management Agency, the 2001 budget includes $67.7 million in discretionary spending, compared to the $64 million that was appropriated for 2000. About $1.6 million of the $3.7 million increase is necessary to cover pay costs and $0.4 million is for information technology investments. The remaining $1.7 million would be used to establish a pilot program for insuring bio-based value added products, and to enhance our civil rights activities.

International Trade and Export Programs

Strong export markets remain an essential component of the farm safety net, and the aggressive pursuit of overseas markets for our farmers and ranchers is one of the Department's highest priorities. For 2000, the value of U.S. agricultural exports is projected at $49 billion, unchanged from last year. While export growth remains sluggish, export levels should improve as the economies of Asia, Latin America, Russia, and elsewhere recover from the financial disruptions of recent years. However, a more solid recovery in U.S. exports is unlikely until global commodity stocks are reduced from their present high levels.

In view of the current export situation, a number of steps have been taken during the past year to bolster our export performance, while assisting other countries to meet their food and agricultural import needs. For example, the Department programmed nearly 8 million metric tons of food assistance under various program authorities last year, the highest tonnage level in 25 years. This included over 5 million tons of wheat programmed under the President's Food Aid Initiative and additional assistance provided to Russia. The Department also continued to make available sizeable levels of CCC export credit guarantees to facilitate sales to buyers in the countries in Asia and elsewhere, which required the guarantees in order to secure financing to purchase needed imports. Sales registrations under the programs exceeded $3 billion last year.

Progress has also been made in our efforts to expand market access through trade policy. Noteworthy among these accomplishments are the U.S.-China Agricultural Cooperation Agreement reached last April, and the broader bilateral agreement on China's entry into the World Trade Organization (WTO) reached last November. These agreements are important as the first will remove longstanding technical barriers related to imports of U.S. grains, citrus, and meat and, upon China's accession to the WTO, the second will result in reduced tariffs and enhanced access to Chinese markets for many of our products. Moreover, the WTO agreement will place disciplines on Chinese agricultural policies, which would reduce the possibility of disruptions in world trade stemming from their policies as has occurred in the past. In order for United States to benefit fully from the agreement on WTO accession, however, it will be necessary for permanent Normal Trade Relations (NTR) status to be approved for China. The Administration will be working closely with the Congress this year to ensure a positive outcome on the NTR matter.

Another important trade policy activity is the new round of multilateral negotiations on agricultural trade. The objectives we have established for the negotiations—elimination of export subsidies, improved market access by reducing tariffs and increasing quotas, reform of state trading enterprises, tighter rules on trade distorting domestic support, and facilitation of trade in products of new technologies—are crucial for the achievement of our long-term export expansion objectives. Although full agreement on the framework for a new round of negotiations was not achieved at the Seattle Ministerial, the Seattle meeting is not the end to further negotiations on agricultural trade. Because of the "built-in agenda" for agricultural reform in the Uruguay Round Agreement, work on the new agricultural negotiations will continue, and the Administration will be working vigorously to ensure that U.S. objectives are advanced as we move forward.

The President's budget for 2001 is designed to ensure that the work of the Department on these important trade policy and export promotion activities can continue. The budget provides an overall program level of nearly $5.8 billion for the Department's international programs. For the CCC export credit guarantee programs, the largest of our export programs, the budget includes a projected program level of $3.8

billion, unchanged from this year's level. These are current estimates of the level of sales that will be facilitated by the programs; however, the actual level of programming will be determined by market conditions and program demand. As export markets recover, the level of export credit guarantee activity should pick up and the level of guarantee programming can be increased in order to meet demand and maximize export sales.

For the Department's market development programs, the budget provides funding of $120 million for 2001. This includes $90 million for the Market Access Program (MAP), the maximum level authorized by law. MAP is the largest market development program and is a key component in the Department's efforts to increase sales of high value products. The program has also served an important role in assisting small and new-to-export companies build new overseas markets.

For the Foreign Market Development Program, commonly referred to as the Cooperator Program, the budget continues funding for the program at this year's level of $27.5 million. As proposed in last year's budget, the Cooperator Program is now funded through CCC rather than funds appropriated to the Foreign Agricultural Service (FAS). This change will provide increased stability in the level of annual program funding and, thereby, will enhance long-term planning by program participants.

The budget also includes funding for the Quality Samples Program, which was first proposed in last year's budget and is being implemented by CCC this year. Under the program, samples of U.S. agricultural products will be provided to foreign importers in order to promote a better understanding and appreciation of their high quality. The program will be carried out through private sector organizations and agricultural trade associations. For 2001, the budget provides funding of $2.5 million for the Quality Samples Program, the same as this year's level.

The budget includes funding for both of the Department's export subsidy programs—the Export Enhancement Program (EEP) and the Dairy Export Incentive Program (DEIP). In the case of EEP, the budget provides funding of $478 million, the maximum level authorized by law and the level which is consistent with the U.S. export subsidy reductions agreed to in conjunction with the Uruguay Round Agreement on Agriculture. Although EEP programming has been limited in recent years due to world supply and demand conditions, the awarding of EEP bonuses can be resumed whenever market conditions warrant. Again this year, proposed legislation will be submitted which would allow unobligated balances in EEP funds to be transferred toward the end of the year to help support increased programming under the Department's foreign food assistance authorities. This would be a very useful tool for ensuring that EEP funds do not go unused, while helping to maximize agricultural exports and assisting other countries meet their food import requirements.

For DEIP, the budget assumes a program level of $66 million for 2001. This is a reduction from the levels of recent years and reflects two primary factors. The first is full implementation of the Uruguay Round export subsidy reduction commitments. The second is the phaseout this June of the so-called "rollover" provision which allows countries under certain circumstances to exceed their annual export subsidy reduction commitments by drawing on unused subsidy quantities from previous years. In view of the constrained level of DEIP programming, the Department will need to work with the domestic industry to determine how it can continue to facilitate U.S. dairy exports and maintain efforts to develop long-term markets overseas.

The budget provides an overall program level of just over $1 billion for Public Law 480 food assistance in 2001, which is expected to provide approximately 2.9 million metric tons of commodity assistance to recipient countries. As in recent years, Public Law 480 programming is likely to be supplemented by food assistance made available under other authorities, including the Food for Progress Act of 1985 and section 416(b) of the Agricultural Act of 1949.

For FAS, the budget provides appropriated funding of $118 million, an increase of more than $4 million over this year's level. Included in the increase is funding to support the opening of three new Agricultural Trade Offices in Canada, Mexico, and the Philippines. These countries have been identified by FAS as priority markets which offer significant market growth potential over the next 5 to 10 years. These offices, working in conjunction with U.S. market development organizations, private exporters, State trade officials, and others, will help to ensure that U.S. agricultural products benefit from the projected growth.

Increased funding is also included to enhance FAS' market access compliance and negotiation activities. The workload associated with these activities has increased substantially with implementation of the Uruguay Round Agreement, and it is expected to increase even further with the onset of new multilateral negotiations on

agriculture. The increased funding will help to ensure that resources are available to monitor implementation and compliance with existing agreements and to ensure that U.S. agricultural interests are fully represented as new agreements are negotiated.

Additional funding is also provided for the increased costs associated with maintaining an FAS presence at the American Institute in Taiwan and for a portion of projected pay cost increases in 2001. The FAS request also includes $3.5 million for the Cochran Fellowship Program, which maintains appropriated funding for the program at this year's level.

RURAL DEVELOPMENT

Rural America is tremendously diverse in terms of its dependence on farming and other sources of jobs and income, and its ability to reap the benefits of the Nation's economic prosperity. Likewise, there is a substantial range in the wealth and economic well-being of rural residents. Homeownership is higher in rural America than in the Nation as a whole. Yet, many rural residents lack the resources to qualify for mortgage credit, and rental housing is often unavailable or unaffordable, particularly for the elderly. Even the basic amenities of clean running water and waste disposal are lacking in many rural communities.

USDA's rural development programs are designed to provide loan, grant and payment assistance for a variety of needs—rural housing, community facilities, water and waste disposal, electric and telephone service, and rural businesses. These programs represent a substantial investment of public funds—nearly $13 billion for 2001. The returns on this investment include jobs—an estimated 200,000 for 2001—as well as decent, safe and sanitary housing, improved community services, and more opportunities for rural areas to compete successfully in the high-tech, global economy.

Through initiatives, such as Empowerment Zones and Enterprise Communities (EZ/EC), USDA helps rural communities with strategic planning and implementation. The Department works with other Federal agencies, State and local governments, and other rural development partners to ensure a coordinated effort in meeting local priorities.

The 2001 budget provides more than $2.5 billion in budget authority. This is an increase of over $300 million in budget authority over the $2.2 billion provided in 2000, and reflects higher subsidy costs due primarily to a projected increase in the Government's cost of borrowing.

Almost $3.5 billion in loans and grants is budgeted under the Rural Community Advancement Program (RCAP) that was enacted as part of the 1996 Act. RCAP funding would be provided in three funding streams, with States having the full flexibility to transfer up to 10 percent of the funds within the funding streams, and up to 25 percent between the three funding streams. This is consistent with the 1996 Act, and would ensure better coordination in meeting State and local priorities. Within RCAP's three funding streams, $24 million would be earmarked for Federally recognized Indian tribes. There are several other earmarks, including $42.6 million for EZ/EC communities, and other initiatives.

The 2001 budget provides mandatory funding of $15 million annually for the communities that were selected in Round II of the EZ/EC Initiative. This will assist these communities, which have a 10-year designation, in meeting the goals of their strategic plans to create jobs and economic growth. The budget also provides for targeting of about $200 million in loans and grants under USDA's rural development programs to projects in EZ/EC communities.

The 2001 budget includes $581 million for salaries and expenses, which is approximately $47 million over the 2000 level. The increase will allow the mission area to increase staffing and to fund a limited number of information technology initiatives.

Rural Utilities

The Rural Utilities Service (RUS) finances rural electric, telephone and water and waste disposal services. Although most rural Americans now have access to these basic necessities, there is still a need to maintain and upgrade these facilities to ensure that rural America does not fall further behind in the fast-paced world of high-tech communications, and to address the increasing risks of unsafe or poor quality water.

The 2001 budget would support over $2.2 billion in electric and telephone loans, down from $2.8 billion. Guaranteed loans would be reduced from $1.7 billion to $1.2 billion. Direct 5 percent electric loans would be reduced and municipal rate loans would be maintained at about the current level.

The Distance Learning and Telemedicine Program offers rural communities an opportunity to receive enhanced learning and medical services and to connect to the information-based economy. In 1997, the program was expanded to include loan as well as grant assistance. RUS expects to see continued progress in loan activity. Therefore, the 2001 budget proposes an increase in direct loans from $200 million in 2000 to $300 million, and an increase in grants, from $20 million in 2000 to $25 million. This program will also fund $100 million in loans and $2 million in grants as part of the Administration's initiative to close the "digital divide."

The Water and Waste Disposal Program provides financing for rural communities to establish, expand, or modernize water treatment and waste disposal facilities. Eligibility is limited to communities of 10,000 or less in population that cannot obtain credit elsewhere. The program supports the Administration's Water 2000 initiative, which targets a portion of the funding to serve those rural communities with the Nation's most serious water quality problems, including even the lack of a dependable supply of drinking water.

The program level for 2001 includes $502 million in grants, $1,032 million in direct loans and $75 million in guaranteed loans for water and waste disposal projects. This level will provide financing for new or improved water systems that will serve about 1.7 million rural residents. In addition, about 700,000 rural residents will be served through new or improved waste disposal systems. The 2001 budget includes $648 million in budget authority to support the program, which is an increase over the $606 million appropriated for 2000.

Rural Housing

USDA rural housing programs, managed by the Rural Housing Service (RHS), have played a key role in providing affordable homeownership and rental opportunities for rural residents since the 1960s. The programs serve very low to moderate income families who cannot obtain conventional credit and cannot otherwise afford decent, safe and sanitary housing. Interest and rental payment assistance reduce the cost of such housing to the families' ability to pay, based on income and other factors. The direct loan program serves low income families with incomes less than 80 percent of the area median. The average borrower's income is $17,500. The 2001 budget would support $1.3 billion in direct (single-family) homeownership loans—compared to $1.16 billion in 2000.

The 2001 budget would also support $3.7 billion in guarantees—$500 million more than in 2000. The program offers no interest payment assistance, so borrowers must be able to pay commercial rates of interest. This keeps the subsidy cost of the program less than 1 percent per dollar of loan guaranteed, allowing it to fill gaps in the commercial credit market where lenders are reluctant to make loans on their own. The Administration will propose legislation to increase the fee on guaranteed loans, which will further reduce the subsidy cost.

The combined total of $5.0 billion in homeownership loans and guarantees reflects the Administration's strong commitment to improving homeownership opportunities in rural areas and is expected to serve almost 70,000 rural families.

The 2001 budget provides for $120 million in direct loans and $200 million in guarantees for rental housing. The guaranteed program for rental housing differs from the direct loan program in that it serves families with incomes up to 115 percent of the area median income, rather than those below 80 percent of the area median. The guaranteed program is proposed to operate without interest payment assistance. Currently 20 percent of loans have interest payment assistance. The program will continue to use other sources of funds and financial incentives, such as tax credits. This combination of the guaranteed loan with other incentives keeps rents affordable for low income families.

In the direct rental housing program, RHS currently has a portfolio of about 18,000 projects with approximately 245,000 units receiving rental assistance payments. About 42,800 of these units will require renewal at a cost of $634 million. The budget of $680 million also provides for some additional units in existing projects for servicing purposes, as well as a small number of units provided in new projects, including farm labor housing.

RHS administers several housing programs that serve specific needs, including farm labor housing, self-help housing for families who trade their sweat equity for a chance to own their own home, and repair loans and grants for very low income households. The 2001 budget recommends $30 million in loans and $15 million in grants for farm labor housing. It also includes $5 million for emergency assistance for migrant farm workers. The budget also recommends an increase in Self-Help grants from $29 million available for 2000 to $40 million for 2001.

The community facilities program provides direct loans, guarantees and grants to finance essential community facilities, with priority given to health and safety facili-

ties. In recent years, the priority has been to serve children and the elderly through child care centers and health facilities; however, a wide range of projects have received this assistance, reflecting the diversity of State and local priorities. The 2001 budget provides $250 million in direct loans, $210 million in guarantees, and $24 million in grants, including $5 million for early warning system grants that would allow rural areas to reduce the loss of life resulting from inadequate warnings of hazardous weather. The total program level of $484 million is about $75 million more than 2000, and will support over 200 new or improved health care facilities and other facilities which will improve the standard of living in rural America.

Rural Business

In order to create thriving local economies that provide good paying jobs and withstand the challenges of a high-tech global marketplace, many rural communities need a more diversified economic base. In response to the EZ/EC initiative, many communities have prepared strategic plans for their development. Implementing these plans, however, requires significant sources of private-sector capital. Within USDA, the Rural Business-Cooperative Service (RBS) administers several programs, including loan guarantees, direct loans, and technical assistance, that encourage private lenders to be more responsive to unmet needs and opportunities in rural communities.

RBS' largest program is the business and industry (B&I) loan guarantee program, which has been operating at a level of about $1 billion for the last few years. The 2001 budget provides $1.25 billion in B&I guarantees and $50 million in direct loans, which are targeted to areas that have traditionally been under-served by commercial lenders. This level of funding reflects the Administration's strong commitment to expanding the rural economy, and is expected to create or save more than 40,000 jobs in rural America.

The 2001 budget provides $64 million for the Intermediary Relending Program with $4 million of this amount earmarked for the Administration's Native American Initiative. This program provides loans at 1 percent interest to intermediaries who relend those funds to local businesses and other organizations to improve the local economic base.

The rural business enterprise grant program would be funded at $41 million, a small increase over the 2000 level. These grants help rural entities, including public bodies, nonprofit corporations and federally recognized Indian tribes, finance and facilitate development of small and emerging businesses. The budget provides $8 million for rural business opportunity grants, which help rural communities develop comprehensive strategies for revitalization and to better coordinate Federal assistance. The budget also includes $5 million for the National Sheep Industry Improvement Center, which is expected to use up most of the $20 million in mandatory funding authority that the Center was provided in the 1996 Act.

The 2001 budget also provides $6 million for rural cooperative development grants and $2 million for cooperative research agreements, compared to 2000 levels of $3 million and $500 thousand, respectively. The increase will be used to provide technical assistance to small-scale farmers to assist them in developing ways to add value to their product in processing and marketing through the cooperative form of business organization.

FOOD, NUTRITION AND CONSUMER SERVICES

America has the most affordable, safest food supply in the world, thanks to its hard-working farmers and ranchers, not to mention the world's most sophisticated food distribution system. Despite the strongest economy in a generation and the continued strength of the Nutrition Assistance Programs, the problem of hunger persists, and too many people have an inadequate diet. The Food Stamp Program, WIC, the Child Nutrition Programs, and commodity programs provide nutrition assistance to meet this need, as part of the national safety net. By improving nutritional status, these programs are contributing to a healthier and more productive America.

The budget includes $35,8 billion to fully fund the Food Stamps, Child Nutrition, and WIC Programs, the Nation's primary means for carrying out nutrition assistance policy. Over two-thirds of this money directly helps low-income children, school age or under.

The Food Stamp Program is budgeted at $22.2 billion, including a $1.0 billion contingency fund for unforeseen needs, on participation of about 18.8 million people. The request is $1.1 billion higher than the 2000 level, and the participation estimate is 0.5 million higher. Food Stamp participation peaked in March 1994 at 28 million participants but has declined over 10 million participants since then. This trend began before welfare reform was enacted, intensified in 1997 and 1998, and has since slowed somewhat. The strongest economy in a generation, increased support

from absent parents and the success of welfare reform in moving people into work are helping vulnerable households reduce their dependency on food stamps. However, too many people eligible for the Food Stamp Program are not applying for these benefits, often because they do not realize they are eligible for food stamps or have difficulty obtaining them. This trend is problematic because food stamps can be the difference that brings working poor families above the poverty line. Several initiatives have been launched to help make sure that those who are still eligible for food stamps know that they can participate. To facilitate participation, funding to promote knowledge of the program among likely eligibles has been included in the budget.

Several Food Stamp legislative proposals and initiatives are also included in this budget. Eligibility would be restored to legal immigrant adults whose children are eligible for food stamps and legal immigrants living in the U.S. at the time of welfare reform, who have since turned 65. The budget would allow States the option of conforming food stamp rules on the treatment of vehicles with more generous Temporary Assistance for Needy Families (TANF) program procedures. The change will simplify administration of both programs, and help program participants own a reliable automobile so that they will have the transportation they are likely to need to take advantage of training and job opportunities. Using current authorities, efforts will be increased to reduce program error rates.

For the Child Nutrition Programs, the budget requests $9.5 billion, slightly below the 2000 enacted level. This includes Team Nutrition funding of $10 million and $2 million for the Nutrition Education and Training program. A request of $6 million, the final increment needed to complete the evaluation of the universal free breakfast pilot is also included. Legislation is being proposed that would improve administration and program integrity for the Child and Adult Care Food Program, and also to reduce barriers for eligible children without health insurance to enroll in the Child Health Insurance Program (CHIP) or Medicaid by allowing health departments to use National School Lunch Program free meal application data to target insurance outreach efforts.

The WIC request includes an increase of $116 million, which will support a monthly average of about 7.4 million participants with a gradual increase so that 7.5 million participants could be served by the end of the fiscal year. A sum of $20 million, a $5 million increase, is requested separately under the Commodity Assistance Program for the Farmers' Market Nutrition Program. The Food and Nutrition Service and WIC State agencies are working to improve vendor management and tighten program targeting and integrity. Among the initiatives in this regard, $6 million is requested to further State implementation of WIC Electronic Benefit Transfer (EBT) technology already under development. WIC EBT will improve efficiency and integrity in benefit redemption, and it will increase operational efficiency in WIC clinics.

The budget provides $145 million for the Emergency Food Assistance Program (TEFAP), including $100 million in food purchases (from Food Stamp Program funds) and $45 million for State and local administration, not including bonus commodities. The Commodity Supplemental Food Program is funded at $93 million, while funding for the Nutrition Program for the Elderly (NPE) is increased by $10 million, to $150 million, to allow for increases in participation.

Finally, USDA also would increase its efforts to manage the nutrition programs effectively and to promote good nutrition. Through well managed programs with effective targeting and increased payment accuracy, program dollars can be stretched and the benefits magnified. The budget includes $129 million for the Food and Nutrition Service nutrition program administration, an increase of $14 million from the 2000 level. This includes $5 million for Partnership for Change, promoting coordination of Federal, State, local and private efforts in specific target areas, primarily the Colonias along the Mexican border from Texas to California. Also included is $2 million to effectively promote the Dietary Guidelines to nutritionally at risk individuals and low income households, as well as $8 million to improve program integrity. Federal resources needed to effectively manage the nutrition programs have dwindled significantly over the years, now down to less then one half of 1 percent of program funding. Resources to oversee States and to implement program improvements, such as EBT for WIC, are extremely limited. Therefore, it is very important to the recipients of these programs that this request be fully funded.

FOOD SAFETY

Over the last 5 years, USDA has pursued a course to reduce the incidence of foodborne illness associated with meat and poultry products. The backbone of this effort has been the planning, development, and implementation of a new inspection

system to achieve pathogen reduction through the implementation of hazard analysis and critical control points (HACCP) systems. With the phased-in implementation of HACCP 3 years ago, steps were taken to introduce science-based inspection practices into a system that had not changed in nearly 100 years. Under HACCP, the industry has taken the responsibility for identifying and addressing food safety hazards that may occur during production and improving the sanitation of their facilities. To coincide with these changes, the inspection program has refocused its efforts on ensuring that production systems are producing products that meet sound, science-based microbiological performance standards; as well as preventing transmission of diseases from animals to humans.

In January 1998, approximately 300 large establishments entered the program and the following year over 2,800 small plants implemented the new requirements. Recently, on January 25, 2000, the program was fully implemented when the remaining very small establishments entered the program. At this time, all meat and poultry establishments have in place standard operating procedures for sanitation and HACCP systems for controlling food safety processes. All slaughter establishments are testing product for generic E. coli contamination to ensure that they are preventing fecal contamination, and all establishments producing raw product must achieve Salmonella performance standards. Compliance with the new requirements, by the large and small establishments, is very high and it is expected that the first year experience for the very small establishments will also be successful.

Now that this system is fully implemented, there is evidence that improvements made by the industry and inspectors are providing valuable benefits for consumers. Data from the first 2 years of implementation of the Pathogen Reduction/HACCP rule in large and small establishments indicates that the prevalence of Salmonella in meat and poultry products was reduced by nearly 50 percent in chicken carcasses. In addition, data released from the FoodNet disease surveillance system indicates that during 1998, the rate of Campylobactor and Salmonella infections declined nationwide.

For 2001, the budget for inspection of meat, poultry, and processed egg products is based on a program level under current law of $688 million, a net increase of $18 million over the 2000 level. The 2001 budget includes an increase for pay and benefits to meet statutory obligations to provide inspection services without disruption. The 2001 budget reproposes legislation to recover the full cost of providing Federal meat, poultry, and egg inspection. The user fee proposal excludes Grants to States and Special Assistance for State Programs. Requiring the payment of user fees for Federal inspection services would not only result in savings to the taxpayer, but would also ensure that sufficient resources are available to provide the mandatory inspection services needed to meet increasing industry demand, while representing less than 1 cent per pound inspected to consumers.

The 2001 budget includes increases to enhance the implementation of HACCP and science-based inspection procedures. Currently, the Food Safety and Inspection Service (FSIS) is examining how to redefine the functions of inspection personnel under a HACCP-based food safety system. The inspection reforms being evaluated are expected to have a substantial impact on the deployment and compensation of FSIS in-plant personnel. The overall complexity of inspection work will increase as will the inspector's responsibility. Offsetting increased costs for implementing the reforms will be savings resulting from an anticipated reduction of part-time and temporary personnel not needed to conduct certain inspection functions. In addition, FSIS will also implement daily randomized inspection in processing establishments, rather than conducting inspection during each shift. Implementation of randomized processing inspection practices in 2001 will lead to better utilization of inspection personnel and eliminate the need for inspection services on an overtime basis, saving the industry overtime charges.

In order to ensure that all establishments producing meat and poultry products for U.S. consumers are meeting HACCP requirements, the budget includes funding to increase the number and intensity of comprehensive reviews of State and foreign inspection programs to assure that they are equivalent with Federal requirements. In addition, the implementation of HACCP and other regulatory reforms has placed increased demands on supervisors and inspectors for learning new processes that have increased the complexity of inspection activities. In order to ensure that these new functions are uniformly and effectively applied, FSIS needs to enable its inspection workforce to hold periodic meetings to address concerns and questions inspectors may have regarding verification of HACCP systems, process control systems, and pathogen testing. The budget also provides the resources needed to accelerate regulatory reform through the elimination of regulations not compatible with HACCP. The budget provides additional funding for Codex Alimentarius, which will

be used to prepare U.S. delegates to Codex for leadership in international food safety issues through technical training seminars.

The USDA strategy for improving food safety has been multi-faceted and broad, involving not only Federally inspected establishments, but also the entire farm- to-table continuum. Under the President's Food Safety Initiative for 2001, eight USDA agencies are requesting a total of $163.7 million, an increase of $27.4 million over the 2000 level. Research and data collection on food safety hazards and developing means to control them continue to be a high priority activity for USDA. In order to continue USDA's success in reducing microbial contamination of meat, poultry, and eggs, the budget includes funding to implement proposed legislation to permit the interstate shipment of State inspected products, and implement the Shell Egg Action Plan.

NATURAL RESOURCES AND ENVIRONMENT

At a national conservation summit that USDA hosted late last year, the Department released the latest Natural Resources Inventory (NRI) demonstrating that American agriculture will be facing a mounting array of conservation challenges in the 21st century. Many of these challenges, which appear to be growing faster than we can solve them, are all too familiar and include the need to conserve and protect our Nation's valuable private land, reduce soil erosion, improve water quality, limit the loss of prime agricultural land to development, protect and restore wetlands, and enhance fish and wildlife habitat. The 2001 budget recognizes the importance that the public has placed on these natural resource concerns and a number of proposals are included in the budget to help the Department address them.

Overall the budget for 2001 includes a funding level for the Natural Resources Conservation Service (NRCS) that totals about $2.3 billion, including $877 million in appropriated funding and $1.4 billion in funding from the CCC. This also includes $654 million for conservation technical assistance, a 13 percent increase, which represents the foundation of the Department's partnership with conservation districts and farmers, as well as the primary means by which the Department addresses many of the conservation priorities mentioned above.

The budget recognizes the important contribution that agriculture can make in addressing water quality and implementing the Administration's Clean Water Action Plan. Polluted runoff resulting from animal feeding operations (AFO's) are one of Agriculture's most critical challenges in preventing water pollution in the Nation and meeting this challenge continues to be a high priority within the Department. To help AFO's develop and implement nutrient management plans, NRCS will direct a total of $87 million in technical assistance funding in 2001 which represents an increase of $20 million and a redirection of $11 million. Financial assistance that AFO's might need to implement the plans will come from the EQIP which is funded through CCC and for which we are seeking an increase of $151 million. The budget also supports actions to strengthen local leadership capacity in the area of watershed restoration planning. NRCS will direct $10 million to competitive partnership grants to enable locally-led institutions, such as conservation districts or watershed councils, to hire non-Federal watershed coordinators who will take an active role in problem identification and goal setting. An additional $3 million is provided for monitoring work to help target resources and document baseline conditions and performance.

Last month the Vice President announced an ambitious new plan to support the farm safety net while at the same time promoting conservation, preserving farmland, and protecting soil and water quality. This plan recognizes the fact that soil and water are vital resources, and that producers should be compensated for their husbandry of these resources, just as they are for crop and livestock commodities. A cornerstone of this proposal is the new $600 million Conservation Security Program which will be targeted to family farmers and ranchers who meet certain income-related criteria but who still want to practice environmentally sound land management practices. Through this program, the Department will make direct payments to producers to keep their agricultural operations economically and environmentally sustainable by compensating them for voluntary land stewardship. It will also be a significant new incentive for farmers to install important additional conservation practices such as nutrient and residue management and environmentally sound grazing. In further support of this farm safety net proposal, the Department will seek to reauthorize and fund the Farmland Protection Program and the Wildlife Habitat Incentives Program and to expand the Wetlands Reserve and Conservation Reserve Programs.

In support of the Administration's Global Climate Change Initiative, the budget includes an additional $12 million for the conservation technical assistance program

to develop accurate baseline soil carbon data and to determine the impacts of Federal programs on soil carbon stocks at the national, regional and field levels. In addition, NRCS will devote $3 million to fund demonstration and research pilot projects to test various carbon sequestration and greenhouse gas mitigation strategies and monitoring mechanisms.

Other budget increases include $5 million to enable NRCS to help communities plan, develop and implement conservation based biomass production systems and $5 million for financial and technical assistance for the Community/Federal Information Partnerships in support of the Administration's Livability initiative, which will allow communities to develop and use geospatial data for land-use planning and decisions.

Funds will again be limited in the watershed planning and construction area where allocations will be made only to those projects that demonstrate cost effectiveness and clear environmental need. Watershed plans will continue to be closely examined to eliminate those projects that have become infeasible in order to reduce the backlog of unfunded work. The budget request also includes the use of $4 million in subsidy budget authority for a new $60 million loan program that will provide loans to State and local governments for the rehabilitation of the more than 10,000 project dams that have been installed with USDA funding over the past 50 years. Many of these older projects are now approaching the end of their projected life span.

Finally, the Department's 2001 budget will continue to support the 315 authorized Resource Conservation and Development areas. While budget constraints preclude any new area authorizations this year, the ongoing program will continue to improve State and local leadership capabilities in planning, developing and carrying out resource conservation programs.

RESEARCH, EDUCATION, AND ECONOMICS

The Research, Education, and Economics (REE) programs aim to address increasingly complex issues faced by producers as we enter the 21st century by: (1) warding off any potential threats to agricultural productivity posed by deadly pests and diseases of U.S. and foreign origin; (2) helping the farming community to produce affordable high quality foods that are safe and nutritious by taking advantage of cutting edge tools such as biotechnology; and (3) creating a future workforce that is capable of addressing emerging issues in agriculture.

For the REE mission area increases are provided for developing novel methods to prevent and control exotic diseases, pests, and invasive species that threaten U.S. productivity; accelerating the development and commercialization of biofuels and other valuable biobased products made from agricultural and forestry resources; promoting agricultural production practices that are environmentally-sound; expanding higher education capacity in agricultural and food sciences; enhancing nutrition education and food recovery efforts to fight hunger; and providing important economic and statistical information for decision-makers to better address key issues in agriculture.

Agricultural Research

The 2001 budget provides $894 million for the research programs carried out by the Agricultural Research Service (ARS), reflecting an increase of about $64 million, or 7.7 percent above the 2000 enacted level. Within the total, the budget provides increases totaling nearly $98 million, for top Administration initiatives and priorities, such as biobased fuels and products and the counter-terrorism initiative aiming to prevent and control acts of chemical and biological terrorism against U.S. agriculture. The initiatives will be funded in part through the savings achieved from the termination of lower priority projects, totaling more than $42 million. An increase of $2 million is also provided for the National Agricultural Library to rapidly respond to information requests in print and electronic form, increase digital publishing, and expand access to key agriculture-related information.

To identify, prevent, and control exotic and invasive diseases and pests, an increase of $23.2 million is included in the ARS budget. The increase includes $14.4 million for expanding the diagnostic capabilities to prevent acts of biological terrorism against U.S. agriculture, and preventing and controlling infectious zoonotic diseases afflicting livestock and aquaculture. The increase also includes $4.3 million for invasive species, and $4.5 million for Food Quality Protection Act (FQPA) related activities. An increase of $21 million is also provided to the Cooperative State Research Education, and Extension Service (CSREES) for competitive grants to develop intermediate- and longer-term pest control alternatives in response to FQPA.

Additional investments in genetic research can potentially increase agricultural productivity and lessen the impact of agricultural practices on the environment by

generating economically desirable crops and animal products that are naturally resistant to deadly diseases and pests. The ARS budget contains an increase of $12 million for genetic research. Additional funding, totaling $12 million, is also available under the National Research Initiative (NRI) competitive grants for constructing genomic maps, conducting map-based cloning of select genes, and manipulating microbial genomes to increase agricultural productivity.

Scientific and technological advances in biobased products research make it possible to enhance farm income, strengthen U.S. energy security, and protect the environment. An increase of $14 million for research to improve the conversion of agricultural materials and feedstocks into biofuels, and enhance the development of valuable biobased products. An additional $9.6 million is also included in the CSREES budget for competitive grants to generate new information and tools for producers to grow and harvest alternative crops, and for manufacturers to convert the raw materials into valuable products for use by industry and consumers.

Other continuing ARS budget proposals include:

—An increase of $5.7 million for food safety research in support of the President's Food Safety Initiative. The increase will support both pre-harvest and post-harvest research. Additional funding, totaling $7.7 million, is available under the NRI to better identify risk factors in food production from farm-to-table.

—An increase of $17.3 million for research in support of the President's Human Nutrition Initiative, aimed at increasing the understanding of how certain nutrients impact human health and weight-loss in individuals.

—An increase of $23.7 million is provided to promote environmentally sound production practices, enhance the understanding of the adverse impacts of global climate change on food production, and develop methods to improve air quality.

The ARS budget also includes an additional $39.3 million for facility construction and modernization projects at five ARS locations, including planning and design of a new Biosafety Level-3 facility at the National Animal Disease Center at Ames, Iowa, improvements to support new facilities at Beltsville, Maryland; continued modernization and construction at the Plum Island facility in New York, continued modernization of the Western Regional Research Center at Albany, California; and to upgrade the U.S. National Arboretum and the National Agricultural Library.

Research, Education, and Extension

The 2001 discretionary budget request for CSREES over $972 million, an increase of $22 million above the 2000 enacted level, with a shift within the total for several integrated research, education, and extension activities, targeting important programs such as water quality, food safety, and the economic viability of small farm producers. In addition to research programs financed with discretionary funding provided in appropriation bills, the Department has launched the $120 million initiative for Future Agriculture and Food Systems and will also use funding available under the Fund for Rural America for various research and extension initiatives. These initiatives will be continued in 2001. An increase of $31 million is also provided for the NRI, funding it at $150 million. NRI supports cutting edge research aimed at addressing critical issues in agriculture by allowing the Nation's best scientists to compete for grant funds. The research funded under the NRI targets key areas, such as plant and animal genetics, human nutrition, global climate change, animal waste management, and pest control.

Specific budget proposals for CSREES include:

—An increase of over $9 million for higher education programs through expanding Institution Challenge Grants, Graduate Fellowship Grants, and the Multicultural Scholars program, as well as enhancing the educational capacity at the Hispanic Serving Institutions, and the 1890 institutions. The increase also adds to the balance of the Native American Institutions Endowment Fund to enhance educational capacity and support facility renovation and construction at Tribal colleges.

—Over $5 million in new funding for nonprofit groups and faith-based organizations to expand community-based efforts to fight hunger, improve nutrition, strengthen local food systems, and help low-income families move from poverty to self-sufficiency.

—$5 million in new funding for a new Youth Farm Safety Education and Certification program to deliver safety training and certification to youth and migrant workers who may have limited access to formal education.

Economics and Statistics

The 2001 budget for the Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS), in total, is $156 million, down $9 million from the 2000 enacted level. The proposed increases of $5.2 million are provided to sup-

port economic analysis that improves public and private decisionmaking and meet the statistical data needs of our customers, are offset by a decrease of $14.2 million, resulting in part from the proposal to transfer food program studies from ERS to the Food and Nutrition Service.

Funding proposals include:

—An increase of $1 million for ERS for continuing analysis of market concentration, focusing on identifying where concentration is occurring in the marketing chain and who is affected. Assistance would also be provided to the Department of Justice for monitoring merger activity.

—An increase of $0.7 million for ERS to assess the economic potential for domestic carbon sequestration in agricultural soils and identify the appropriate economic incentives for such activity.

—An increase of $0.5 million for ERS to expand research and collaboration with appropriate institutions in developing countries to find solutions for global food insecurity.

—Increases of $3.2 million for NASS to expand the monitoring of pesticide use, expand the current hog survey, develop computer security for confidential and market sensitive information and statistics, and begin preparations for the 2002 Census of Agriculture.

MARKETING AND REGULATORY PROGRAMS

The Marketing and Regulatory Programs facilitate domestic and international marketing of U.S. agricultural products by: (1) reducing international trade barriers and assuring that all sanitary and phytosanitary requirements are based on sound science; (2) protecting domestic producers from animal and plant pests and diseases; (3) monitoring markets to assure fair trading practices; (4) promoting competition and efficient marketing; (5) reducing the effects of destructive wildlife; and (6) assuring the well-being of research, exhibition, and pet animals. Consumers, as well as farmers, ranchers, handlers, processors, and other marketers in the agricultural sector, benefit from these activities.

The budget includes an increase of $15 million for the Agricultural Marketing Service (AMS) for a number of important activities. It would be used to (1) continue the Mandatory Price Reporting for livestock begun in 2000; (2) expand voluntary market news reporting to include international and organic markets data; (3) finalize the National Organic Standards; (4) enhance the rapid response capability of the Pesticide Data Program (PDP) necessary to support the Department's responsibilities to meet the Environmental Protection Agency's data requirements for agricultural pesticide residues for drinking water under the Food Quality Protection Act; and (5) conduct microbiological testing of fruits and vegetables to support the President's Food Safety initiative.

For the Animal and Plant Health Inspection Service (APHIS), the budget includes an increase in current law appropriated funding of $74.3 million. The increase for 2001 reflects a decision to fund, through appropriations, several programs that had been started with funds transferred from CCC. These continuing activities can no longer be considered "emergencies." These programs address the detection and exclusion of pests and diseases, including Mediterranean fruit fly, Citrus Canker, Asian Long-horned Beetle, and Hog Colera. The budget also improves APHIS' Emergency Management System and implements a new Invasive Species program. These efforts will address demands to protect American agriculture from deliberate or accidental introductions of animal and plant pests and diseases from abroad. Other priority increases are requested in the following areas: (1) Agricultural Quarantine Inspection services will be improved along U.S. borders and ports of entry to match the greater demands for these services, by using additional point-of-entry inspectors, expansion of canine teams, and state-of-the art high-definition x-ray machines; (2) Animal Health Monitoring and Surveillance will continue to assure our trading partners of the highest quality products, by maintaining epidemiological and statistical principles of critical animal disease control and diagnostic testing methods; and (3) Animal care activities will increase the number of inspections to assure violations are corrected, expand public outreach, and encourage stakeholder and industry participation. Also, legislation will be proposed to increase license fees on the entities regulated under the Animal Welfare Act to recover the field level costs of administering the Act and to increase biotechnology permit fees to recover the costs of providing such services.

The budget requests an increase for the Grain Inspection, Packers and Stockyards Administration (GIPSA) in current law appropriations of $7.1 million so that grain inspection activities for standardization, compliance, methods development, and all activities under the Packers and Stockyards Program are achieved. GIPSA needs to

address the complex quality information needs emerging as a result of today's biotechnological advances, in order to meet market and consumer demands with respect to genetically engineered grains and grain products. New testing methods will permit greater transparency from grain inspection, adding value to grain products so producers can continue to compete in the global economy. Specifically, $2 million would be used to develop new biotechnology testing methods, analytical tests, and greater quality assurance procedures, and $150,000 will be used to address emerging sanitary and phytosanitary standards required by the WTO and NAFTA. Under the Packers and Stockyards Programs, $5 million would be used to: (1) develop models which could be used to verify the existence of anti-competitive behavior; (2) expand the Rapid Response Teams used to investigate time-sensitive financial, trade, and anti-competitive behavior issues; (3) examine the competitive structure of the poultry industry; (4) establish a swine contract library, and (5) enhance civil rights activities and establish an information staff. This funding will allow GIPSA to promote competition and improve market performance, which is vital to increasing confidence in the livestock and poultry sectors. Legislation will again be proposed to charge user fees for grain standardization activities and license fees for packers and stockyards activities.

DEPARTMENTAL MANAGEMENT ACTIVITIES

The Departmental offices provide leadership, coordination and support for all administrative and policy functions of the Department. These offices are vital to USDA's success in providing effective customer service and efficient program delivery. The 2001 budget proposes targeted increases for USDA's central offices and management functions to strengthen Departmentwide management oversight, leadership, coordination, and administrative support in keeping with the Department's Strategic Plan Management Initiatives to:

—Ensure that all customers and employees are treated fairly and equitably, with dignity and respect;
—Create a unified system of information technology management;
—Improve customer service by streamlining and restructuring the county offices; and
—Improve financial management and reporting.

The budget request reflects a continuing commitment to improving civil rights enforcement throughout USDA. In recent years, the Congress has provided funding for key civil rights initiatives in the Department, which is greatly appreciated. This budget includes further increases to ensure the achievement of the Department's civil rights goals. For example, an increase of $1 million is included to enhance the Department's capability to more efficiently and effectively resolve workplace conflicts, including equal employment opportunity complaints, through an expanded Alternative Dispute Resolution program that will be jointly administered by the Office of Civil Rights and the Conflict Prevention and Resolution Center. An increase of $7 million is included for the Department's Socially Disadvantaged Farmers Outreach Program. In 2000, this program was provided with an additional $5.2 million form the Fund for Rural America. Authorized by Section 2501 of the Food, Agriculture, Conservation, and Trade Act of 1990, this program provides grants to organizations to help increase socially disadvantaged farmers' and ranchers' participation in USDA programs and to help enhance the success of their operations by providing outreach and technical assistance. The budget also includes $500,000 for a Small Business Education and Development Pilot Program that will: (1) demonstrate strategies for the growth and stability of small businesses in rural America; (2) identify new markets for agricultural products of small, limited-resource farmers; and (3) deliver educational and technical resources to sustain economic growth and development.

The Office of the Chief Information Officer (OCIO) provides policy guidance, leadership, and coordination in USDA's information management and technology investment activities. The budget includes an increase of $6.6 million to implement a comprehensive USDA Cyber-Security Program and $2 million to support electronic commerce and information management and collection initiatives. The cyber-security program will ensure that the Department's information technology (IT) systems are protected from unlawful and malicious intrusions. Activities include establishing a department-level IT risk management program to provide means to identify vulnerabilities in USDA's information assets and mitigate security risks; further the development of an information and telecommunications security architecture; and conduct security awareness and training programs to educate our employees about security risks as well as their role in protecting USDA's information resources. As USDA agencies increasingly provide customers access to programs and services on

the Internet, Department-wide electronic commerce initiatives will facilitate the development of unified and more resource efficient approaches to common issues such as electronic signatures, information security, and rapidly evolving technical standards. Information management and collection initiatives will also provide a quick and easy way for customers to conduct business with the Department, reduce customer reporting burdens, and help the Department meet the requirements of the Government Paperwork and Elimination Act.

OCIO also has oversight of the Common Computing Environment (CCE) that is part of the Service Center Modernization Initiative (SCMI). CCE is a critical component of our plan to reengineer the Department in a way that improves customer service while reducing the long-term costs of providing those services. In recent years, the Department has collocated field offices of the Farm Service Agency, Natural Resources Conservation Service and Rural Development to create about 2,500 one-stop USDA service centers. A key ingredient in providing seamless, quality service at service centers is the replacement of these agencies' separate, incompatible, and aging information technology systems with a single, integrated, and modern information system. CCE will allow these agencies to share common information, will reengineer business processes to reduce the redundant requests, office visits, and paperwork burden faced by customers participating in multiple programs, and will save customers time and money by making Internet-based services available. Significant progress on SCMI has already been achieved. Business processes are being reengineered to streamline administrative functions and improve program delivery; modern telecommunications systems have been installed; and 30,000 computer workstations are being deployed that can be used interchangeably among the agencies. Significant efficiencies will be achieved when the service centers are allowed to integrate their administrative functions. A comprehensive Service Center Modernization Plan has recently been completed and adopted by the Department. It lays out the next steps and implementation timeframe for attaining the goal of one-stop service for USDA customers at the county level.

Until such time as the CCE is fully operational, the service center agencies will continue to rely on outmoded legacy computer systems, many of which have been in place since the early 1980's. These systems are becoming increasingly unreliable and are expensive to operate and maintain, costing an estimated $250 million to operate in 1999. While spending on existing legacy systems will be held to minimum levels, there are operational and maintenance requirements of these systems that must be met to provide ongoing customer service. It is just not possible to finance the new CCE solely with funds diverted from the legacy systems. Additional investments will be needed in the current and upcoming years to reach the goal of bringing the CCE into full operational status during 2002. Failure to develop a modern IT infrastructure poses high risks for the continued ability of USDA to meet its basic customer service responsibilities. Thus, consistent with the Service Center Modernization Plan, this 2001 budget includes $75 million for IT investments under the Office of the Chief Information Officer that will help achieve a fully operational common computing environment during 2002. Additional funds from the Service Center agencies' 2001 budgets will support the reengineering of business processes, additional equipment for the common computing environment, data acquisition to support geographic information systems, and training needed to maximize the benefits of this technology.

USDA's Office of the Chief Financial Officer (OCFO) provides overall direction and leadership in the development of modern financial systems in the Department. The budget includes an increase of $1.5 million for a variety of strategies needed to strengthen the Department's financial credibility and accountability. These efforts include expanding departmental use of a new, integrated financial management system (the Foundation Financial Information System) and ensuring that all USDA agencies, including OCFO, develop and retain a level of expertise to ensure the effective and efficient use of financial management information. This funding will be used to effectively implement legislative mandates such as the Government Performance and Results Act, debt collection and cost accounting that are aimed at promoting sound business practices and making valid and reliable data and financial expertise available to support decision-making processes, and to help USDA achieve a clean audit report on its financial statements.

The budget also reflects a number of increases to strengthen departmentwide management oversight and leadership in support of USDA programs. An increase of $800,000 is proposed to support the Department's Biobased Products and Bioenergy Coordination Council. Funds will be used to develop standards for and a list of biobased products as part of departmental and governmentwide initiatives to further the use of environmentally preferable products.

The Department's Office of Communications (OC) plays a critical role in disseminating information about USDA's programs to the public. The budget includes increases of $0.9 million to enable OC to utilize new technology to reach audiences in a more timely and effective manner, and to lead departmentwide communications efforts to reach underserved populations.

Legal oversight, counsel, and support for the Department's programs is provided by the Office of the General Counsel (OGC). The budget provides an additional $3.7 million to strengthen OGC's ability to provide timely response to increasing requests for legal assistance from the program agencies, especially in the areas of civil rights, natural resources, food safety, concentration, and general law. Funds are also included to provide IT improvements to further enhance the efficiency of the office.

The National Appeals Division is responsible for all administrative appeals of adverse decisions issued by certain agencies within the Department and conducts administrative hearings in a fair and impartial manner. The 2001 budget includes an increase of almost $900,000 to maintain current activities while providing training to its employees that will enhance their required knowledge and skills regarding adjudication procedures and USDA regulations and policies.

The Chief Economist advises the Secretary on policies and programs related to U.S. agriculture and rural areas, provides objective analysis on the impacts of policy options on the agricultural and rural economy, and participates in planning and developing programs to improve the Department's forecasts, projections, and policy analysis capabilities, including the collection and dissemination of weather data to the agricultural community. The budget includes an increase of $400,000 to continue the modernization of USDA's weather and economic data systems, including the installation of a second automated weather station to better cover prime agricultural areas and Internet-based dissemination of economic and weather data. An increase of $1 million is requested to provide analysis and evaluation needed to support the Department's and governmentwide efforts to use more biomass energy and biobased industrial feedstocks and products. This proposal includes $700,000 to address increasing concern about the effects of agricultural operations on the environment and food safety by enhancing USDA's ability to assess these risks and reduce them.

The budget also includes funding to continue ongoing implementation of the USDA Washington Area Strategic Space Plan, which seeks to reduce facilities' costs by moving headquarters employees into efficient and safe government-owned workspace. In 2001, the Department is requesting an increase of $46 million for:

—required increases in rental payments to GSA;
—renovation of the nearly 70-year old South Building to address serious fire and health hazards and electrical malfunctions;
—maintaining and operating our buildings; and
—addressing the increasing threats of terrorism and intrusion to USDA's employees and systems.

The Hazardous Materials Management Program provides for Departmental compliance with legislation requiring the cleanup of sites and facilities contaminated by hazardous wastes and the responsible management of hazardous materials. An increase of $14.4 million is requested to accelerate investigative and cleanup activities in order to protect public health and stay on track to meet the goal of cleaning up all sites under our jurisdiction by 2045. Along with protecting public health and the environment, funding will reduce the likelihood of costly enforcement actions and lawsuits against the Department. It also will contribute to a proactive effort to seek out and reach agreements with outside parties responsible for contamination of sites under USDA's jurisdiction. Getting these groups to pay their fair share of cleanup efforts contributes significantly to ensuring activities in this area are completed as quickly and comprehensively as possible.

OFFICE OF INSPECTOR GENERAL

The Office of Inspector General (OIG) conducts and supervises audits and investigations relating to programs and operations of the Department, and as such, is the principal law enforcement provider in the Department; reviews and makes recommendations on existing and proposed legislation and regulations; and recommends policies and activities to promote economy and efficiency and to prevent and detect fraud and mismanagement in USDA operations. The request provides an increase of $5.1 million to conduct additional audits aimed at ensuring the safety of agricultural products and protecting the integrity of USDA's information systems. The proposal will also support the acquisition of specialized law enforcement equipment to enhance the safety and security of OIG law enforcement activities, and increase criminal investigations in USDA public integrity vulnerabilities.

That concludes my statement. I am looking forward to working closely with the Committee on the 2001 budget so that we can better serve those people who are in need of USDA programs and services.

Senator COCHRAN. I apologize for our obligation to have to leave to vote. We will recess quickly and resume our questions.

Secretary GLICKMAN. Okay.

Senator COCHRAN. Thank you very much.

Secretary GLICKMAN. Thank you.

Senator COCHRAN. The subcommittee will come to order.

SAFETY NET PROGRAM

Mr. Secretary, thank you for your patience. I understand the budget proposal includes, for this next fiscal year, $5.8 billion out of this $11 billion safety net program that you mentioned, and that a major component includes a payment limit income assistance program.

You said that even with the proposed payment limit, only 2 percent of current recipients under the AMTA payment scheme will be ineligible. And further, it is my understanding that an individual that receives less than the $30,000 payment limitation would have his supplemental payment reduced by the amount of his AMTA payment.

The ad hoc emergency disaster assistance provided by the Congress in the last 2 years has been offset from within the spending caps established by the balance budget agreement. Is this new $11 billion proposal submitted by the Administration offset, or is it being taken from the budget surplus?

Secretary GLICKMAN. Well, I would ask Mr. Dewhurst to respond. It is not in the category of emergency spending. That, I can tell you. So, it is part of the basic budget of the government, and I suppose one could say it is paid for in the context of the President's balanced budget proposal, but Mr. Dewhurst may have a little more specific answer to that.

Mr. DEWHURST. Well, the Secretary is correct. The President's budget has a section on mandatory proposals. It has increases, it has decreases, and it has a balance at the end. Our increases are in that table.

None of the offsets were in the Department of Agriculture. They are in other places in government, but essentially we are within a proposal that is a balanced proposal.

INELIGIBILITY OF CURRENT AMTA RECIPIENTS

Senator COCHRAN. Another concern I have is that your suggestion that only 2 percent of current AMTA recipients would be ineligible under this new program. I think just the opposite is going to be true in my State. I think only 2 percent of the producers are going to be eligible, and 98 percent are going to be ineligible. I hope you will take another look at that.

Secretary GLICKMAN. I wonder if, perhaps, Mr. Collins can respond—I have not done a State-by-State analysis, but he can tell you a little bit more than what I have mentioned.

Mr. COLLINS. I have not done a State-by-State analysis either, but I could get you that data. I can only say that based on the 1998 data that we report to the IRS for purposes of issuing Form 1099's

for tax purposes, only 2 percent of the total number of recipients of payments receiving 1099's had more than $30,000 and dependents in 1998.

That is the basis on which we say that 2 percent would, right out of the box, be excluded nationally. It may be that a disproportionate share of those are in your State, but I could certainly check that.

Senator COCHRAN. Or even in the region. It seems to me that there is a likelihood that you are going to have the payment skewed toward the upper Midwest.

Not to be critical of that, Senator Kohl.

But I really think you are going to find, if you look at this carefully, it is going to discriminate possibly against the Southern Region, the Southern producers. I am suggesting that s a possibility. It is a concern of mine. Have you done a regional analysis of this?

Mr. COLLINS. I think that is true, that it will disproportionately affect some crops, such as cotton and rice. There tend to be higher payments associated with those crops because they are high value crops.

Senator COCHRAN. Right. It costs more to produce the crops.

Mr. COLLINS. Correct.

Senator COCHRAN. Okay. Well, I am hopeful, before we rush to embrace the Administration's proposal, we will look at some of the details carefully. And I am confident that is what the legislative committee will do.

Frankly, it will not be up to this committee to change the law as you are suggesting to get to the point where appropriated dollars would have to be made available to support this program.

NEW CROPS ELIGIBLE FOR SUBSIDIES

Do you expect there would be an expansion of farm program subsidies to new crops as well?

Secretary GLICKMAN. Our proposal helps new crops, in two ways. One is that conservation payments would be available to all farmers, everywhere in the country.

So, the direct conservation payments to the farmers, whether in Mississippi or anywhere else, would be on top of AMTA. In addition, they would be available to every producer of every type of crop. We still have to come up with legislative language for this, but it will be a profound enhancement of the current farm program.

In addition, as I mentioned before, our crop insurance programs are going to be modified to ensure more participation by producers of non-program crops. We are also developing of new insurance programs to cover additional crops and to get rid of the area-wide trigger that has limited assistance under the non-insured assistance program.

NEW DELTA INITIATIVE

Senator COCHRAN. One other concern that I raised in my opening statement is this new delta initiative. I am suspicious that this is not going to do nearly as much as the President is advertising that it will do. Can you tell us out of this $153 million proposal to create

a new delta regional authority, how this money is actually going to be spent?

Secretary GLICKMAN. I would ask Mr. Dewhurst to, perhaps, respond to that question.

Mr. DEWHURST. The honest answer to your question is: I do not know. It is presented as proposed legislation in the President's budget to be administered by an agency outside the Department of Agriculture, and I am just not versed in what that proposal is.

Senator COCHRAN. I had an opportunity to make comments about the user fees. I am convinced that this is just not going to be enacted by the legislative committee, and so the expectation that we are going to impose what would amount to be new taxes, over a half billion dollars in new taxes on producers, processors and handlers of agriculture and food products, is just not going to happen. I do not think Congress is going to go along with that.

On the subject of the census, I understand that you have granted a waiver——

Secretary GLICKMAN. That is right.

Senator COCHRAN [continuing]. So that food stamps recipients can be employed in the taking of the census, and I commend you for getting that done. HUD has also made a similar kind of waiver. Thank you.

It seems to me that if we have people involved in taking the census, even if they are beneficiaries of food programs, they are going to be from the community, and they are going to be familiar with where people live and who people are, and we will have a more accurate census.

And people who are being questioned by the census takers are going to be more likely to respond to someone they know, rather than somebody who is hired out of Washington to come down there and try to check up on everybody, and where everybody is, and get all the answers to these census data forms.

I remember being chairman of that subcommittee one time. We had hearings around the country, New York City and rural areas of the country, and how we could actually ensure that a more accurate census is being taken.

That was one of the suggestions that we kept hearing, "Get local people who are well known in the communities you are trying to examine and review, and that is how you will end up building confidence." And so, I think this is a very important step, and thank you.

I have other questions, and I am going to defer to my friends on the committee to ask questions, and then I will return to continue my questioning.

Senator Kohl.

Senator KOHL. Thank you, Mr. Chairman.

Secretary Glickman, your safety net plan will provide more than $6 billion to support crops on top of AMTA payments and loan deficiency payments they already receive.

DAIRY ASSISTANCE

I do not begrudge crop producers a meaningful safety net. I encourage that. But I am dumbfounded that this Administration has not proposed something more meaningful for dairy, particularly in

light of the disaster of the low milk prices that your agency is predicting this year. Still, the Federal Government has a record of what I consider to be destructive dairy policies.

So, Mr. Secretary, what am I supposed to tell dairy farmers in Wisconsin, or for that matter, across the country, to explain this policy? Can I tell them that volatility in dairy is not as devastating as it is for other commodities; or perhaps should I tell them that when the pie was cut up, their income simply was not as important to this Administration as income for farmers of other commodities? Mr. Secretary?

Secretary GLICKMAN. I am fully cognizant of the price and volatility issues, but let me just talk about a couple of things.

Number one, we have proposed extending price supports for 2 years. That is a cost of $300 million, and if that is not done, prices could fall to levels way below where they currently are.

I also think it is important, in this context, to note what we have already done. And a lot of what we have done is because of what Congress has put in emergency bills. We raised class one differentials in the upper Midwest.

When did we do that?

Mr. COLLINS. January 1st.

Secretary GLICKMAN. January the 1st. We ran a $200 million economic assistance program last year. We will run a $125 million program for dairy farmers again this year. We will scale up the dairy options pilot program. We will run the DEIP—dairy export incentive program—at its maximum.

Most dairy farmers will benefit from crop programs. Most, if not virtually all dairy farmers produce row crops, and will benefit from that as well. And the conservation proposals and the EQIP program will have a significant impact on dairy producers.

Now, is that enough? It probably is not enough, and we are going to have to work with you on seeing if there are other things that we can do. And the fact is, as you know, I did try last year to make changes in the milk marketing order system. For a lot of different reasons, it was not successful.

But I do want you to know that we are trying to deal with this in a multi-disciplinary approach, from the conservation approach, from the risk management approach, from the export approach, as well as for direct payments. We just have to work with you to kind of continue going down this road.

Senator KOHL. So you are prepared to consider some alterations?

Secretary GLICKMAN. Well, our proposals were the initial proposals based upon our budget. But, you know, I am a student of the legislative process. We are going to have to work with you, and I fully recognize there are going to be some changes in these proposals. If history is any guide, there will be.

We presented an intellectual framework for what the emergency package ought to look like. But do I expect that Congress, working with us, will make some changes? Of course.

REGIONAL DAIRY COMPACTS

Senator KOHL. Mr. Secretary, in addition to low milk prices, I am very concerned about the impacts, as you know, of regional dairy compacts. On dairy farmers in the middle west, particularly, of

course, Wisconsin. As you know the concerns of the upper Midwest dairy farmers are based on the distortion that such compacts create and the inevitable increase in milk production that will result from these compacts. Ultimately these policies will reduce prices for all farmers outside the pricing cartel.

Studies of the impact of the Northeast Dairy Compact, some of which are actually commissioned by the Compact Commission itself, show: One, that consumers are paying higher milk prices in that area; two, that not all nutrition programs are being reimbursed for their increased cost under the program; three, that when effective, the compact prices encouraged excess production of manufactured dairy products; and four, that the compact does not prevent the loss of family farms in the Northeast.

Earlier this week, Mr. Collins reviewed, for the Agriculture Committee, some of the economic studies at the University of Wisconsin, Vermont, Missouri, and Massachusetts, the impact of the Northeast Dairy Compact.

And, Mr. Collins, would you like to review those studies and conclusions to this committee? Will you just spend a minute or two or three telling us what the major——

Mr. COLLINS. I would just probably repeat what you just said, Mr. Kohl. The studies generally show that when the over-order price under the compact exceeds what would have been the price under federal orders, consumers in New England have paid a higher price than they otherwise would have paid.

The University of Vermont study shows that in the first 12 months after the compact was in effect, milk production increased 1 percent or 45 million pounds in the compact area, due to the compact itself. So, there was an increase in milk production.

The third point you made was the issue related to assistance provided to food and nutrition programs. The compact commission has provided compensation for the WIC program, and has started doing it for the school lunch program. The food stamp program recipients, of course, will pay higher milk prices without being compensated.

There have been some studies to show that the compensation has not been perfect. That is, in Massachusetts, WIC recipients have received compensation to offset their higher milk costs, but this is not true in the State of Connecticut, for example.

Senator KOHL. Mr. Secretary, any justification for setting up a price fixing cartel arrangement? Any justification, whatsoever, Mr. Secretary? Is there any justification for it, Mr. Secretary, in the United States of America?

Secretary GLICKMAN. Nobody wants to set up a price fixing cartel that is violating anti-trust laws or anything else.

But let me comment on this. As you know, we proposed milk marketing order reform, under the Congressional statute. When that reform became effective, the Northeast Dairy Compact would end. That may have been one of the reasons why we could not get milk market order reform because there were a lot of folks who did not want the Compact to end.

We have not taken a formal Administration position on compacts. However, I had stated publicly that compacts do raise some of the concerns that Mr. Collins has talked about.

If you were going to go down that road, you would have to protect against other parts of the country being affected by excessive milk supply, because that could affect dairy farmers by getting lower prices in those areas. It could have an effect on our programs for the poor.

Also, I have said that if you were going to have compacts, you would need to give authority to the Secretary to revoke the compact if, in fact, these terrible things happened.

Now, I have not addressed absolutely whether we would approve the compact or not approve it, because I do not know whether you could work out any language that could deal with some of the problems that you and Mr. Collins have raised. I do not know if that is possible yet.

REGIONAL DAIRY COMPACTS

Senator KOHL. Price fixing arrangements, whether they are in the milk industry or any other industry, whether it is in commodities or manufactured products, price fixing arrangements that prevent producers or manufacturers from selling their products in all 50 States, the basis of the American economy, price fixing arrangements.

Any way that you can support them, whether it is milk or any other commodity or any other manufactured product—can you support that? I asked you another question.

In terms of the larger issue that I am raising, and in terms of your legacy, our legacy, the American economy, what makes it great, are you not willing to stand up and say, "I do not know if I will win and I do not know if I will lose, but I will fight them to my last breath because price fixing cartels are not consistent with the way the American economy has worked"?

Secretary GLICKMAN. Senator Kohl, I hope that I showed last year that I was willing to weigh in. I am not afraid of the political fallout of taking a position which, apparently, a majority of the Congress did not agree with me on.

The fact is, even under a compact, you can move milk around in interstate commerce. A compact will affect the volume of milk that is moved, and perhaps the price as well. It also may affect lower income citizens.

As a general proposition, all products should flow in interstate commerce as freely as possible. I agree with that.

Senator KOHL. And they do.

Secretary GLICKMAN. But I am just saying that I think it would have been better if we would have adopted the milk marketing order reform that we had proposed, so that we would not have to continue to deal with this issue.

There are problems with compacts. I have said that before. I think that if Congress were to decide to go ahead with compacts, they would have to address our concerns. I have said that before. Those concerns relate to effects on other parts of the country. They relate to pricing in other parts of the country. They relate to how the poor would be dealt with.

Senator KOHL. Is there some idea as to how we are going to deal with apparent effort on the part of other regions to set up their compacts? That is the way these things work. And it is going to

work. It is expected to work. I have heard from members of this committee that compacts are going to be proposed for other regions this year. Are you all prepared to take a position?

Secretary GLICKMAN. We will, I am sure, take a position when the legislation is at a ripe point where we think we need to do that. I am willing to work with you and the other members on our concerns. Obviously we have serious concerns about it. I have raised that. Mr. Collins has raised it.

But I am not willing, at this stage, to give you a formal position, because I do not have a piece of specific legislation to deal with right now.

Senator KOHL. Mr. Collins, do you have a comment on that?

Mr. COLLINS. No, sir.

Senator KOHL. Really? I mean this whole thing is—what is the logic in the year 2000 of paying farmers, the further away they get from Wisconsin, more for their product?

Secretary GLICKMAN. I do not disagree with you on that point.

Senator KOHL. What is going on here? Is there no justice? Is it just "might makes right"? Is that all it is about? I've worked here for 12 years and I have learned, and I wish I had not learned, that that is all we are talking about here—"might makes right." If you got the votes and you have a Federal court decision in your favor, you can do anything.

Is that the way it works? Why has not the Administration, even though maybe this is a small issue, I recognize that, but why is not the Administration taking a stronger position on this? There is no logic to defend the present milk pricing system, just "might makes right."

Secretary GLICKMAN. Well, Senator, I would have to say this: There are an many of parts of agriculture that are hurting very much right now, and people are looking for alternative ways to address the problems, the low prices, that producers are getting everywhere.

Now, we do know that in this particular area, you have a situation of regional conflicts, which you do not tend to have in other areas of agriculture. Cotton pricing tends not to be parochially regional, whereas dairy does get to be regional.

But I think that the reason why this issue has been so difficult to resolve is because those in Congress from farm States are looking for ways to help their producers any way they can. You know, we have to ultimately take a position based upon what we think is the right thing to do, and we will. But at this stage, I think it is premature for us to tell you absolutely one way or the other which way we would go.

REGIONAL DAIRY COMPACTS

Senator KOHL. Well, you know, ultimately I am hoping that we can work constructively again this year on this issue, both in terms of the pricing policy and the compacts, because I do not hear any defense for them except that that is just the way it is. And I appreciate that, and I know you did not create it, and it is not easy to change it, but it is certainly worth the effort.

There is no justification. I defy Senator Cochran or anybody else to tell me why the further away you get from Wisconsin, the more

you should get for your milk, while we are the State with the most milk producers in the nation. Dairy is Wisconsin's leading industry, and we are not asking for any advantages, we just do not want to have any disadvantages. It does not make any sense.

Senator COCHRAN. You pay your quarterback from Mississippi a lot more than you pay any other quarterback.

Senator KOHL. Right.

Senator COCHRAN. For Green Bay.

Senator KOHL. Right.

FOOD STAMP PROGRAM

Anyway, just another question: Mr. Secretary, this subcommittee provides more spending for nutrition than any other USDA programs. However, over the past few years we have seen dramatic declines in spending for the food stamp program.

In fact, we now learn that over $1 billion of food stamp funds are estimated to lapse at the end of this fiscal year, and despite the economy and the decline in food stamps spending, we continue to hear reports of increased demand at food banks and in soup kitchens.

According to USDA, over 14 million children do not have food to meet their basic needs and they are going hungry. In Wisconsin, one paper, the Green Bay News Chronicle, has reported extensively on the growing hunger problem in that region. What has USDA been doing, and what have you learned about this phenomena, what actions can the subcommittee take to start turning these numbers around, especially the disturbing trend of growing child hunger?

Secretary GLICKMAN. Well, one thing we have done is we have asked for full funding for the food stamp program in our budget. We also want to take into account a large number of people that we think ought to be participating in the program that are not.

This is a very serious problem. The rate of reduction in participation in the food stamp program, is much greater than the rate of reduction in our poverty rates. We have an awful lot of people we believe are not on the food stamp program that are eligible. There may be many reasons why.

One reason may be confusion about the welfare reform law an its impact on other laws, the TANF law, AFDC, and Medicaid. People are no longer eligible in certain circumstances for the State run programs, but food stamps is still an entitlement program with federally set eligibility criteria, and a lot of people, I think, thought if they were off one program they were ineligible for food stamps, which is often not the case.

So, we have an obligation to do a much more intensive outreach and education effort, both in English as well as Spanish and other foreign languages, if necessary, to let people know what they are eligible for. We are encouraging the States to do the same thing, because they basically run the programs as well.

But this is a phenomenon that is out there. The fact is that the differential between the haves and the have nots in many parts of this country is growing.

The Food Stamp program is one that most people are on for a very short period of time. It is our largest food assistance program,

and over half of the recipients are children. It is a program where the rules have been changed through legislation to encourage people to go to work. Outreach and education are needed, however to ensure that low income working families know that they remain eligible for food stamps.

We also are proposing some legislative changes. The President has proposed making some legal aliens, some people who were cut off before, eligible. We have also proposed to ease the rules on automobile ownership, because it has been the same for almost 20, 25 years. We want to encourage more people to own a car. So, if you have a car, you can at least go to work, and car ownership has been disqualifying people from being on food stamps for some time.

This is a very serious problem. We are working with the activists and the hunger groups and the non-profit community, the church communities, to try to deal with this issue. But the law does allow people with eligibility to participate in the program, and there are an awful lot of people who are not doing it.

CONSERVATION PROGRAMS

Senator KOHL. Okay. One last question. I am a strong supporter of USDA conservation programs and all conservation activities in general. In fact, I am very proud that Wisconsin takes credit as the birthplace of today's conservation movement. In current law, and in the farm safety net initiative you propose, many of the major conservation programs are funded directly out of the Commodity Credit Corporation.

The 1996 farm bill set in place limited funds made available through Section 11 of the CCC charter act, which has had the result of making it difficult for USDA to carry out these important programs.

Last year, I, along with Senator Cochran, provided you some relief in order to make funds available in fiscal year 1999 and 2000, to carry out programs like the Wetlands Reserve Program and the Conservation Reserve Program, notwithstanding the so called Section 11 cap.

SECTION 11 CAP

What action do you plan to take in working with the authorizing committees to change the Section 11 cap problem and what will be the effect in carrying conservation programs in fiscal year 2000 if no action is taken?

Secretary GLICKMAN. I would ask Deputy Secretary to respond.

Mr. ROMINGER. It is true, Senator, that we are looking at a shortfall in funds for technical assistance because of the Section 11 cap, and so we are going to be asking the committee for a supplemental to be able to cover that. If we do not get the supplemental, there will be farmers out there who do not get the assistance in developing their plans so they can participate in the programs.

Senator KOHL. Do you have any other——

Mr. DEWHURST. No, I do not. But to be precisely correct, the Administration is going to be asking, in the safety net proposal, the authorizing committees to lift the cap, as appropriate, to provide the necessary technical assistance.

If Congress were to take all the actions the Administration recommended to create the Conservation Security Program and expand the other mandatory conservation programs, without expanding the cap, it would produce on the order of a $100 million shortage in technical assistance funds to support these programs. So, increasing the cap is a very important part of the conservation initiative of the Administration. Thank you.

Senator KOHL. No questions.

Senator COCHRAN. Thank you, Senator. Senator Burns.

Senator BURNS. Thank you, Mr. Chairman, and thank you, Mr. Secretary, for coming up today. I am not going to take long. No good deed shall go unpunished, right?

Senator COCHRAN. That is right.

Senator BURNS. We can look at the overall budget and there are some things we are just tickled to death with, and other areas we do not like so much, which means that if we had one foot in the hot oven and one foot in a bucket of ice water, we ought to feel pretty good. But we do not.

EXPORT ENHANCEMENT PROGRAM

The area of EEP, I would like to see some kind of reform made there, so that we can use that tool effectively, and the right people get the help in their exports. And I know you have done a lot of work in that line, and I would like to work with you on reform of EEP and the initial thrust.

I was quite disappointed in the Department of Agriculture when Frito Lay made its announcement that it was not going to use any of the enhanced products, genetically enhanced products. And I did not hear anything from the USDA, not one word. And yet, my good friend from Missouri has done a lot of work as far as building a scientific case why this should be.

LAND ACQUISITION

And I also want to take note of another area of which Senator Stevens brought up, is land acquisition. It is the United States Department of Agriculture. It is not the United States Department of Acquisition. And because the government has got too damn much land now.

They cannot even manage what they have got, and so I would take a good strong look at that and even though it may come all fuzzy and warm and green and all that. It is really hurting some of our communities on this land acquisition, because we are just very, very concerned about that.

And in our area, are we making the best use of rural utilities—and I appreciate your help on the RUS and those areas. That is very good. But those are areas that we will be looking at. Our research, we are still losing plant breeders—we are still losing people in facilities where we do our research and development. As the population grows, demand for food is going to be there, and this other stuff that we do.

CIVIL RIGHTS

And then the last area is in the area of civil rights. Let us get that taken care of. Let us just not give it lip service, because we have got several cases pending in Montana that we really need to do something about that, Mr. Secretary, and we get the feeling that that is being put on the back burner.

I know some of our Native Americans in Montana that have really had a case, and that should be dealt with. And I want to make sure those are the areas in which we will work with the Chairman and work our way through. But those are areas that I have quite a lot of concerns with and we will work with the Chairman and try to allocate the funds where we think they will be best used. But I would just ask you, and I would not mind coming down and sitting down and talking to you about the civil rights thing, because I think there is a way to handle that.

Secretary GLICKMAN. This is not being put on the back burner, I can assure you. It is a civil rights responsibility of the Department. Of course, I have been to your office once. We have talked about these cases.

Senator BURNS. Yes.

Secretary GLICKMAN. I know that they have been very troublesome, both for us as well as for you.

Senator BURNS. Yes.

Secretary GLICKMAN. As well as for the applicants, and maybe it is not a bad idea to come down to talk specifically about them again.

Senator BURNS. I would like to do that, and I would like to work with you in that area. And again, I would tell you, there has never been a time like this, I know why the concerns of Senator Kohl.

Our concerns in agriculture, Mr. Secretary, there is not anything wrong on the farm except in the price when we compare it to the grocery store, one way or the other. And I would tell you, can we justify a cartel? You can if we use our leverage in the market, agriculture today, as soon as that drill or that planter hits the ground. We use our leverage in the market as soon as we turn the bull with the cows. And some way or the other, you have got to be an advocate for the producer. You have got to be.

FRITO LAY

And just like in this Frito Lay thing, you should have picked that up right now and ran with it and defended the producers.

Secretary GLICKMAN. Can I just comment on that point?

Senator BURNS. Yes.

Secretary GLICKMAN. Okay. Look, I suppose I could have called the president of Frito Lay and asked why are you doing this.

Senator BURNS. I tried to.

Secretary GLICKMAN. Okay.

Okay. But let me talk about what we have to do in this context. You know, as much as I think that the decision of Frito Lay may not have been the decision I would have made if I had been the head of this company, because I do not like to see farmers out there confused as to what they can plant and what they can sell, the fact

of the matter is that they are responding to consumer pressures. Right or wrong, they are responding to them.

So, what do we have to do at USDA? The most important thing we can do is to give people the confidence, consumers the confidence that these products are safe. I cannot tell Frito Lay to do anything. The president of Frito Lay would laugh in my face if the government tried to tell him what to do.

But what we have done on the GMO issue is the following: Number one is that I appointed this 36, 37 member biotech advisory committee composed of people who can help us deal with a lot of the tough regulatory issues. I have had the National Academy of Science peer-review our approval process in order to make sure that the public has confidence. Most of this is in the FDA's jurisdiction any way in terms of food products. Frito Lay produces food products so I cannot tell them exactly what to do.

If people have confidence their food is safe, if they think it is on the level, they will buy it, and a lot of the hysteria will go away, and that is the most important thing.

Senator BURNS. Well, I would agree to allow that, but I noticed also in your food safety, in here we have got a little bit of a cutback and I think the Chairman noticed that. And I will point that out—we will talk about that later on. And I got another appointment.

Senator COCHRAN. All right.

Senator BURNS. I thank the Chairman for his courtesy, and I thank you for coming.

Senator COCHRAN. Senator Feinstein.

STATEMENT OF SENATOR DIANNE FEINSTEIN

Senator FEINSTEIN. Thank you very much, Mr. Chairman.

Mr. Secretary, I know you have had a hard time personally with loss of members of your family, and I want to extend my condolences. And I do not want to give you a bad time, but I have to give you a bad time.

Secretary GLICKMAN. I can separate the personal from the professional.

Senator FEINSTEIN. This is not a good budget for California, and I am going to try to take a little bit of time, with the Chair's indulgence, to tell you why. The budget does provide enough dollars with respect to pest exclusion.

INVASIVE SPECIES

In the last 6 months alone, California has had six quarantines. Let me tick them off to you; Oriental fruit fly eradication quarantine, a 9 square mile area, Burbank; September 2nd, pink hibiscus mealy bug, Imperial County; September 3rd, oriental fruit fly eradication, 9 square miles, City of Westchester; September 17th, fruit fly eradication, 11 square mile area, City of Pico Rivera; November 19th, Mexican fruit fly quarantine in 72 square mile area of Fallbrook, California. And I want to talk about that in a moment—January 13th, 2000, melon fruit fly quarantine in a 75 mile area of Los Angeles County.

In addition, California's $1 billion nursery industry is threatened by red imported fire ants. And the $2.8 billion grape industry faces a complete destruction due to an infestation of the glassy wind

sharp shooter for which there is no treatment. I really want you to hear this.

Secretary GLICKMAN. Yes. Okay.

Senator FEINSTEIN. Let me talk for a moment about staffing on the border.

Secretary GLICKMAN. Yes.

USDA UNDERSTAFFED INSPECTORS

Senator FEINSTEIN. California's land, air and seaports are understaffed. That is clearly reflected in the rates of infections that are occurring at these ports of entry. In 1998, more than 60,000 foreign aircraft landed at California's six major international airports. Fewer than half were inspected by USDA officials.

Of the nearly 10,000 foreign vessels that arrived at California ports, fewer than 3,000, less than a third, were inspected. Most astonishing, of the more than 29 million vehicles entering California from Mexico, fewer than 90,000 were inspected.

In San Diego, the USDA has only 49 agents and support personnel to monitor three land ports, two airports and a harbor.

Another problem is that the ports of entry are not always staffed during hours of operation. At Otay Mesa, for example, the USDA operates from 8:30 a.m. to 6:00 p.m., even though the ports are open a lot longer.

Sorry, you are going to have to wait for a minute while I find the right page here.

Inspection hours are limited and shippers are known to slam the border before the end of a shift to avoid rigorous inspection. Virtually non-existent penalties for violators do not deter the smuggling of illegal produce.

I happened to be sitting next to the United States Attorney in San Diego about a week ago, and I said, how many cases have you prosecuted in the last year or so for illegal smuggling of produce? Guess what the number is? Zero. Guess what? USDA has not sent a single case to the U.S. Attorney for prosecution, and we now have almost a dozen quarantines. The penalty for criminal violation of the smuggling laws is a $5,000 fine.

For an illegal shipper, this is simply a minor cost of doing business, not an effective deterrent. I urge you to use your authority to remedy this situation.

Now, let me talk for a moment about this latest Fallbrook quarantine. The Fallbrook quarantine, if I can find the right notes again, as I said is 72 square miles. It involves 1,470 growers and 20 specialty crops.

Now, where is the rub? These farmers were encouraged by your department to grow these specialty crops. They thought to reduce the risk of exotic pest introduction no pre-or post-harvest treatment was provided for any of these crops by USDA.

As a result of two fruit flies, 150 growers, among the 1,452 affected, are going to lose their entire harvest, virtually everything, almost $3 million worth. And because they are small, they face the real probability they are going to lose their land and/or their homes as well.

I have met with your staff. I urge that some assistance be provided. I outlined the sections of the code which would enable this

to be treated as an emergency. That the fact that it was extraordinary because USDA had encouraged the growing of these specialty crops, and I got nowhere. Zip, zero, nothing.

SUPPLEMENTAL APPROPRIATION

Now, Mr. Chairman, I would hope that in the supplemental appropriation, we could add something, because out of the 1,400, we estimate that there are 150 people that are going to lose everything because their whole crop is on the ground. They cannot touch it. They cannot put it in a lunch bag to go to school. They cannot sell any portion of it, and so they are effectively dead for this entire crop season. So, this is a huge problem.

I have met with a number of your inspectors. They all tell me that staffing is inadequate on the Mexican border, and I have given you a list of the quarantines that is resulting from inadequate inspection. And I think we are going to have a huge problem, and you can very well see the wipe out of California as an agricultural community unless we do something about it.

Now, the quarantine in Fallbrook in San Diego County has resulted in six countries not accepting the produce from the entire San Diego County and Riverside County as well. That is the present situation today.

C&H SUGAR REFINERY

Now, let me go on because the distinguished senator and colleague on my left is present, and I think he has an issue as well. And that is the issue of the sugar program. As you know, I first met with you in 1994 about the largest cane refinery in the United States, C&H Sugar. I have written you 13 letters. The refinery is 93 years old.

When I first met with you, it had over 1,000 employees. It is now down to 500, and once again about to close its doors. It is also the only source of employment, major employment, in Crockett. It refines about 15 percent of the total cane consumed in the United States. It requires an excess of 700,000 tons of raw cane sugar to meet its demand.

Hawaii is C&H's sole source for its domestic raw cane sugar needs. But the cane industry has been in decline for over 10 years. So, C&H has been forced to cover over half its annual consumption through imports, and the quota prevents it from importing enough sugar. Higher restrictive import systems force C&H to pay an inflated price for raw sugar from both domestic and foreign suppliers.

Even more devastating, the quota limits the amount of sugar available to the refinery. That is why they are down to 500 workers. Simply put, it cannot buy sugar to refine, and it has been forced to close its doors.

In a letter to me, the CEO reports C&H was forced to close November 8th to November 15th because it ran out of raw sugar. The closing is extremely costly. Other competitor refineries, Savannah and Domino, have had similar experiences. The government imposed shortage is forcing up the market price for raw sugar to levels that are bankrupting refiners.

The recent production capacity has resulted in a severe downsizing of the work force. As recently as 1987, C&H employed over 1,400 people. They are now down to just over 500 people.

Recently, as a short term solution, the USDA allowed C&H to import an additional 100,000 tons and expanded the re-export period from 90 days to 5 years. I was shocked to learn on December 29th of this past year that your department reversed its position and reduced the re-export period to 180 days. C&H may now be forced to forfeit the bond posted for the sugar at a cost of more than $20 million.

Frankly, according to C&H, the department's actions have done far more damage than if you did nothing at all. And according to Mr. Conselic had you not intervened, C&H would have been forced to shut its doors, and that would have been preferable to forfeiting its bond, which I am told could go up to $40 million.

You have got to find a way to resolve this mess. And I would say to the sugar beet states, you cannot prevent a refiner from getting cane or beet or some sugar to be able to refine. It is an unfair policy. And if I have to, I will do everything I can on the floor. I will find a way to shut down the entire sugar program. I have appealed to sugar senators. I just get blank stares.

But can you carve something out so that C&H can at least buy sugar at market prices to be able to refine and nobody cares? It is a phenomenon.

So, the sugar policy of the United States Government is going to drive the largest domestic refinery out of business. I have no doubt that that is going to happen. And that is a flawed policy. But we have got—these are the two big problems.

Secretary GLICKMAN. Okay.

EXOTIC PEST INFESTATION

Senator FEINSTEIN. One is a huge exotic pest infestation that has resulted in nine quarantines, two of them large now. And two pests that will wipe out, one, the grape industry and the other, the entire nursery industry, unless something is done with it. As you know, you have got money in the budget. Three-quarters of it is earmarked and it is earmarked to states other than California. But we have a huge problem. Could you respond to this?

Secretary GLICKMAN. Yes, I will try to. Thank you. First of all, let me tell you—increasing penalties for violating our regulation on importation of pest-laden fruit has not passed the Congress. One of the problems is if you send a case over to the U.S. Attorney it may not be prosecuted if it is small and only a misdemeanor. We need to get the penalties up.

Senator FEINSTEIN. This U.S. Attorney will prosecute.

Secretary GLICKMAN. Okay. Well, I am just telling you that a bill is in the Congress, and if you raise the penalties, the incentives will follow and it will make it a lot more attractive to prosecute everywhere. We will work with you on that legislation. I am told that, my staff has met with you. Where they came back and told me about the meeting, and I asked them why are we not sending cases to the U.S. Attorney.

I would like to know from the U.S. Attorney what kind of cases actually would be prosecuted. But if we can raise the penalties, it

would make it a lot more worthwhile for these cases to be prosecuted.

Senator FEINSTEIN. I would be happy to ask him to come back, to sit down with you and discuss this.

Secretary GLICKMAN. Yes. And I will tell you, I am going to call the U.S. Attorney myself. I know the person.

Senator FEINSTEIN. Please.

Secretary GLICKMAN. I will talk to him and ask him what can we do to get him the kind of cases that he might pick a couple to prosecute to send the signal out there. I also will talk to our Office of Inspector General on this as well.

On the budget, I understand what you are saying. Clearly as we go into a more globalized trade situation, the entire government of the United States has to do a better job of inspection. In our budget, as you know, fruit fly exclusion and detection has been increased from $25 million to this year to a request of $55 million, over 100 percent increase for that effort.

For the agriculture quarantine inspection we have asked for a 15 percent increase, from $210 million to $240 million.

Senator FEINSTEIN. May I stop you there?

Secretary GLICKMAN. Yes.

Senator FEINSTEIN. My staff tells me it is a just a shift of accounts.

Secretary GLICKMAN. Mr. Dewhurst.

Mr. DEWHURST. Well, we started with the med-fly which was begun with emergency CCC money, but under our rules we can do that for 2 years and then we have to budget for it and count it against our targets. And we have done that.

Secretary GLICKMAN. I would have liked to keep it as emergency spending so that I would not have to count it but we are not able to do it that way any longer.

Senator FEINSTEIN. But is it net new money or is it a shift?

Secretary GLICKMAN. It is both. It is some net new money and some shift. We will get you the specifics on it. For, emerging plant pests, we have gone from $1.5 million in 1999 to $29 million for 2001. We do have a responsibility to protect animal and plant resources and we do not have enough people at the border, you are correct.

Now, on the other issues, as you know, the basis of our meeting, I sent Dr. Siddiqui who ran the Plant Protection Activities for the California Department of Agriculture, to San Diego where he had a meeting, I believe.

Senator FEINSTEIN. Day before yesterday.

Secretary GLICKMAN. Yes, the day before yesterday with us. I think some of your staff were there.

Senator FEINSTEIN. The Agriculture commissioner.

Secretary GLICKMAN. The Agriculture commissioner and others.

Senator FEINSTEIN. Correct.

Secretary GLICKMAN. Now, what I am told is that there are two basic issues. One of the issues is the issue of compensation. That is, does the government have a responsibility to compensate these producers when there is a quarantine.

Senator FEINSTEIN. And when you encourage them to grow the crops in the first place.

Secretary GLICKMAN. Okay. In any event, we, on occasion, have provided compensation. We did it for Karnel bundt in wheat. Some of that wheat was in California. We are now looking closely at the case of plum pox in Pennsylvania.

CITRUS CANKER

Senator COCHRAN. Citrus canker.

Secretary GLICKMAN. Yes, citrus canker. We have done it when the authorities asked us. Even then there were some cost share between the State and the Federal Government. I do not think the Governor from the State of California has declared an emergency or asked us to participate in the funding.

Senator FEINSTEIN. He has not.

Secretary GLICKMAN. But that would obviously be helpful.

Senator FEINSTEIN. Right.

Secretary GLICKMAN. In addition to that——

Senator FEINSTEIN. If the Governor declares an emergency, will you then help?

Secretary GLICKMAN. It would make it a lot easier for us to do that. I have to go back and talk to my folks, but if the State declares an emergency, it was a situation where we were able to participate, such as citrus canker, we would consider providing cost share money on some compensation. So, that would make a big difference.

Now, the other thing is we have a lot of quarantines every year. The policy is the government cannot compensate every producer for every quarantine for every purpose. Now, what you are telling me is we may have contributed or caused a specific type of production.

Therefore, there may be some responsibility. Maybe not legal responsibility, but if nothing else, moral responsibility. I have instructed our people to go back and take a look at that as a result of the meeting a couple of days ago. So, we will do that.

Senator FEINSTEIN. And the border staffing?

Secretary GLICKMAN. Well, the border staffing is a function of money, and some of this money will go for additional staffing. I cannot tell you how much. We may need to work with you, perhaps, to augment these numbers a little bit.

SHORTAGE OF USDA INSPECTORS

Senator FEINSTEIN. Let me tell you what I am told by the Deputy Ag Commissioner of San Diego County. That your people work very hard, but they are completely overwhelmed, and they cannot keep up with it. And like with drugs, those who smuggle get very sophisticated. And when they go off duty and the port is open for 2 more hours, they just pour across.

Secretary GLICKMAN. Yes.

Senator FEINSTEIN. Now, the avocado growers told me that they got one smuggled avocado shipment because they thought the pits were narcotics. But, if it is an infestation, they do not get them.

Secretary GLICKMAN. Well, I do think then, when we are trying to encourage globalization of agriculture, we have a special responsibility to protect American producers and to do the adequate amount of inspections. I agree with you, we do not have enough inspectors on the borders.

Whether the budgeted amounts are enough or not, I do think it requires a very high priority from our government in all aspects, whether it is in California, Arizona, Texas, Florida or the Canadian border. We will continue to look at the compensation issue. This is on my plate now. I want you to know that.

SUGAR ISSUE

Senator FEINSTEIN. All right. Good. Sugar?

Secretary GLICKMAN. Now, on the sugar thing, I might ask Under Secretary Shumaker to respond to you. I would let him go first and I will respond.

Mr. SHUMAKER. You want to go first?

Secretary GLICKMAN. No, you go first.

Mr. SHUMAKER. Senator, sugar, as you know, is an issue throughout the country and it is a very, very complex problem. We administer the sugar program. Let me just take 1 minute on where we are with the overall sugar issue, because I think some members here may be very interested in it.

We had an increase in acreage in both cane and beets in recent years. Good weather, combined with increased acreage have meant record cane and beet sugar crops throughout the country, including the major producing States such as North Dakota, Louisiana, Florida and others.

So, we have this increased domestic production and increased imports of sugar products which are outside the sugar tariff rate quotas. These are the key factors in the question of the low domestic prices. So, what have we done?

We are working, particularly, on non-recourse loans. They are now available to domestic producers of sugar cane and sugar beets. Many of the processors are taking advantage of these loans, which in turn benefit the producers that sell to these processors. Apart from these loans, there are not many other provisions under the current sugar legislation.

Part of the problem is, of course, Hawaii. I have been to Hawaii several times and it has reduced substantially its sugar production for a variety of reasons and that has really affected C&H over time. So, the Hawaiian diminution of sugar production has really affected that one sugar refining plant in California.

Thats why we have the problem, and I have to be honest with you, there was some unfortunate set of circumstances in the way we handled the TRQ and its impact on C&H. We provided a waiver and allowed them to import raw outside the TRQ at a time when there is excess domestic sugar on the market.

We have since initiated, I think my staff has worked and kept you fully informed, in an effort to mitigate some of the negative effects which you have outlined today that this original waiver has had on the sugar program overall. We are trying to mitigate the effects on C&H. Obviously we have not been as helpful as you would have liked us to have been.

Senator FEINSTEIN. What about requiring that they forfeit their bond?

Mr. SHUMAKER. Well, I do not have exact information on this question. I will get back to you on that bond issue, because I have not been formally briefed on that. But we are trying to mitigate the

effect on C&H and at the same time, trying to see that there are no unfortunate circumstances if that waiver was provided on the rest of our sugar industry.

Secretary GLICKMAN. If I may talk for a minute. I must tell you, not that I agree with you on everything, but if we put a company in jeopardy because we made a mistake at the Department, that is inexcusable. I am going to get to the bottom of this matter.

Senator FEINSTEIN. Thank you.

Secretary GLICKMAN. This is inexcusable, and it is one of the things I used to get frustrated with when I was in Congress. You just can say here, well, it may have been because of the tariff rate quota. It is kind of like saying it was the law, when you try to explain what you did. We have got to somehow make good on this.

I do not know how we are going to do it, and that is very troubling to me. I promise you that I will see what I can do, because it is not an excuse that some employee made a decision and it was not in conformance with what we are supposed to be doing.

Senator FEINSTEIN. Right.

SUGAR TARIFF RATE QUOTA

Secretary GLICKMAN. This company was mislead and went out and did certain things based upon that and we have an obligation to do what we can to deal with it. I would have to tell you domestic production of sugar has gone from 7.3 million tons in 1995 to 8.8 million tons last year, a significant increase in production. Because of the TRQ and the way that we have to administer it under the law, imports have gone from 2.2 million down to 1.2 million, largely as a result of the dramatic increase in production of domestic sugar.

So, you and others have called me about how to try to deal with this problem in the most sensible way that we possibly can. But the underlying problem is domestic production is going up very significantly.

Therefore, the administration of the TRQ means imports are coming down rather significantly. I gather C&H probably used to get a lot of its sugar from Hawaii, but now they having to rely on importing their sugar.

Senator FEINSTEIN. They were, yes. They were limited. And you see, the problem is they are not allowed to buy sugar. Remember we talked about this? They cannot bring sugar in, as I recall. They cannot import it. Now, that is ridiculous. I mean, this a free market. Why should not a huge refiner be able to import it?

Secretary GLICKMAN. There is a limitation under the tariff rate quota. I am not telling you it all makes a lot of sense. All I can tell you is that I understand your frustration with respect to this firm who is employing people and, trying to buy sugar. But I am going to get to the bottom of it. It is unacceptable as far as I am concerned.

Senator FEINSTEIN. Thank you very much.

Senator COCHRAN. Senator Dorgan.

SUGAR PROGRAM

Senator DORGAN. Mr. Chairman, I respect the statement of the Senator from California. She has a problem and has to address

that and resolve it. I know she will not expect anyone to apologize for a sugar program that works for sugar producers or for family farmers in this country who are raising beets, for example. This is one program that has worked over the years among a range of programs that have largely failed in agriculture. But, you know, she makes a point.

I appreciate the Secretary's response to her about dealing with the C&H issue. But, we ought not believe that repealing the sugar program is a thoughtful response. I know you are not suggesting that.

Senator FEINSTEIN. It is the only thing I can do.

Senator DORGAN. Well, but I do not think——

Senator FEINSTEIN. I have tried since 1994.

Senator DORGAN. With all due respect, I do not think you can do that either.

Senator FEINSTEIN. Just to get adequate sugar.

Senator DORGAN. I mean, I do not think you are able to repeal the sugar program, nor should you be able to. We should solve your problem, but do so without ravaging family farmers.

Senator FEINSTEIN. That is right. That is all I want.

Senator DORGAN. Mr. Secretary, I waited because I wanted to ask you a couple of questions about something that is often more discussed in the agriculture committee, the authorizing committee. But the appropriations in the budget really reflect the need for funds that come from farm policy.

You are now proposing additional money with respect to a counter cyclical program. My assumption is that that reflects your belief that you have previously stated, that the farm program should be significantly changed. That is the statement you have made?

Secretary GLICKMAN. That is correct. Let me discuss with you the urgency of that.

CHANGE CURRENT FARM PROGRAM

Senator DORGAN. Some of us believe that rather than wait for 2002, that we ought to change the underlying farm program this year. We are going to attempt to make the changes to the farm program to make it counter cyclical this year. How do you feel about that? Would you support that? Do you think there is an urgent need to change the farm program?

Secretary GLICKMAN. First of all let me say, I think the 1996 farm bill has had major radical changes in the last 2 years, because the Congress had to appropriate more money in emergency spending on top of the basic AMTA-payments.

Senator DORGAN. But that is not the farm program itself.

Secretary GLICKMAN. No. But what I am saying is that if the farm program is has to have these additional direct payments, the Congress has basically said the underlying farm program does not work very well.

Congress has not made any authorizing structural changes in the farm bill. The net impact intellectually does not work very well. Now, what we would like to see is significant additional revisions to that base farm program.

Knowing how difficult it sometimes is to actually get some of this done, what we have proposed is this counter cyclical program on top of the existing program. But we would be willing to work with you on more fundamental structural changes in the farm bill. That is, I think we have developed the intellectual principle that we would like to see this program based on, and that is a counter cyclical formula and not on straight lined payments.

Senator DORGAN. Now, the chairman of the Agriculture Committee likened the emergency aid in 1998 and 1999 to ad hoc counter cyclical aid. My assumption is that almost no lender is going to consider ad hoc cyclical aid as a part of a regular farm program, and that, I think, underscores the need to change the underlying farm bill itself or to, as you are suggesting, add something to it that changes the nature of the safety net.

Secretary GLICKMAN. If you cannot change the basic formula, then I think you need a bridge to the new farm bill that gives a signal to producers as to where we are going to be going.

Senator DORGAN. But let me ask you, do you think it advisable to change the basic formula? Do you basically support the efforts of those of us who think it is urgent we do so?

Secretary GLICKMAN. I think it would be advisable to change the basic structure of the current farm bill. I would add two caveats. Number one is whether it is, in fact, something that could be done. And number two, there are a lot of lenders and farmers out there that have factored in these AMTA payments into their debt repayments, and into their operating programs. So, there is a possibility of creating some instability out there unless you were to give them at least as much as they are getting in the basic AMTA program.

Senator DORGAN. Your recommendation to fund something that is counter cyclical in your budget also anticipates targeting. Can you describe how that is different from AMTA? AMTA does not target, is that correct?

Secretary GLICKMAN. AMTA does not target. There is the payment limitation.

Senator DORGAN. Right.

AMTA PROGRAM

Secretary GLICKMAN. This program would have a more restrictive payment limitation than the AMTA program does. It is based on income losses, not just based upon a straight payment, irrespective of what the market is doing.

Senator DORGAN. So, targeted to actual losses and also targeted with respect to limitations?

Secretary GLICKMAN. That is correct.

Senator DORGAN. And that differs from the AMTA payment in that the AMTA payment may well go to people, not only that did not have losses, but may go to people who did not produce anything?

Secretary GLICKMAN. That is correct.

Senator DORGAN. And one more attempt at this. There will be a disagreement, I assume, in this Congress. Those of us who are attempting to change the underlying farm bill as opposed to just grafting some counter cyclical piece to it, because we think it ought to be done now rather than later.

We think the year 2000 is important to do it, rather than 2002, only because history shows us that the current farm bill does not provide counter cyclical support. It was not designed to, nor will it help farmers when prices collapse, respond to that price collapse. In light of that, is it your feeling that it is a reasonable thing to do, to try to get an early start on changing this farm bill rather than waiting until 2002?

Secretary GLICKMAN. I would say a couple of things. Number one is that AMTA payments are going to come down by about a half billion dollars this year and a billion in 2001. So, you are going to have some reduction in farm assistance even with the 1996 farm bill. Unless it is made up some way, it will result in more net income losses to farmers.

I think it is very reasonable to look at the underlying structural nature of the 1996 farm bill, but I would say that if you do not think you can do a fundamental re-write of the legislation, then you try to at least set some principles for interim legislation that will give some leadership to where you are going to be going in the 2002 farm bill.

Two other points. The conservation piece cannot be ignored, because for the first time we are going to make payments to producers everywhere in the country, not just in the regions that have been getting the farm program payments, for practices of good conservation practices, and not cost share payments. More and more I think in the future, you are going to see more farm bills related to conservation as well as basic commodity policy.

Senator DORGAN. I support a conservation element, too. But I do not, for example, want to see someone saying, well, let us just have CRP replace farming.

Secretary GLICKMAN. Right.

Senator DORGAN. I want family farmers to be able to live and operate the family farm and make a decent living. And those of us who come from farm country have a real stake in seeing that happen. And regrettably, as you have said, the AMTA payments ratchet down this year.

Even if grain prices continue to soften, you have a farm program that provides less income, even as prices collapse. That is the reason it needs to be rewritten.

Secretary GLICKMAN. Right.

Senator DORGAN. Mr. Chairman, thank you.

Senator COCHRAN. Thank you, Senator.

Senator Bond.

Senator BOND. Thank you very much, Mr. Chairman. I appreciate being able to come back and pick up where we left off. I know that you all are having a great time today. I am sorry I have had to go to other hearings.

BIOTECHNOLOGY ACTIVITIES

But, Mr. Secretary, I did want to get into, and I am glad we had the opportunity in the public forum, to talk more about the biotechnology activities. Are you aware of any food hazard that has resulted from utilizing the transgenic process? The process as opposed to what comes out.

Secretary GLICKMAN. I am not personally aware of anything. I am aware that in the past, the FDA has looked at this issue as it relates to hypoallergenic responses.

Senator BOND. That is correct. The product.

Secretary GLICKMAN. Yes.

Senator BOND. The product when they try to incorporate a Brazil nut and a soybean resulted in the potential of causing an allergic reaction, and therefore, the Brazil nut was dropped as an additive to soybeans. And that was the product. And I think that we all agree that each product needs to be reviewed on its own.

Secretary GLICKMAN. Right.

Senator BOND. But the process itself should not cause any harm, should it?

Secretary GLICKMAN. I am not aware of any. I would say that one of the things we are doing at USDA is to continue to upgrade our approval process, because the big thing you have to do is to give the public and consumers confidence that we are doing everything we can. The process needs to be forward thinking.

I mentioned the National Academy of Sciences is doing a peer review of our approval process. I have created a biotech advisory committee chaired by a former member of the House, Dennis Eckart from Ohio, to basically keep a continuous advisory eye on what we are doing.

As you know, the approval of foods themselves is a responsibility of the FDA and the EPA has some responsibility. But as long as we continue to do this kind of thing and give the public confidence, I think this technology will and should go forward.

Senator BOND. Well, and I mentioned to you, and I think I have shared with your staff, I do not know if you have seen it, but the letter that I took to Seattle signed by 500 scientists from all walks, all across the country, saying that we have got as good a process as science can develop through the EPA, the USDA and the FDA.

And I agree with you that we need to continue to take—actually, these are extraordinary methods. Dr. Martina McGlouglin, the Director of Biotechnology at the University of California, Davis, in her comments to the FDA said that she believes that the regulatory oversight must be science and safety based.

She says that suddenly altered products on our plates, coming from biotechnology, have been put through more thorough testing than any conventional food has ever been subjected to. I guess that is a fair statement. There is no other—we have never tested any other food products.

Secretary GLICKMAN. Certainly in the recent period of time, I think that is probably true and will continue to be true.

Senator BOND. And, you know, we agree that labeling of foods ought to be based on science.

Secretary GLICKMAN. I have said that if companies may find it useful to engage in labeling, information labeling, it is voluntary labeling. They have to make the decision to do that. For the government to come in and mandate labeling is clearly premature. We have not established a basis or thresholds for it. We do not have the scientific basis to determine really what is in the product from a commercial basis right now.

I would have to say this, I want to go back to this point again, we have got to make sure that the consuming public, not only here but around the world, have confidence that the food supply is safe.

This morning, I went over and spoke to a group of consumers from around the world. They are meeting on this very point. I was trying to tell them that we have got a food safety system, that while it is not perfect, it is by far and away the best in the world.

Whether it is our food borne pathogen safety system or our GMO review process, it is a science based system and it is on the level. It is independent from industry.

The industry is not running this system, because that for sure would make it kind of suspect. Because of that, I think that the industry ought to take our lead and develop similar systems.

BIOTECHNOLOGY ACTIVITIES

Senator BOND. We just need to get you a bigger megaphone because I believe you are exactly right. That you have to have the best science. I understand from the FDA that the FDA says that the only reason to label a food if it is different, significantly different or if there is a health concern, and then the consumers have a right to know that.

But, if there is no safety issue, the companies can label a product if they want to, but it has to be truthful. In other words, if they label something as GMO free, then you could not sell cheese, most of which is produced with chymosins that are—chymosin that are genetically altered in my understanding. You could not sell most of the cheese we have today.

Secretary GLICKMAN. I tell you, one of the things we are doing at USDA to address this, in something of an indirect way, is to issue our rules on organic certification. As you know, the Congress passed a law in 1990 that required us to issue rules on how to certify organic products.

UNDER THE RULE

Organic foods can not contain GMOs. That is the result of the rule making process. It does not mean the food is any safer.

Senator BOND. Do they get to use BT and still it as an organic?

Secretary GLICKMAN. I do not want to prejudge everything within the final rule.

Senator BOND. Cultural practice.

Secretary GLICKMAN. Yes, as a cultural practice, they can use BT. I do not want to go through all of it, but all I am saying is that there is a group of people out there that want a certain kind of food. But I have made it clear this is not a safety issue.

Some people argue that a lot of the things we do with our food actually improves the safety of food. But, you know, this is an interesting issue. I have been working on this for about 9 months. It is causing a lot of havoc out there in the countryside with farmers, as you know, not knowing what to plant, where to sell their products. One of the reasons why we are talking about doing an on farm storage program for producers is so they have a little more control over the marketing of their product than they did before.

When we come up with products that the consumer believes is in their interest, nutritional things like the Vitamin A rice, may be

health related things, I don't think this thing is going to turn overnight. But until such time as that happens, I think there is still going to be a lot of controversy.

Senator BOND. I am very much concerned that this technology is under such broad scale attack, if we do not have scientists speaking out and knowledgeable government officials, like you, speaking out to say, hey, we are using the best science, this is another step in the continuum of development.

We have come many, many miles with hybrid corn and cross breeding to get better food products from animals and from crops, because we have fiddled with Mother Nature. And we have come up with improved plants. This is another step. It is a more precise step. But I think, and some of the opponents call it "a largely untested technology," would you agree with that?

Secretary GLICKMAN. I cannot agree—there is no new food that is approved for use in this country, or no new seed that is approved for use in this country, that is untested. Period. I mean that is just wrong. Does that mean that we should just rest on our laurels?

Senator BOND. No.

Secretary GLICKMAN. Should we not help to produce better systems? We clearly need to do that.

Senator BOND. Let me—I have written you a letter, and it is very important that, I think, that we try to stop the spread of ural sclerosis to other parts of the world, which are, frankly, under attack from Europeans and others who want to stop all genetically modified foods. I just came back from Southeast Asia, and in Thailand and countries there, they want to know what our regulatory process is.

They have some excellent scientists. Scientists who have worked hand in glove with American scientists. They are working on genetic engineering to get rid of the gemini virus in tomatoes that causes the yellow leaf welt that destroys 95 percent of their crop. The papaya ring virus, are things that can be dealt with by genetic engineering.

They want very much to have contact with the USDA and the FDA, and I would urge you, if you have someone available who can make a trip to Bangkok, to go over with them the process that you go through so that they can assure their consumers. I sent the letter in the last day or so.

Secretary GLICKMAN. Okay. But we also have our agricultural attache in Thailand. I do not know if you saw this person when you were over there.

Senator BOND. Yes.

Secretary GLICKMAN. Do we have one in Bangkok?

STAFF. Yes.

Secretary GLICKMAN. I will make sure they are aware of this.

Senator BOND. Yes.

Secretary GLICKMAN. We do have the programs and we will work on it.

Senator BOND. They do not seem to believe the embassy or visiting senators. They want to hear somebody from the USDA who is involved in the regulatory process.

Secretary GLICKMAN. I will make sure that Mr. Shumacher follows up on this.

Senator BOND. Yes, if you would, please because we want to make sure, because this part of the world is going to benefit tremendously from genetically modified organisms. And we need to work with them. And our Ambassador there, Bob—excuse me—Ambassador Hechlinger is working very closely with them to provide the resources.

Mr. Chairman, I probably have another 2½ hours of questions, but I will submit them for the record, and I am sure the Secretary would like to go to lunch, too. So, thank you very much, sir, for accommodating me.

Senator COCHRAN. Thank you, Senator.

I have a number of questions that I will submit as well.

One final question, though, of you, is about the recission the Department elected to impose on the Title I Public Law 480 program under the budget resolution that we finally wound up with. We had a 0.38 required recission and you singled that program out. And I also notice that you have singled it out again with a cut proposed in this budget request.

I am curious about the lack of support in the Administration for Public Law 480, Title I. It is a very useful tool in assisting developing countries with the potential of becoming commercial markets for U.S. agricultural products at a time when we are seeing barriers and difficulties in international trade, like Senator Bond was talking about, and others. It seems like a poor time to be targeting an export promotion program for under funding and cutting and rescinding.

Secretary GLICKMAN. Perhaps Mr. Dewhurst can respond first.

Mr. DEWHURST. Yes, sir. Well, the cut that we were required to take added up to about $96 million in the Department in discretionary money and the emergency money that Congress had provided. It was simply not easy to find $96 million in reductions. One of the things that happened, frankly, is that we looked at areas where there were substantial carry over balances or other ways we thought the impact of the cut could be ameliorated.

In Title I, we had over $100 million in available funds carried over from the prior fiscal year. So, when we worked with the agency, $8 million of the $96 million was taken out of Title I. It was done with the understanding that there were these balances and the cut could be handled, at least for this year, without a serious impact on the program.

ADDITIONAL COMMITTEE QUESTIONS

Senator COCHRAN. Thank you. Mr. Secretary, we appreciate your patience with our committee. Thank you for your cooperation.

Secretary GLICKMAN. It was good working with you. Thank you.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

COMPUTER SECURITY

Question. Mr. Secretary, I notice that the budget for the National Agricultural Statistics Service includes funds for the security improvement of the agency's computer systems. With the recent news of computer hackers breaking into computer

systems of major national companies and government agencies, how do you perceive the threat to USDA computer systems? What would be the potential consequences of a computer break-in at the Department? Is this not something that should be dealt with by the Chief Information Officer (CIO) of the Department, instead of dealing with these needs on an agency-by-agency basis?

Answer. Recent security break-ins in the private sector and security problems at the Environmental Protection Agency make it clear that no organization is safe from cyber-security attacks. We are working to strengthen our cyber-security program, and have thus far managed to repel efforts at intrusion without apparent damage.

USDA takes such threats seriously due to the market sensitivity of many of our reports as well as the confidential information collected by the National Agricultural Statistics Service from producers and agribusinesses that is maintained on our information systems. The information USDA manages affects the financial markets and the lives of individuals. The National Finance Center processes payroll for 450 thousand federal employees and administers the Thrift Savings Plan for over 2 million federal employees. Rural Development's loan portfolio exceeds $100 billion. At the same time, USDA is increasingly using the Internet to provide customers information about programs and services, and will eventually use it to allow customers to conduct transactions online. I do not want to speculate on the potential consequences of a computer break-in at the Department, other than to say that USDA clearly has significant resources that are at risk.

The Department's CIO is taking a holistic approach to strengthening our cyber-security program. We have recently hired an Associate CIO for Cyber-Security who is an expert in this area and who reports directly to the CIO. His mission is to work with each USDA agency to improve cyber-security while also strengthening security at the Departmental or perimeter level. Given the interconnectedness of the Department's networks, and the common issues that all agencies face, we are strengthening our corporate approach to security while also continuing to identify and address specific weaknesses at the agency level. Individual agencies such as NASS have identified immediate needs based on their programs, missions, and current vulnerabilities. These security steps are important and necessary, but equally importantly they must be addressed in the context of strengthening cyber-security throughout the Department.

COMPUTER SECURITY FUNDING

Question. Are the needs for computer security funds widespread within the Department? What are the practical implications if this funding is not provided?

Answer. OCIO has requested an increase of $6.6 million for fiscal year 2001 to complete implementation of a corporate cyber-security program. This will allow OCIO to expand USDA's Cyber-Security Program Office, establish a department-level Information Technology Risk Management Program, develop a USDA Information and Telecommunications Security Architecture, and conduct employee training program to heighten awareness among all USDA employees about security risks and their responsibilities in mitigating those risks. Strengthening cyber-security is a top priority across

USDA. Each agency has already or will soon be undertaking a comprehensive risk assessment to identify its vulnerabilities and take steps to mitigate them based on the value of the data that they manage. Some, such as NASS, have completed these assessments and have requested funding to implement corrective measures. We anticipate that future agency budget requests will reflect their cyber-security needs once their assessments are complete.

COTTONSEED ASSISTANCE

Question. Mr. Secretary, as you are aware, the fiscal year 2000 Consolidated Appropriations Act provided you with discretionary authority to provide assistance to producers of cottonseed. This authority referenced some $117.2 million in available unobligated funds which could be used to finance such assistance.

It is my understanding that of the $117.2 million in unobligated funds that we identified in the bill, the Department first subtracted the $4.7 million for implementation of the mandatory price reporting, then used these funds for the across-the-board cuts that were also required by the bill, then reserved $10 million for the Step-2 program for Extra Long Staple cotton, thus leaving $74 million for cottonseed assistance. It is my understanding that assistance in the order of $20 per ton would be necessary to raise the price received to a 5-year Olympic average. The amount of funds that you have left for cottonseed would only provide about $13 per ton—35 percent less than the average.

It is also my understanding that prior to the clarification included in the Consolidated Appropriations Act, the Department was already working to develop a program to assist cottonseed producers from other disaster funds. So, it would seem to me that because we identified available funds from which assistance to cottonseed producers could be made, we actually reduced the amount of money they would have received.

Why were the mandatory price reporting funds not subjected to the across-the-board cut?

Answer. The statutory authority for the 0.38 percent government-wide rescission provided the Secretary with discretion to target the reduction. Implementation of livestock mandatory reporting is a key element in providing information needed to promote competition in livestock markets and is especially critical to smaller producers. Taking more than a token cut would have hampered our ability to implement this effort during fiscal year 2000.

Question. It is my understanding that no final decisions have been made to date about whether to exercise this authority. You and I last spoke about this issue in December. When do you intend to make a decision?

Answer. Department staff are developing options for the cottonseed support program and the ELS cotton competitiveness payment program. We have determined that approximately $84 million will be available for the two programs. We expect to determine the operating provisions of the programs soon.

Question. Do you have any intention to supplement the $74 million remaining from other disaster funds?

Answer. We likely will allocate $10 million for the ELS program. That would mean that the cottonseed program could be funded at $74 million, a payment of about $11.50 per ton of seed produced. We would not propose to increase the cottonseed payment unless our preliminary estimate of unspent supplemental AMTA funds proves too low. In that case, we would allocate any small increment to cottonseed payments and not propose to increase funding for ELS.

SUPPLEMENTAL INCOME ASSISTANCE PROGRAM

Question. Mr. Secretary, I understand that the budget includes a legislative proposal estimated to cost $5.8 billion in fiscal year 2001 and $11 billion over the next three fiscal years (2000–2002).

It is my understanding that a major component of this initiative includes a payment-limited income assistance program. Mr. Secretary, you have been quoted as saying that even with the proposed payment limit, only 2 percent of current AMTA payment recipients will be ineligible. Further, it is my understanding that an individual that received less than the $30,000 payment limitation would have his supplemental payment reduced by his AMTA payment.

On what basis did the Department estimate that only 2 percent of current AMTA recipients would be ineligible? In my State of Mississippi, I would estimate that the opposite would be true, only 2 percent would be eligible for a payment under this new program.

Answer. The $30,000 Supplemental Income Assistance Program (SIAP) payment limit was selected to limit the amount of supplemental assistance provided to very large family and non-family farms. This limit would apply to combined payments under SIAP and Agricultural Marketing Transition Act (AMTA) payments. This combined payment limitation is mutually exclusive to the $40,000 payment limitation for AMTA payments alone. For example, a producer eligible for $20,000 in AMTA payments would be eligible for up to $10,000 in SIAP payments, but a producer receiving more than $30,000 in AMTA payments would not be eligible for any SIAP payments. The purpose of SIAP is to target smaller producers who have lower farm incomes. For that reason, SIAP payments would supplement farm incomes of those producers who already receive less than $30,000 in AMTA payments. Our preliminary analysis of 1998 AMTA payments indicates that only 2 percent of all producers would be ineligible for some level of SIAP assistance and an additional 6 percent would have their supplemental assistance reduced under the proposed limit. Based on the same analysis, only 8 percent of Mississippi producers would be ineligible for SIAP payments. By reducing the amount of payments that go to the very largest producers, supplemental assistance to small- and medium-sized family farms would increase by more than 20 percent.

Question. Can you give us an estimate of the geographic distribution of these payments?

Answer. Yes, I can provide that information for the record.

[The information follows:]

The table below provides an estimated percentage breakdown of Supplemental Income Assistance Program Payments by State for 2000 crops. The numbers are a preliminary estimate based on 1999 production of wheat, feed grains, rice, upland cotton, and soybeans. The distribution of payments by State are determined by the level of SIAP payments going to each crop and the level of each State's production of that crop. This distribution can vary widely from year-to-year as payment and production levels vary among the crops and States. For crops, such as wheat, upland cotton, sorghum, and rice, where a large percentage of all U.S. production is concentrated in a relatively small number of States, changes in payment levels for these crops can significantly affect the overall distribution of SIAP payments among States. With the exception of North Dakota (the second largest wheat-producing State in 1999), the States with estimated shares of SIAP payments greater than 5 percent were also the leading producers of wheat, upland cotton, sorghum, and rice. (North Dakota was the leading wheat producing State in 1995 and 1996.) Because SIAP is intended to offset current year reductions in revenues for each supported crop, the large shortfall projected for wheat revenues in 2000 results in projected SIAP payments for wheat which are more than the SIAP payments for all other crops combined. The largest share of wheat SIAP payments would go to those States with the largest share of wheat production. If future prices for the various commodities generate larger payments to commodities other than wheat, the geographic distribution of payments would of course, be much different from the example distribution shown in the table which assumes most of the payments would be for wheat.

Estimated Supplemental Income Assistance Payments, Percentage by State

State	*Percent*
Alabama	.27
Arizona	.49
Arkansas	6.57
California	3.42
Colorado	3.11
Connecticut	.....
Delaware	.17
Florida	.04
Georgia	.60
Idaho	3.69
Illinois	4.28
Indiana	2.16
Iowa	3.33
Kansas	14.28
Kentucky	.82
Louisiana	2.18
Maine	.02
Maryland	.43
Massachusetts	.....
Michigan	1.50
Minnesota	3.99
Mississippi	1.58
Missouri	2.37
Montana	4.93
Nebraska	4.72
Nevada	.04
New Hampshire	.....
New Jersey	.05
New Mexico	.38
New York	.34
North Carolina	.96
North Dakota	7.26
Ohio	2.47
Oklahoma	3.85
Oregon	.99
Pennsylvania	.53
Rhode Island	.....
South Carolina	.33
South Dakota	3.72
Tennessee	.66
Texas	7.51
Utah	.37

Estimated Supplemental Income Assistance Payments, Percentage by State—Continued

State	*Percent*
Vermont	
Virginia	.50
Washington	3.58
West Virginia	.01
Wisconsin	1.15
Wyoming	.34
Total	100

NOTE. Estimates are based on 1999/00 wheat, feed grain, rice, upland cotton, and soybean production.

Question. Do most of them go to the upper Midwest?

Answer. No, not necessarily. Since the Supplemental Income Assistance Program (SIAP) payments are tied to production, the largest shares go to the corn belt, central plains, and northern plains States. However, the southern States, including Oklahoma, Missouri, and Texas, would account for 28 percent of all SIAP payments, based on the above estimates.

Question. One could infer from this new program that in order to spend the $2.4 billion allocated for these payments, that farmers of crops other than traditional program crops (corn, wheat, cotton, rice) would be eligible. Is this true?

Answer. The Administration's proposal assumes $5.6 billion in payments for 2000 and 2001 crops. The Supplemental Income Assistance Program (SIAP) would provide assistance to producers of wheat, corn, grain sorghum, barley, oats, oilseeds, upland cotton, and rice. The proposed program could be expanded to include other crops, but recognize that we are working with a limited budget. We will work with Congress to include other crops, but will insist on remaining consistent with budget spending limits.

NEW DELTA REGIONAL AUTHORITY

Question. Mr. Secretary, the budget includes a $153 million legislative proposal to create a new Delta Regional Authority, $30 million of which is for start-up costs for the new entity, and the remaining $123 million is to be targeted to the Delta counties from existing programs within the Departments of Housing and Urban Development, Commerce, Transportation, Agriculture, Labor, Health and Human Services and Education. Can you explain how much of this $123 million is for the Department of Agriculture?

Answer. The proposal contains $10 million in funding for the Rural Business-Cooperative Service, $8 million in program level for the Intermediary Relending program and $2 million in technical assistance grants.

Question. For what programs will it be used?

Answer. The Intermediary Relending program and Rural Business Opportunity Grants.

Question. Is this in addition to the funds already set-aside for empowerment zones from within existing USDA programs?

Answer. Mr. Chairman, all of the funds referenced in the initiative are new funds. In the case of Rural Development's programs, they are in addition to the funds set-aside for the empowerment zones and enterprise communities.

PARTNERSHIP FOR CHANGE—COLONIAS INITIATIVE

Question. A Colonias Initiative is proposed by the fiscal year 2001 President's budget to promote nutrition assistance, health care, and job training placement to eligible participants. This new initiative would be a Federal-State pilot program funded at $5 million within the Food Program Administration account. Why is this a USDA proposal rather than a Health and Human Services initiative?

Answer. The Colonias Initiative is part of the Partnership for Change Initiative that has been operating in the Food and Nutrition Service's Southwest Regional Office for several years. So it is primarily a USDA, not a Department of Health and Human Services (HHS) effort. The Regional Office, as part of its normal operating activity, worked in conjunction with other USDA and Federal Agencies in 10 Colonias communities in Texas in 1999, sparking the building of some WIC clinics, helping with USDA rural development targeted loans and grants to the Colonias for installed water and sewer systems, and also getting the various programs there working together to assist residents in finding employment and job training, housing, and language and health services.

In addition to HHS, the Regional Office has worked with the Department of Housing and Urban Development (HUD), with Texas A&M staff, and with the many local agencies that operate social services and infrastructure development projects.

COLONIAS SITE SELECTION

Question. How did the Department determine that only the Colonias was to be the appropriate site for a Federal-State Pilot program?

Answer. Partnership for Change works in other areas, but the Colonias are the focus of the budget initiative due to their need. These are very needy communities along the U.S. Mexican border occupied primarily by Hispanics experiencing high poverty and unemployment rates and little infrastructure—substandard housing, utilities, water, health, and roads.

The Initiative will increase coordination of Federal, State and local programs and resources to work with residents to address their special needs. The initiative fosters effective use of existing social services and infrastructure building resources. The Initiative does NOT seek to initiate new, not-yet-authorized programs or to change existing regulations.

OTHER SITES CONSIDERED FOR PARTNERSHIP FOR CHANGE

Question. Were other areas, such as the Mississippi Delta and Alaska native villages also considered for this type of program?

Answer. The Southwest Region is presently assessing the possibility of a similar Federal-State initiative in the Mississippi Delta region of Arkansas and Louisiana.

TIME FRAME FOR PARTNERSHIP FOR CHANGE

Question. What is the time frame for this proposed pilot program?

Answer. The $5 million requested by FNS would be used to expand the Partnership for Change model to all four U.S. Mexico border States and to increase the effort at existing sites. Depending upon the extent of success, we may seek expanded funding in future years.

NUTRITION EDUCATION AND PROGRAM INFORMATION

Question. The President's budget request proposes additional funding for a food stamp nutrition education and a program information initiative to inform eligible non-participants of the availability of food stamp benefits. How much additional funding is proposed for this initiative?

Answer. We are requesting $10 million for this initiative.

PROVISION OF FOOD STAMP INFORMATION

Question. How will the agency use this funding to inform non-participants?

Answer. The funding will be used to try to ensure that eligibles are aware of their eligibility. We are pleased that many former food stamp recipients have moved on to jobs, and off of the food stamp rolls. Data reflect, however, that there are many who are eligible for food stamps whose households could use food stamp assistance in their transition towards work and responsibility, but who are not signing up for benefits. I will ask the agency for more details on this campaign.

[The information follows:]

The Food and Nutrition Service (FNS) is considering a number of ways to most wisely use these resources. Some of the approaches under consideration include:

—Staffing of the FNS toll free information number with live operators.

—Developing a device to prescreen households for eligibility and benefits. This prescreening tool might also be placed on the FNS Web site so that participants, advocates, and others can use the guide in the privacy of their homes or offices.

—Increasing the number of program access reviews in States with identified customer service problems.

—Printing our educational materials in bulk quantities to assist others in their efforts to reach underserved individuals.

—Funding grants or cooperative agreements with national organizations that are willing to actively promote the campaign through their constituency networks. Such groups could include advocacy groups, health organizations, the faith based community, Federal, State, and local program managers, and others.

Ultimately FNS will try to identify all potential ideas, evaluate to determine which of them would yield the most positive impact on recipients, and implement the most effective strategies.

FOOD STAMP INFORMATION BUILDS ON EXISTING EFFORTS

Question. How will this differ from the agency's current outreach activities?

Answer. Currently USDA and program stakeholders have done much to reduce potential barriers to participation, including ensuring that eligible recipients know they are eligible and how to apply. The fact that too many eligibles appear not to be signing up for benefits, however, suggests that additional effort is needed. That is why we seek the additional funds. Let me ask the food and Nutrition Service to supply some additional details on how this effort differs from current efforts.

[The information follows:]

Our current campaign essentially relies on the voluntary efforts of organizations willing to support the campaign financially and with their own resources. However, these organizations are indicating to us that, while they are willing to facilitate the campaign through their own communications networks, they need materials in large quantities to support their efforts. To date, we have not had resources to produce the bulk copies that these organizations could use to effectively reach potentially eligible individuals.

The new educational initiative will continue to be targeted towards the elderly, disabled, working poor families, and households containing legal immigrants, those persons most underserved in the Food Stamp Program. This initiative will enable FNS to print and distribute the educational materials that have already been developed but have not had wide distribution. Widespread dissemination of the materials will help to overcome Program misconceptions and barriers to Program participation, such as changes in Food Stamp Program policy that facilitate program access and availability, special accommodations for elderly persons, information to help working poor understand that they may still qualify for Food Stamp Program benefits, and encouragement to certain immigrants that they may be eligible for the Food Stamp Program.

These materials, as well as increased use of the media and enhancements to our Web site and toll free number services, will enable FNS and the stakeholders to more effectively educate the public about the Food Stamp Program and its requirements. The new initiative will build on the existing plans by providing the tools our partner organizations say they need to be successful.

MONITORING ABUSE VIA ELECTRONIC BENEFIT TRANSFER (EBT)

Question. A congressional study showed that the Government loses billions of dollars to fraud, abuse, and mismanagement.

Many States have switched from food stamp coupons to electronic benefits transfer (EBT) for disbursement of food stamps. This study claims that problems still persist. How is the Department monitoring the abuse of EBT as it applies to food stamp disbursement?

Answer. EBT has been misunderstood as a panacea to all program waste, fraud and abuse. It is not. EBT improves the efficiency of delivering, redeeming and accounting for food stamp benefits. It makes it much easier for USDA and the States to detect trafficking and some types of fraud and abuse. The largest area of loss in the report is erroneous allotment calculations for food stamp households, which cannot be affected by how the benefits are actually delivered—be it by the efficient EBT system, or by the traditional paper coupon system.

Nonetheless, EBT is a big help. USDA and the States are moving up the learning curve on how to best use EBT audit trail data for fraud reduction. FNS uses a system called Anti-Fraud Locator Using EBT Retailer Transactions (ALERT) which uses EBT transaction data to identify suspicious retailer activity.

LOWER MISSISSIPPI DELTA NUTRITION RESEARCH

Question. It has been noted in the press that USDA will audit what people in Mississippi are eating to see what makes them so obese. How is the Department implementing this new anti-fat campaign?

Answer. ARS has a project in the Lower Mississippi Delta region known as the Nutrition Intervention Research Initiative (NIRI) whose goal is to improve the nutrition and health of families of the Delta region, including Arkansas, Louisiana, and Mississippi. NIRI is currently conducting a telephone survey of a random sample of individuals in these states to determine what they are eating. From the existing data, we know that obesity is a problem in all of the three states. However, to date we do not have the evidence to suggest that they are necessarily eating more fattening foods in comparison with the rest of the U.S. population. From the new data that we collect, we hope to better understand the causes of obesity in the Delta

region and develop appropriate intervention strategies to change eating behaviors, if necessary.

Question. Is this a nationwide campaign?

Answer. The Delta NIRI is currently conducting a telephone survey of a random sample of individuals residing in Arkansas, Louisiana, and Mississippi.

ACTIONS TO ADDRESS HUNGER IN SEVEN STATES

Question. Mississippi was one of the seven States with hunger rates of 12.6 percent or higher according to a USDA study conducted during 1996–1998. What actions have USDA made to address the hunger rates in these seven States?

Answer. Our programs directly address these problems for the low-income population. In addition to the efforts of Child Nutrition, WIC and commodity distribution programs, the Food Stamp Program, being the cornerstone of the Nation's nutrition assistance effort, has made a number of initiatives to increase participation. Allow me to have the Food and Nutrition Service summarize their efforts.

[The information follows:]

The seven states with hunger rates of 12.6 percent or higher are: Arizona, Arkansas, Louisiana, Mississippi, New Mexico, Oregon and Texas. Specific actions taken by the Food Stamp Program to address high hunger rates in these States include:

—State and local government and advocacy organizations in these States were among those provided with Food Stamp Program educational and access materials for distribution to potentially eligible households. These materials include flyers, posters, information packets and CD ROMS. The CD ROMS were provided by FNS so that States and organizations may print additional materials for an even wider distribution.

—We have conducted Food Stamp Program access reviews in each of the seven States cited above. We are working with each State to correct any deficiencies or obstacles to program access identified in each review. In addition, we are currently accumulating a listing of best practices in program access among the high-performing States and we will work with these seven States to implement these practices and procedures where appropriate.

—Some of these targeted States are already developing and adapting best practices to address the issue. Oregon and Arizona have State optional program educational plans. In addition, the Oregon State agency has placed their application on their Web site to facilitate the food stamp application process. Mississippi and a number of other States have developed educational materials and videos targeted to needy households. This material is distributed through State and local agencies, cooperative extension offices, faith-based communities, WIC offices and advocacy groups.

—We have in place a USDA food stamp toll-free number, 1–800–221–5689, for households to call to obtain information on participating in the FSP. We recently upgraded this system to provide callers with the option of obtaining their State's toll free number. For example, when prompted, a resident from Mississippi simply punches in his/her zip code to obtain Mississippi's toll-free number.

We are requesting $8 million in additional funding to do more to assure that eligible persons have access to the FSP. These seven States will continue to be targeted in any future activity.

CAUSE OF HIGH RATE OF HUNGER

Question. What is this high rate of hunger attributed to?

Answer. USDA does not have the definitive answer to this question. Research on both household and State determinants of food insecurity and hunger is ongoing. Factors that are likely to affect State prevalences include the poverty rate, cost of living, income stability (vs. cyclically or seasonally variable income), and strength of extended family and community support systems, including the effective use of USDA-funded nutrition assistance programs.

WIC VENDOR ACCESSIBILITY

Question. Why does USDA want to limit the number of retailers that can participate in the WIC program?

Answer. USDA policy is that WIC retailers should be accessible to WIC recipients and that they should carry and have available all of the WIC foods, taking into account cultural preferences. There is no effort to reduce the number of retailers. Stakeholders are cognizant that there is a cost to the States to adequately manage and monitor retailers. States seek to maintain an appropriate number—balancing

recipient access and the State's ability to adequately monitor the program to prevent abuses.

WIC VENDER ACCESS IN RURAL AREAS

Question. Won't this burden recipients, especially those living in rural communities?

Answer. We anticipate no particular change affecting rural communities. The changes to the rules are to ensure that only qualified retailers, accessible to recipients, are authorized.

TECHNICAL ASSISTANCE FOR MANDATORY FUNDS

Question. The Department will propose legislation to expand the Wetlands Reserve Program (WRP), the Wildlife Habitat Incentives Program (WHIP), the Environmental Quality Incentives Program (EQIP), the Farmland Protection Program, and the Conservation Reserve Program (CRP). This proposed "Farm Safety Net Initiative" includes an additional $1 billion in mandatory spending over authorized levels to enhance these conservation programs. How much of this new mandatory funding proposed would be used to provide technical assistance for these programs?

Answer. The proposed legislation to implement the Farm Safety Net Initiative will provide a total of $266 million in Conservation Credit Corporation funding over the five year period fiscal years 2001–2005 for technical assistance costs related to the CRP, WRP and FPP. This will support the enrollment of 250,000 acres annually in the WRP and will enable the acreage cap for CRP to be raised to 40 million acres. Technical assistance needed for WHIP and EQIP are not subject to the Section 11 cap and are based on a percentage of each program's total funding level. WHIP would require 25 percent of the program level, or $12.5 million while EQIP would require 19 percent or $61.75 million.

Question. Currently Commodity Credit Corporation (CCC) funds for administrative support services is capped at the 1995 level of total allotments and transfers to Federal and State agencies (the so-called Section 11 "cap"). This limitation affects the amount of dollars used for conservation technical assistance. How does this limitation affect the conservation technical assistance available for each of the mandatory conservation programs?

Answer. The programs that are affected by the "Cap"include the Wetlands Reserve Program (WRP), the Conservation Reserve Program (CRP), and the Farmland Protection Program (FPP). The current limitations of the "Cap" do not allow for the full reimbursement of all of the required technical assistance needed to carry out these programs.

Question. The President's fiscal year 2001 budget request proposes an increase of $86 million, for a total of $652 million in 2001, for conservation technical assistance for the President's Clean Water Action Plan. What type of activities will this increase support?

Answer. The Conservation Technical Assistance proposes a $86 million increase of which $33 million is for activities associated with the Clean Water Action Plan. This includes $20 million in accelerated technical assistance to animal feeding operations (AFOs) to develop and begin implementing comprehensive nutrient management plans and $13 million for additional environmental monitoring and research work. In addition, $11 million will be redirected to AFO technical assistance.

The balance of the increase that is not associated with the President's Clean Water Action Plan will include $28 million for additional field-based technical assistance staff to provide needed conservation technical assistance to farmers, ranchers, and other land users across all states; $15 million for activities that are related to global climate change, including soil carbon studies and livestock management pilot programs; $5 million to help farmers plan, develop, and implement conservation-based biomass production systems; and $5 million for cooperative agreements with State and county governments to develop various geospatial data to help communities better plan and assess their zoning and development strategies.

Question. The Conservation Reserve Program's current acreage enrollment is a total of 36.4 million acres. Does the fiscal year 2001 budget request for NRCS conservation operations propose enough funding provided for the needed conservation technical assistance and staff years to meet this current "cap"?

Answer. Technical assistance for CRP is provided by reimbursements from CCC. Therefore, the fiscal year 2001 President's Budget does not propose CRP technical assistance funding in the NRCS Conservation Operations account. Instead, the Budget proposes to increase the CCC reimbursable cap to provide for needed technical assistance.

Question. The fiscal year 2001 request includes $4 million in subsidy budget authority for a new $60 million loan program to provide loans to state and local governments for the rehabilitation of aging dams built over the past 50 years. (This need exists nationwide, including Mississippi.) How many projects will be supported through the new program?

Answer. It is estimated that 10–20 watershed projects per year could receive loans at this funding level. Funds would be transferred to the Rural Utilities Service (RUS) for servicing these loans. Funds for loan subsidies, $4.17 million, would come from the existing watershed operations, financial assistance account and expenses necessary to administer the loans would be transferred to RUS from the existing watershed operations, technical assistance account.

FARM LOANS

Question. Mr. Secretary, in your opening statement, you mention that USDA has streamlined its guaranteed loan making regulations in order to encourage more private lenders to participate in the program. What is the difficulty that private lenders have had with participating in the guaranteed loan program?

Answer. In the past, lenders have been hesitant to participate in FSA's guaranteed loan program because of the perception that the program was required too much paperwork required.

Question. What changes did the Department make in the regulations that will encourage increased private lender participation?

Answer. The streamlined guaranteed loan regulations give lenders increased flexibility and make the rules more consistent with standard procedures in the banking industry. The new regulation reduces requirements for loans of $50,000 or less. For these applications, FSA requires limited supporting documentation and historical data. The only forms needed to apply are an FSA application, balance sheet, and cash flow statement.

We also implemented a Preferred Lender Program (PLP) for lenders experienced with the FSA guaranteed loan program. Under PLP, FSA approves the lender's system of credit management, and the lender is then able to obtain a guarantee under a simplified process tailored to each lender's own policies. To apply for an FSA guarantee, the PLP lender submits only a one-page signed form and a narrative addressing certain credit criteria. The guarantee is automatically approved if FSA does not take any action within 14 days of receiving a complete application.

We also increased flexibility in our collateral and servicing requirements. We now permit the subordination of direct loan security in favor of a guaranteed loan when specific indicators, such as cash flow and equity, are at a level that indicates sufficient financial strength. In addition, we allow the subordination, exchange, or release of collateral when in the borrower's and Government's best interest.

COMMODITY CREDIT CORPORATION

Question. The fiscal year 2001 President's Budget request includes an increase of approximately $55 million to continue emergency operations to eradicate Mediterranean fruit fly, Citrus Canker, and Asian Long-horned beetle infestations. In past fiscal years, the agency's contingency funds and Commodity Credit Corporation (CCC) funding were used for emergency operations. Why has the Department requested this increase in appropriated funds for emergency operations for this particular fiscal year instead of using its current authority to use CCC funds and APHIS contingency appropriations?

Answer. An important factor in the decision was the anticipated length of time necessary to combat the infestations. In all three cases, we used emergency funding sources to begin a multi-year eradication effort. We are submitting the budget request and believe it is appropriate to obtain Congressional scrutiny through the regular appropriations process.

Question. How will this shift from CCC to direct appropriations reduce the agency's ability to meet its ongoing requirements?

Answer. Our request assumes that adequate funds will be appropriated to enable us to meet our ongoing requirements and that the continued eradication funds would not come at their expense.

Question. How much of this increase is going to be used for the Mediterranean fruit fly?

Answer. Of this increase, $23,200,000 will be used for the Mediterranean fruit fly program.

Question. The Citrus Canker?

Answer. Of this increase, $20,500,000 will be used for Citrus Canker.

Question. The Asian Long-horned beetle infestations?

Answer. $4,600,000 of this increase will be used for the Asian Long-horned beetle infestations.

EMERGENCY LOANS

Question. The President's fiscal year 2001 budget request for emergency loans is $150 million. According to the U.S. Department of Agriculture's 2001 Budget Summary, this proposal reflects funding to accommodate the expansion of eligibility to larger farms through Treasury loans, and to close the eligibility gap with the Small Business Administration (SBA) emergency loans. What is the current gap in eligibility for emergency loans between the USDA and SBA programs?

Answer. Existing statutes prohibit the SBA from providing disaster loans to any agricultural enterprise. The FSA emergency loan program is presently limited to family farms. The net result is that larger than family farms (those farms which require substantial labor beyond that required by the family and exceed the size of a typical farm in the community) cannot receive a disaster benefit that smaller farms receive, and some agricultural businesses are currently not eligible for any emergency loans.

Question. Does this legislative proposal have a related cost?

Answer. A major component of the cost of the emergency loan program results from subsidizing the difference between the interest rate borrower's pay (3.75 percent) and the governments cost of borrowing money (6 percent). The legislative proposal would reduce the subsidy cost of the emergency loan program because larger than family-size farm borrowers would pay an interest rate equal to the Government's cost of borrowing money. The subsidy rate for the emergency loan program is 24.53 percent for fiscal year 2001. Under the proposed legislation, the subsidy rate is estimated to be 21.54 percent based on the assumption that 30 percent of emergency loan borrowers would be large farmers paying 6 percent interest, and 70 percent would be family-size farmers eligible to receive the subsidized rate of 3.75 percent.

RURAL HOUSING DIRECT AND GUARANTEED LOANS

Question. The President's fiscal year 2001 budget request proposes $120 million for direct loans and $200 million in guaranteed loans for multi-family housing. The Administration plans to propose an elimination of the statutory requirement that 20 percent of the loans guaranteed must receive interest assistance. This legislative proposal would reduce subsidy cost of this program. What is the cost savings, assuming this legislative change is made by the Senate Banking Committee?

Answer. Currently, the cost of the guaranteed loan program is less than two cents on the dollar. We are proposing to make the program even more cost effective by eliminating the provision that requires us to provide subsidies for at least 20 percent of the loans. We feel that this provision is unnecessary in most cases because the tenants served by this program have incomes high enough to generate sufficient cash flow to the borrower to allow repayment of the loan. This provision makes the loan much more difficult and costly to administer equitably and market across the country. In addition, operation of the program is burdensome for banks because while borrowers make monthly payments to the banks, RHS pays the interest credit on the loan annually. Should Congress revise the Housing Act as proposed, the Section 538 program will become budget neutral.

The cost savings to the Government for the proposed change is estimated to be about $3 million for fiscal year 2001.

EMERGENCY ASSISTANCE TO MIGRANT FARM WORKERS

Question. For fiscal year 2001, the President's proposed budget includes $5 million for emergency assistance to migrant farm workers. Is this a new program?

Answer. This is not a new program. It is a continuation of the emergency grants to assist low-income migrant and seasonal farm workers that the Congress funded in the fiscal year 1999 spring supplemental appropriations bill.

Question. If yes, how would the program be implemented?

Answer. This program will be implemented through a Notice of Funding Availability (NOFA) process.

Question. What type of emergency assistance would be provided?

Answer. This money will help farmworkers who face natural disaster or economic hardships by providing emergency services to low income migrant and seasonal farm workers. The types of services could include assistance directly to the farm worker such as meeting rent or mortgage payments, utility bills, child care, transportation, school supplies, food, repair or rehabilitation of farm worker housing. In addition, facilities related to farm worker housing such as an infirmary for emer-

gency care, a child care facility, or construction of new farm worker housing units could also be provided.

Question. How does this program differ from the emergency grants to assist low-income migrant and seasonal farm workers that the Congress funded for $20,000,000 in the fiscal year 1999 spring supplemental appropriations bill?

Answer. This program is a continuation of the assistance from the fiscal year 1999 supplemental appropriations bill.

Question. From fiscal year 2000 funds made available for the Fund for Rural America for fiscal year 2000, $2.5 million was allocated for farm labor housing projects at three or four high priority areas. What are the geographic locations of these priority areas?

Answer. The three high priority areas are the States of California, Florida, and Washington.

Question. The budget proposes funding to maintain Farm Service Agency (FSA) federal and permanent non-federal staffing levels in fiscal year 2001 at the fiscal year 2000 levels, but to reduce temporary non-federal staff by 622 staff year positions due to the decreased workload requirements of the agency to carry out programs for crop and market loss assistance. Will the FSA staffing levels proposed in the fiscal year 2001 budget be adequate to support the Administration's "Farm Safety Net Initiative"?

Answer. FSA fiscal year 2001 non-federal staff year levels are based on performing workload activities similar to fiscal year 2000, with the exception of assumed decreases for crop and market loss assistance programs and somewhat lower loan deficiency payments. These activities account for the proposed decrease of 622 temporary FTE's. Staffing impacts associated with the proposed "Farm Safety Net Initiative" have not been determined and are not included in the proposed fiscal year 2001 staffing levels.

Question. The budget also indicates that the Administration will propose legislation to convert all non-federal Farm Service Agency personnel to Federal employee status in 2000. Will this proposal have any impact on the agency's funding requirements or affect the staffing levels presented in the fiscal year 2001 budget?

Answer. The conversion of all non-Federal county office employees to Federal status in fiscal year 2000 will allow greater accountability of all employees under one personnel system and improve efficiency of Agency operations. It is not anticipated that the conversion will have a significant affect on agency funding needs or staffing levels.

Question. In November 1999 the FSA had approximately 5,300 to 5,700 temporary employees on board to help with the delivery of payments to farmers. FSA knew at the start of the fiscal year that it could not keep this very high level of temporary employees if additional funds were not appropriated. The Congress appropriated an additional $56 million for basic program delivery needs, not for temporary employees. Did the agency have to reduce the number of temporary employees after November 1999?

Answer. Although we are not certain what is meant by "basic program needs", we cannot meet those needs effectively without temporary employees. The FSA used the $56 million to retain about 665 permanent county office employees who were originally budgeted for separation in order to meet basic program needs and the balance of the funding was used to retain the temporaries needed to deal with extremely high volumes of ongoing workload, including record loan deficiency payments. We consider that to be basic program needs because long delays in getting payments to producers were avoided. In order to achieve timely delivery of programs and handle ongoing producer requests, FSA will likely spend all funding available for temporary staff years, except for staff years needed to operate county committees, in the first 6 months of the fiscal year. We will then begin releasing temporaries in late February and March.

Question. If yes, by how many?

Answer. During the months of February and March, FSA anticipates the need to reduce nearly all of the temporary employees except for temporary staff years associated with county committees.

Question. If a reduction occurred, how did this affect the timeliness of the delivery of payments to farmers?

Answer. A reduction did not occur in the numbers of temporaries after November because Congress appropriated $56 million in CCC funds for use by FSA. We used this funding as previously discussed and "front-ended" the use of temporaries to keep current on all workload for as long as we can. We have had no producer or congressional complaints about payment delays, as we did last year, as a result of this policy.

Question. If a reduction did not occur, what was the time line for the delivery of ad hoc disaster payments to farmers?

Answer. We anticipate some difficulty in completing timely sign-ups for some of the disaster assistance programs and an increasing lag in providing other payments to producers.

Question. Which payments have not been delivered to farmers to date?

Answer. By using most available funding for temporaries during the first 6 months of the fiscal year, the Agency has remained current in most workload and late-payment interest being paid to producers has dropped considerably from fiscal year 1999.

INVASIVE SPECIES

Question. The Department has been addressing problems caused by invasive plant pests and pest species. What has triggered the need to increase and strengthen the Department's efforts in this area, as reflected by the 33 percent increase in funding (from $396 to $528 million) presented to this subcommittee?

Answer. Two events have triggered the need to increase the USDA request. First, in February 1999, an Executive Order charged the USDA and 20 other Federal agencies with coordinating a strategy to combat non-native species which pose a threat to agricultural and natural resources. Second, the on-going acceleration of trade and transportation systems to meet the demands of the global marketplace reflects the Department's request for these funds. Unfortunately, these organisms or invasive species do not honor traditional geographic boundaries. Indeed, the pests are one of the by-products of global trade. Without the requested funding, easy opportunities will continue for unwanted pests and non-native organisms. A total of $561 million, an increase of $136 million or 32 percent, is proposed to exclude, detect, and eradicate incipient populations and manage established species. However, the USDA portion of this request represents only $15.4 million. The Department's Animal Plant Health and Inspection Service (APHIS) is the largest stakeholder for this Initiative. The requested increase will continue to strengthen the Department's on-going programs which have been addressing problems caused by invasive plant and pest species. The APHIS fiscal year 2001 request is $8.8 million (including $4.45 million in prevention, $3.95 million for detection, rapid response, and control, and $400,000 to promote public awareness). In addition, increases of $1.1 million are proposed to support research efforts at Agricultural Research Service (ARS) labs, universities and with other cooperators, $1.5 million for a Cooperative State Research, Education, and Extension Service (CSREES), and $4 million for the Forest Service to expand control, restoration, and monitoring for invasive species within the National Forests.

BIOTECHNOLOGY

Question. Secretary Glickman, would you please discuss the significance of biotechnology to the future of American agriculture.

Answer. Biotechnology has enormous potential to benefit American farmers, to help us address difficult environmental problems, and better enable us to help combat hunger worldwide and improve nutrition. Biotechnology is only one of the tools we are using in approaching these problems, but it may be our most important one. Biotechnology-derived crops currently or potentially may offer farmers savings of time and energy, be more economical to produce, enable better disease and pest control, reduce pesticide use, decrease soil erosion, increase crop yields, improve nutritional content, and use less water. In addition, new value-added crop varieties with new and desirable output traits may provide important new sources of income for producers.

U.S. and world agricultural markets are rapidly evolving and diversifying. The development of new differentiated markets will offer new opportunities and challenges throughout the agricultural production and marketing chain. With the high technology farming and identity preservation tools available to American farmers, they should be uniquely able to profit from these innovations. Pharmaceutical, nutraceutical, and other specialty crops under development may increase the unit value of agricultural production. It will, however, be vital to ensure that farmers themselves are able to realize a significant portion of this added value.

Over the past several growing seasons, U.S. farmers have rapidly adopted the new technologies, so that, according to one recent study by the International Service for the Acquisition of Agri-biotech Applications, over 70 percent of the world's roughly 100 million acres of transgenic crops were planted in the U.S. in 1999. However, ultimately our ability to realize these potentials depends on maintaining and enhancing public confidence in our regulatory system and in resolution of the current

problems in international acceptance of our new biotechnology products, particularly in Europe. Market uncertainties and an increased level of domestic concern have complicated seed purchase calculations for farmers. Issues of concern, scientific and otherwise, need to be addressed in a fuller public dialogue before we can fully benefit from appropriate uses of biotechnology in agriculture.

Question. Please tell us what significance, if any, the new international agreement on genetically modified organisms would have and what are its shortcomings from the United States' point of view.

Answer. The Biosafety Protocol to the United Nations

Convention on Biological Diversity (CBD) will provide a regulatory framework for international trade in bioengineered products known as living modified organisms (LMOs). The Protocol is an environmental agreement aimed at protecting biodiversity, and was adopted by more than 130 countries on January 29, 2000 in Montreal, Canada. The Protocol has to be ratified by 50 countries before it can go into effect, taking from 2–3 years. U.S. is not a party to the CBD, and therefore cannot ratify the Protocol. However the U.S. exporters will be called upon to conduct trade of LMOs in a manner consistent with the objective of the Protocol.

The Protocol preserves the countries' rights under other international agreements, including the World Trade Organization (WTO). It requires that regulatory decisions regarding biodiversity be based on scientific risk assessments. Countries will not be able to use unfounded concerns about biotechnology as the basis for keeping products out of the country. If an exporting country challenges the decision of an importing country to not accept a bio-engineered product, it will turn to WTO for assistance. WTO establishes a biosafety clearinghouse to help countries exchange scientific, technical, environmental and legal information about LMOs produced through the use of biotechnology. The agreement requires governments to provide the clearinghouse with information on the final decisions on the domestic use of an LMO commodity within 15 days of deciding on a course of action.

Because the Protocol is designed primarily to protect the environment from the potential effects of introducing an LMO, the most immediate impact on agricultural trade will be for seeds exported for planting. Bioengineered seeds will be part of an Advanced Informed Agreement procedure where importing country must decide whether to approve the import of a biotech seed. If the seeds are approved they require documentation specifying their identity and traits.

The Protocol will not alter the status quo for bulk commodities containing a biotech component. These commodities will not have to be segregated. Many countries require the approval of new biotech crop varieties under their national laws and regulations. The Protocol, however, does not mandate or encourage that countries take such action nor does it mandate any type of notice and consent procedure for commodities. Upon the enforcement of the protocol, documentation for shipments of bulk commodities will have to state that the shipment "may contain" LMOs and that the contents of the shipment are not intended for planting. In addition, the Protocol establishes a two-year process under which further documentation requirements will be considered. The scope of the Protocol does not cover food safety. Processed products are not covered by the Protocol. As a non-Party to the CBD, our ability to directly influence the outcome of the negotiations was somewhat limited. Thus, we were unable to correct a series of more minor drafting flaws in the text. Despite our disadvantaged position, however, we were able to achieve all of our major objectives in the negotiation.

BIOTECHNOLOGY

Question. What is the Department doing to address the dissension among agriculture groups, the concerns of the food industry, and opposition from activist groups regarding genetically modified organisms and the effect this controversy is having on U.S. farmers?

Answer. With the current level of controversy and concern, it is very important that all the relevant Federal departments, including USDA, provide accurate information to the public regarding biotechnology. USDA has developed a web site on biotechnology to address key questions for the public and we have formed an internal Biotechnology Communications Committee to ensure that our various agencies provide consistent messages on topics that arise. This group is also working with the communications offices at FDA and EPA to improve interagency coordination in public outreach. A key responsibility we have as a Department is to defend the integrity of our regulatory processes and decisions. This is a role our regulatory and policy officials perform in public meetings throughout the U.S. as well as in bilateral and multilateral fora. It is vital for our continued credibility that we continue in this role, and are seen as balanced and impartial.

There has been increased media attention to various potential risks posed by biotechnology and there have been questions raised by some about the adequacy of the existing Federal regulatory system for biotechnology products. It is to be expected that, as for any new technology, questions will continue to arise. To ensure that we can address, in an authoritative manner, any scientific issues that may arise, I have asked the National Research Council of the National Academy of Sciences to set up a Standing Committee on Biotechnology. The membership on this committee and its charge will be announced shortly. The first task of the Standing Committee will be to examine the risk assessment process and the assumptions underlying it as used by USDA's Animal and Plant Health Inspection Service in its safety reviews of biotechnology products for agricultural use. The Standing Committee will in that study consider whether we are addressing all of the relevant scientific issues appropriately, and identify any areas where USDA might improve its regulatory oversight based on the most recent scientific knowledge. It will also consider how most appropriately to monitor biotechnology products that have been approved for commercial use.

Question. What do you think the role of USDA should be in protecting the interests of U.S. farmers in this matter?

Answer. A variety of social and economic issues have been raised by critics either of the technology itself or of some of its key agribusiness proponents. A number of these complex questions need to be aired in a balanced public forum and the implications raised carefully considered, in order both to shed light on the public debate and to provide me with important recommendations to help guide future USDA activities. On February 4, 2000, USDA announced the membership on our new Advisory Committee on Agricultural Biotechnology which will address these issues. The committee will meet for the first time on March 29–30, 2000 in Washington, DC. Additionally, we believe that it is essential that there be accurate information available about the economic impacts on farmers who use biotechnology-derived crops, and on the environmental effects of their use in terms of inputs such as pesticides. We are increasing our data-gathering efforts in these areas.

The increased controversy surrounding export concerns have led a few food processors and shippers to shy away from biotechnology-derived materials. This has added confusion in the marketplace, as there are increasing demands by some end-users for testing of commodity shipments for the presence of biotechnology-derived materials. There are no common standards for such testing, nor are there common requirements from end-users, but there are an increasing number of companies offering a variety of testing services. This is an arena ripe for unsubstantiated claims and abuse, which can ultimately impact producers, shippers, and processors. USDA is setting up, under the auspices of its Grain Inspection, Packers, and Stockyards Administration, a reference laboratory which will evaluate and validate the testing claims of the various testing kits and services available in order to minimize these impacts. We are also considering whether there are other appropriate activities we might undertake to help address current marketplace uncertainties.

ADMINISTRATIVE CONVERGENCE

Question. The fiscal year 2000 Appropriations Act prohibits funding for the establishment of a Support Services Bureau, as proposed by the President last year, or a similar entity to converge the administrative functions of the Farm Service Agency, the Natural Resources Conservation Service, and Rural Development agencies. I find no mention of this in the fiscal 2001 budget. Does the Department plan to proceed with any convergence of the administrative functions of these agencies in fiscal years 2000 or 2001?

Answer. The fiscal year 2001 President's budget proposes the elimination of section 750 of the General Provisions, which prohibited the establishment of the Support Services Bureau (SSB). Proceeding with the consolidation of the administrative and information technology staffs of the county-based agencies is essential to gain the efficiencies and management improvements that are needed to provide one-stop quality service to our customers.

Currently, each of the three Service Center agencies (the Farm Service Agency, the Natural Resources Conservation Service, and Rural Development) retains separate administrative structures. This arrangement defeats our goal of providing seamless, quality service to our farmers and rural residents as efficiently and effectively as possible.

The SSB organization would converge three redundant, overlapping agency bureaucracies into one cost-effective, comprehensive administrative services operation. The scope of this convergence would be limited to the administrative areas of human resources management, financial management, management services, infor-

mation technology, and civil rights. For example, the SSB organization will eliminate two-thirds of these agencies' existing administrative structures and will immediately consolidate 44 separate administrative divisions in these agencies down to 10. The SSB will not divert program resources to administrative activities; in fact, it is needed because USDA agencies are being asked to provide improved program delivery services with less funding and staff. The SSB is designed to allow agencies to operate efficiently at lower levels of administrative staff and funding.

As we have continued our related efforts to reengineer Service Center business practices and develop a common computing environment, the need for the SSB has only become more urgent. We are committed to streamlining these functions and I urge the Congress to remove the restrictive language that prevents the Department from moving this initiative forward.

BIOBASED PRODUCTS/BIOENERGY

Question. The fiscal year 2001 budget proposes a 56 percent increase in USDA spending for the development of biobased products and bioenergy in support of the President's goal of tripling U.S. use of biobased products and bioenergy by 2010. What is the significance of this proposed investment to U.S. farmers and rural communities?

Answer. We expect that this investment will have a significant strengthening effect on farm product prices and will enhance the pace of job formation and income generation in rural communities. We have not, as yet, conducted analyses that adequately quantify either the likely increases in farm and forest product prices and farm income generated by the proposed increases in biomass activities or the effects on rural job formation and income generation. One of the pressing needs for which we have requested additional funding for the Office of Energy Policy and New Uses (OEPNU) in the 2001 budget is to undertake such analyses.

Based on very limited analysis, however, we have determined the projected farm gate price to be paid farmers for switchgrass used for co-firing electric power generation. A payment to farmers of $40 per ton would be required to bid 42 million acres away from other land uses (crop, pasture, and CRP land) in order to produce 188 million tons of switchgrass in 2008. That would be used to generate 43,371 megawatts of electric power. Most of the switchgrass would be produced in the Southeastern and Midwestern states. Based on the analysis, major crop prices rise, as a result of bidding land into switchgrass production. In 2008, corn prices are projected to be 24 cents per bushel higher, soybean prices 61 cents per bushel higher, wheat prices 49 cents per bushel higher, and rice prices $1 per hundredweight higher, than what prices would have been without the switchgrass production. Net farm income in 2008 is projected to be $5.5 billion higher than without the switchgrass production.

We believe it is very important to understand the likely effects on farm and forest product prices and on farm income as a result of the President's biobased products and biomass for energy initiative. We believe, as well, that it will be important to better understand the extent to which this initiative will stimulate new business development, employment growth, and income generation in rural communities, analyses we intend to undertake with the requested funding.

We also intend to undertake analysis of market potential that will identify those biobased products and crops that represent high potential markets. In this way it will be possible to focus product research, development, and demonstration efforts in ways that deliver the maximum payoff for taxpayer dollars invested.

We believe the requested 2001 funding will enable us to both identify high potential markets and also to develop a much better understanding of the benefit of this initiative to producers, and rural America.

TRADE

Question. What efforts are being made by the Department to improve agricultural trade and how does USDA's fiscal year 2001 budget request expand and enhance economic and trade opportunities for U.S. agricultural producers?

Answer. The Department has taken a range of actions to improve our trade performance over the past several years. We have undertaken a significant expansion in the programming of CCC export credit guarantees in response to the financial crisis in Asia and elsewhere. We have increased our food aid activities substantially. Last year, U.S. food aid programming increased to over 9 million metric tons, more than the double the previous year's level. We will again be providing a substantial level of foreign food assistance this year, including nearly 4 million metric tons under the authority of section 416(b).

We continue our efforts to improve access to overseas markets through a vigorous trade policy agenda. Last year, the United States reached two significant trade agreements with China that will improve access to that growing market. We also continue our preparations for the new round of multilateral agricultural trade negotiations.

The 2001 budget provides increased funding for the Foreign Agricultural Service which will support an expansion in some of its most important activities related to trade, including its market access compliance and negotiation efforts and overseas trade offices.

Again this year, the budget contains proposed legislation which would authorize the Secretary of Agriculture to reallocate unobligated EEP funds to carry out other export related activities, including foreign food assistance and overseas market development.

Question. What have been our major successes to expand and open markets for U.S. agricultural products?

Answer. The Department has had numerous successes during the past year. A summary of some of the most significant will be submitted for the record.

[The information follows:]

RECENT PROGRESS IN THE OPENING AND EXPANSION OF OVERSEAS MARKETS

Asia.—The United States and China signed an Agreement on U.S.-China Agricultural Cooperation in April 1999, an unprecedented step forward in U.S.-China agricultural trade relations. Once fully implemented, this agreement should result in an estimated $900-million increase in annual U.S. agricultural exports to China.

In December 1999, U.S. and Indian negotiators reached agreement on India's phase-out of quantitative import restrictions on a wide range of food and agricultural products in accord with an April 1999 WTO Dispute Settlement Resolution. Elimination of these restrictions, which are to be phased out by April 1, 2001, has the potential to increase U.S. food and agricultural exports by as much as $200 million a year.

The Japanese Ministry of Agriculture, Forestry, and Fisheries (MAFF) officially lifted its ban on unapproved varieties of tomatoes (primarily roma and cherry varieties) from the United States and Canada in September 1999. The sales potential for these varieties in Japan is estimated at up to $10 million a year. Also last year, Japan's Ministry of Construction (MOC) agreed to allow construction of three-story wood-frame apartment buildings in its major urban areas for the first time, a historic change to its building code that is estimated to increase U.S. wood export opportunities by $150 million annually.

Sponsorship by the Foreign Agricultural Service (FAS) of purchasing officials from 85 South Korean food importing companies at the May 1999 Food Marketing Institute Show in Chicago, Illinois paid handsome dividends. Of those in attendance, 49 South Korean companies made purchases totaling $42 million in U.S. sales.

Europe and Newly Independent States.—After 5 years of negotiations, the United States and the EU signed a Veterinary Equivalency Agreement on July 20, 1999, to facilitate trade in animal and animal products. The agreement covered approximately 40 product areas valued at $3.0 billion, combined.

In 1999, FAS negotiators helped to conclude important bilateral agreements that paved the way for Estonia and the Republic of Georgia to join the WTO as full members. U.S. agricultural exports to the two countries are expected to grow by approximately $3–4 million annually following their accession to the WTO.

Market Access Program (MAP) and Foreign Market Development (FMD) funded activities by the American Hardwood Export Council earned the organization an award from a United Kingdom Government agency promoting business sponsorship of the arts. This and a wide range of other creative activities promoting US hardwood, resulted in increasing press coverage and market profile in Europe, the leading overseas market for U.S. hardwood products, with annual exports valued at over $600 million.

In a major effort to assist Russia through its acute food shortages and economic crisis, the United States supplied the country with Public Law 480, Title I credit financing to purchase U.S. corn, soybean meal, soybeans, beef, rice, and poultry. Proceeds from the sale of the commodities allowed the Russian Government to make overdue payments to pensioners. Other commodities, including Alaskan salmon, rice, lentils and peas, dried beans, soybeans, and vegetable oil were provided as food donations to vulnerable populations throughout Russia through various Private Voluntary Organizations.

In fiscal year 1999, the CCC Supplier Credit Guarantee Program was used for the first time by importers in the Baltic Region, the Republic of Georgia, and Turkey.

Program coverage for the Baltic Region included roughly $940,000 worth of meat products. Coverage for the Republic of Georgia and Turkey included about $2.9 million worth of U.S. poultry products and $57,000 in U.S. hides and skins sales.

The United States and several countries within the EU worked jointly in 1999 to apply biotechnology and other tools to improve crops and food safety, identify costly plant pathogens that limit trade, reduce production and post-harvest costs, monitor genetic diversity in economically and environmentally important forest species, and improve management strategies to prevent environmental contamination from agriculture. FAS's role in the effort helped bring together U.S. scientists from universities and USDA agencies with the EU counterparts.

Western Hemisphere.—The Southern U.S. Trade Association (SUSTA), a regional FAS cooperator, was honored with the 1999 Produce Business Marketing Excellence Award for its "Go South!" marketing campaign. Now in its third year, the MAP-funded multi-year marketing campaign produced outstanding results, reaching approximately 20 million consumers through its advertisements, which were aimed at increasing consumer awareness, and increasing commodity sales an average of 106 percent in fiscal year 1999.

Foreign Market Development Program funds were used by the USA Rice Federation to sponsor one Ecuadorian and two Colombian rice trade delegations to the United States to familiarize them with the U.S. rice industry. This resulted in several Ecuadorian and Colombian importers purchasing U.S. rice for the first time, pushing rice sales to the two countries to $28 million and $74 million, respectively.

In response to Hurricane Mitch, CCC donated 200,000 metric tons of wheat valued at $31 million to the Governments of Honduras, Nicaragua, El Salvador, and Guatemala in fiscal year 1999 under the authority of section 416(b). An additional 45,000 metric tons of corn valued at $6 million also was donated to the region under the same program.

Africa and Middle East.—The Cochran Fellowship Program developed a U.S.-Sub Saharan Africa Workshop on Codex Alimentarius and the WTO, involving 37 participants from 17 African countries. The training improved participants' understanding of the processes at work in the WTO and the international standard setting bodies. Most importantly, the discussions pointed out areas of shared interests, including mutual concerns in the next round of multilateral negotiations. The participants agreed that there are significant areas in which the United States and Sub-Saharan African countries can cooperate in international trade and the work of the international standard setting bodies.

FAS staff implemented many first-time Food for Progress programs in Sub-Saharan Africa in 1999. Sub-Saharan African countries benefitting from the programs included South Africa, Zimbabwe, Swaziland, Togo, Cote d'Ivoire, and Equatorial Guinea.

Commodities donated included: rice, wheat, wheat flour, vegetable oil, and pinto beans. The proceeds from the sale of these commodities are being used to address basic infrastructure development needs in these countries.

TRADE

Question. What have been the major barriers?

Answer. There are a number of different types of barriers.

First, while U.S. agricultural exports have been trending down, so has global trade in agricultural commodities. Global demand has been weak due to the lingering effects of the 1998 Asian financial crisis and higher production of basic commodities worldwide. This has resulted in soft world market prices for many basic agricultural commodities and foodstuffs. Additionally, the U.S. dollar remained strong during fiscal year 1999, making U.S. products more expensive relative to competitor countries' products.

Second, our major competitors—the European Union (EU) and the Cairns Group—have been outspending the United States in both public sector and private sector market promotion funding by a wide margin. Market promotion activities were not disciplined in the Uruguay Round. Our competitors were quick to recognize this, increasing spending by 35 percent in the past three years. Also, direct export subsidies, while disciplined under the Uruguay Round, are still at formidable.

Third, the commodity composition of our competitors' exports are more closely aligned with the fastest growing sector of global import demand—namely high value products. U.S. high value product exports have performed well over the past two decades and have grown in importance, but they still represent a smaller share of our overall agricultural exports than our competitors. This is especially true of our top competitor, the European Union, which is already the world's leading high value

product exporter and could, as early as this year, overtake the U.S. as the world's leading agricultural exporter.

CIVIL RIGHTS

Question. This Committee has provided increased resources over the past couple of years to strengthen the Department's civil rights efforts and to assure the timely handling of civil rights investigations and complaints. What progress has the Department made in this area and what additional resources are requested in the fiscal year 2001 Budget (by agency and activity as compared to fiscal year 2000 to enhance these efforts?)

Answer. Ensuring that all customers and employees are treated fairly and equitably with dignity and respect has been one of my top priorities. Your support has been critical to the Department's progress in aggressively addressing civil rights concerns. We have taken several steps toward turning USDA into a civil rights leader in the federal government.

We have nearly eliminated the backlog of more than 1,000 old program civil rights complaints. We are providing the support needed to resolve the cases under the Pigford v. Glickman class action lawsuit. As a result, the adjudicator has made decisions in about half of the cases filed to date. We have also made changes to our internal processes for handling civil rights complaints, instituted universal civil rights training for USDA employees at all levels, and stepped up monitoring and review of civil rights enforcement both in programs and employment throughout the Department. All agency heads were evaluated on civil rights performance during fiscal year 1999, and there was improved performance in all but two agencies. Over 90 disciplinary actions, including removal, have been taken against employees for discrimination or misconduct related to civil rights. Consistent with the recommendation of our Civil Rights Action Team, the Office of Civil Rights has been reorganized into separate units with distinct responsibilities for overseeing the timely and effective resolution of program and employment discrimination complaints. USDA also launched a new tracking system for processing program discrimination complaints in 1999.

Departmental Administration has overall responsibility for the civil rights program at USDA and the President's fiscal year 2001 budget request for DA contains several increases related to civil rights. An increase of $1 million is requested to enhance the use of Alternative Dispute Resolution (ADR) for resolving employee and program complaints. ADR can reduce the number of complaints and accelerate the resolution of many cases. We believe the program will resolve workplace and programmatic conflicts in less time and with less financial and human cost. The budget request also includes a $500,000 increase for a pilot program in small rural business education and development. This effort will support traditionally under-represented groups in establishing viable commercial operations and guide them in identifying new markets for agricultural products. A $7 million increase is requested for the Outreach for Socially Disadvantaged Farmers Program to provide education and training needed to help these farmers succeed. In the coming weeks, I will be releasing a progress report on civil rights that provides additional details on efforts throughout the Department to address these issues.

AGRICULTURAL CONCENTRATION

Question. Increased funding has been provided over the past few years to support the implementation of the recommendations of the Secretary's Advisory Committee on Agriculture Concentration. Would you please give the Committee a report on the status of implementing each of the recommendations made by the Advisory Committee.

Answer. The Secretary's Advisory Committee on Agricultural Concentration made a large number of recommendations in four broad areas: antitrust and regulation, a market-based disclosure policy, vertical linkages, and cooperatives and producer bargaining. USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) has undertaken several initiatives that address the Committee's recommendations; our response to each of these broad areas is listed below.

For Anti-Trust and Regulatory actions, GIPSA increased staffing to address competition, due to its recent reorganization. In this way it added economic, statistical, and legal expertise to pursue prospective anti-competitive practices. It also establish a Memorandum of Understanding between USDA, the Department of Justice and the Federal Trade Commission so that greater cooperation is achieved in the areas of anti-competive packer and grain practices.

For Market Based Disclosure the Congress passed, legislation requiring mandatory price reporting of livestock. AMS recently proposed a rule to implement this legislation.

For Vertical Linkage actions, GIPSA conducted a broad investigation of fed-cattle in Texas and follwed this up with a peer review to assure that GIPSA's analysis was sound. USDA has also worked with the Department of Justice (DOJ) to investigate the proposed acquisitions by Smithfield Foods, Inc. of Murphy Family Farms and Tyson's pork operations. While DOJ allowed this merger, USDA is ready to pursue other troublesome mergers in the future.

For Cooperative and Producer Bargaining Agreements, GIPSA is now contracting in a cooperative fashion with researchers at universities across the Nation to address issues of competition in the poultry markets. Also GIPSA has conducted major investigations to determine whether contract poultry grower settlements are fair and non-discriminatory.

Question. What additional funding is requested for fiscal year 2001 to continue the implementation of these recommendations?

Answer. GIPSA has asked for an increase of $1.2 million to develop econometric models to help identify collusion, predatory behavior, price leadership, market allocation, failure to compete, price and non-price discrimination and other restraints in the procurement of cattle, hogs and lambs by meatpackers.

An increase of $800,000 is requested to examine the competitive structure of the poultry industry. This project will assess the characteristics of markets for poultry grower services. Over 95 percent of broilers are grown under contract so there is no market for the birds. But there is a market, with supply and demand functions, for grower services. We know that integrators offer contracts for grower services and we know the general terms of those contracts. We also know that many growers complain about being unable to negotiate the terms of their contract, about insufficient information about contract terms, about early termination of contractual arrangements, and about contract settlements. However, we know very little about the supply of grower services at various levels of compensation; grower costs and returns; why integrators offer contracts in some areas but not others; how integrators compete with each other for growers; how contract terms vary with the number of competing integrators in an area; and other information relating to the structure and competitive behavior of this industry.

An increase of $1.3 million is requested for Rapid Response Teams to address major investigative issues of immediate and often National concern regarding anticompetitive, financial and trade practice issues.

An increase of $350,000 is requested for an Information Staff. In addition, GIPSA is required to collect, compile, and publish a monthly report . Recent events strongly indicate that hog and chicken producers, as well as others in the farm community, need to become better informed about GIPSA's role in the marketplace. Grain farmers, and the grain industry as a whole, are also going through a difficult period. Some groups, especially small farmers and socially-disadvantaged farmers, lack information to successfully deal with the increasingly complex business of growing and selling farm products.

Also, an increase of $400,000 is requested to establish a swine contract library as required by the Livestock Manadatory Reporting Act 1999.

FARM SAFETY

Question. I note that the fiscal year 2001 budget proposes a new $5 million youth farm safety education and certification program under the Cooperative State Research, Education, and Extension Service. What is the need for this program and why can't the activities proposed be supported through the existing farm safety program?

Answer. The Fair Labor Standards Act and selected state laws allow child agriculture workers to work at younger ages, for longer hours, and in more hazardous occupations than in other industries. Minors 16 and 17 years of age are exempt from prohibitions on work in hazardous occupations identified by the Secretary of Labor, and 14 and 15 year old children are exempt from the hazardous occupation restriction if they possess a valid certificate documenting completion of safety training for tractor operation or other machine operation. This new Youth Farm Safety Education and Certification Initiative would establish a USDA-administered competitive grants program to States to provide formal safety training and certification targeted to youth age 16–17 years. These grants would also be used for related purposes such as curriculum improvement for current safety programs and development of new safety education curricula for other agricultural occupations as needed. The initiative would provide funds to land-grant institutions in order to contract with quali-

fied private businesses and community and youth organizations to deliver education and training, such as 4–H, Future Farmers of America, and other similar organizations that would provide safety education that prepares youth for safety certification.

This initiative is intended to augment state and local vocational agriculture school funds for safety training by agricultural employers and other private businesses, and is intended to enhance the safety of young farm workers, while maintaining their employability in agriculture and minimizing disruptions to farm employers' access to youth workers.

Question. How was the rescission of fiscal year 2000 funding for farm safety applied, i.e., what reduction was made in funding for the AgrAbility program versus the farm safety formula program.

Answer. The rescission was applied proportionately against the formula portion and AgrAbility. The revised appropriation for Farm Safety in fiscal year 2000 is $3,400,430. This appropriated amount is split between formula funds and AgrAbility.

[The information follows:]

Formula Funds	$803,352
AgrAbility	2,597,078

Question. Does the fiscal year 2001 budget continue funding for AgrAbility?

Answer. Funding for AgrAbility is not proposed in the fiscal year 2001 budget.

Question. If not, why?

Answer. This action is consistent with the Administration's belief that the most effective use of taxpayer dollars is through competitively-awarded, peer reviewed grants. Alternate funding from formula programs, State and local governments, and private sources could be used to support aspects of this program deemed to be of high priority at State and/or local levels.

LIVESTOCK REPORTING

Question. The fiscal year 2000 Consolidated Appropriations Act made available $4.7 million which the Department indicated was necessary to implement the Livestock Mandatory Reporting Act of 1999 (Title X of the fiscal year 2000 Agricultural Appropriations Act). The Committee requested it but did not receive a detailed justification on why this level of funding was required and just how these funds would be spent. Would you please provide that for the record?

Answer. Additional staff are required to analyze and edit large amounts of new data that has never been available through voluntary reporting. Also, a compliance unit must be established to audit packer records to insure that packers are accurately reporting the required information. Time sensitive information requires electronic transmission of a large volume of records on a daily basis during periods of short duration. A computerized process must be developed to manage the data. Outreach programs to educate producers about the new information will increase travel, in addition to travel associated with managing the program. I will provide for the record a detailed accounting of how these funds would be spent.

[The information follows:]

[In millions of dollars]

Fiscal year 2000 Costs	
Salary and Benefits	2.2
Travel, Transportation, Rent, Utilities, & Communications	0.5
Training, Agreements, & Supplies	0.4
Computer System Development Contracts	1.1
Equipment: Hardware, Software, & Licenses	0.5
Total	4.7

Question. What increase, if any is included in the fiscal year 2001 request to implement the requirements of the Livestock Mandatory Reporting Act of 1999?

Answer. Congress authorized the Department to initiate mandatory reporting in 2000 and provided start-up funding of $4.7 million through a one-time transfer from Commodity Credit Corporation funds. For 2001, the budget includes $5.9 million in funds appropriated to the Agricultural Marketing Service to continue the mandatory livestock reporting program; $0.4 million to the Grain Inspection, Packers and Stockyards Administration to establish a swine contract library; and, $0.6 million to the National Agricultural Statistics Service to increase the frequency of hog and pig reports from quarterly to monthly.

Question. Please provide a detailed justification as to how the funds requested for fiscal year 2001 for this purpose would be obligated.

Answer. The budget justifications are included in the agency budget submissions. I will provide you the budget justifications included in the agencies' explanatory notes.

[The information follows:]

FSIS' FOOD INSPECTOR RECRUITMENT EFFORTS

Background

A number of factors have made it difficult to successfully recruit individuals to fill vacant positions in Field Operations. In the case of Veterinary Medical Officers, positions are not competitive in today's job market. Top quality candidates for Food Inspector positions are also in short supply in many locations, due to many factors. The work is typically very demanding, with strict physical requirements. Remote locations often have a limited applicant pool, and many who do apply have conflicts of interest that do not allow them to serve in a regulatory capacity. In the case of Intermittent Inspector positions, the requirement to be on-call with no guarantee of hours, and the limited benefits, make that position less attractive to most applicants than other options in the current job market. The Food Safety and Inspection Service, however, is confident it will recruit a well-qualified and diverse workforce.

FSIS efforts to increase the number of inspectors include:

—Refocusing efforts within Human Resources to increase the number of applicants on standards registers for field occupations. Applicants to these registers are solicited through a variety of recruitment initiatives such as on-campus visits, conventions, advertisements, direct mailings, and posted announcements on the Internet and at all Office of Personnel Management Service Centers. FSIS also publishes job opportunities in agricultural publications, such as the Cattlemen's Journal and Farm Bureau. FSIS recruits from veterinary schools, Hispanic-serving institutions, and historically black colleges and universities, as well as at veterinary conventions and agricultural career days at universities where candidates are identified. In addition, public notices about FSIS jobs are available at all State employment agencies.

—Recruiting and hiring 80 more inspectors by the end of the fiscal year to achieve a target employment level of 7530.

—Broadening the emphasis of FSIS' recruitment program to include other scientific backgrounds to meet current and future hiring needs and conducting recruitment training in September to train new recruiters in this area.

—Asking current agency personnel to assist in publicizing recruitment needs.

—Asking candidates who applied for inspector positions in areas surrounding locations with shortages if they would be interested in a position in locations that are experiencing shortages.

—Providing Veterinary Medical Officers with a recruitment bonus up to 25 percent of their salary, particularly in areas where there are fewer candidates. This has been approved in eastern Pennsylvania, Iowa, and Nebraska. FSIS is also exploring additional options, such as relocation and retention bonuses for inspectors.

—Scheduling inspector entrance tests in locations where there is a need for inspectors. FSIS conducts tests in 10–12 locations around the nation each month. These tests are spread out geographically.

—Exploring alternative ways to fill other than permanent (OTP) full-time positions, such as permanent part-time tours of duty, and term and temporary appointments. We will be working with the inspectors union to explore the feasibility of options identified.

—Collecting and analyzing exit interview data to identify possible retention issues.

—For an application, contact Keith McFarlin at 1–800–370–3747, ext. 2580, or visit the U.S. Government official site for jobs and employment information at www.usajobs.opm.gov.

SERVICE CENTER MODERNIZATION FUNDING

Question. What is the total dollar amount that USDA has invested on its modernization effort to date? What will be the total cost for implementing the entire effort and what are the milestones for completing all aspects of it?

Answer. The USDA has invested $322,265,000 in the modernization effort through the end of fiscal year 1999. This amount includes $8.6 million for program management and change management training, $31.1 million for Business Process Re-engineering (BPR), $122.4 million for installation of the LAN/WAN/Voice shared

telecommunications system, $77.9 million for development and initial acquisitions for the Common Computing Environment (CCE), and $82.3 million for acquisition of base data for Geographic Information Systems (GIS).

The total implementation cost is estimated at $875 million through fiscal year 2005. Major milestone dates are reflected in the following excerpts from Appendix Q of the Service Center Modernization Plan. They are currently under review in light of funding availability in fiscal year 2000. It is critical that adequate resources be available to quickly transition to modern systems and processes. During the transition period, we are forced to pay for two sets of systems. We must make investments in the modern technology needed to serve our customers in the future while maintaining existing legacy systems to serve our customers today. Delays in the modernization process mean that the Department will incur costs for these two systems over a longer period of time, reducing savings and delaying benefits.

[The information follows.]

USDA

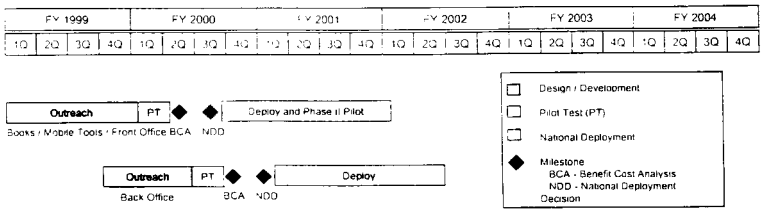
United States Department of Agriculture

Appendix Q

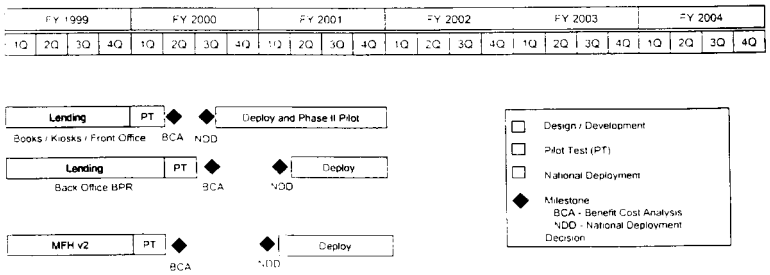
SCI Project Schedules

This document can be found on the share drive on the BOC LAN. Contact SCI-PMO at (301) 504-4295.

Service Center Implementation Community Development



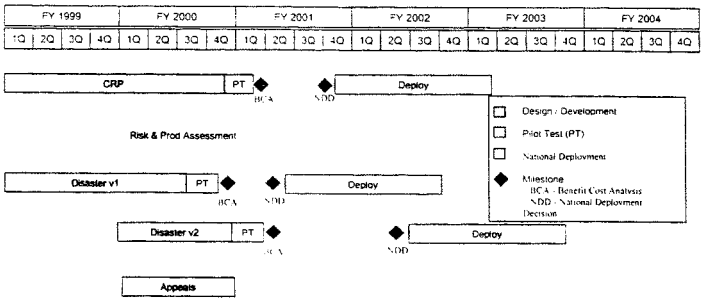
Service Center Implementation Lending



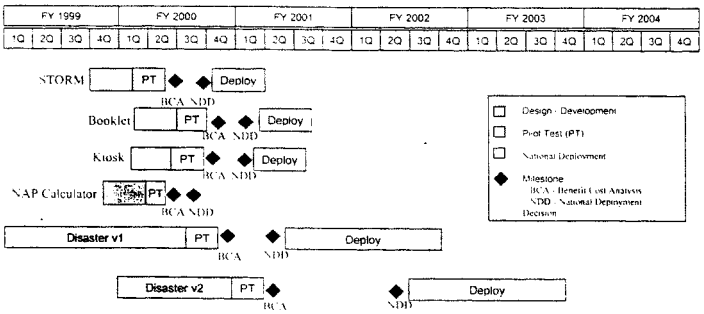
USDA

United States Department of Agriculture

Service Center Implementation
Managing Risk



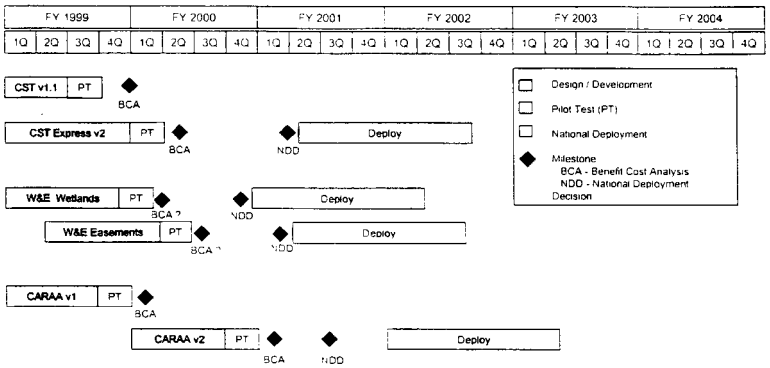
Managing Risk
Disaster Assistance



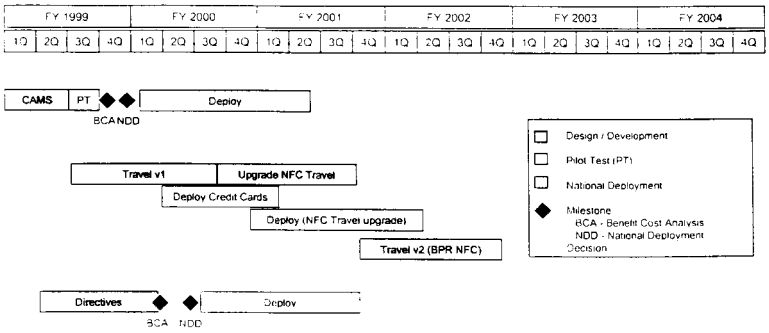
USDA

United States Department of Agriculture

Service Center Implementation
Conservation and Environment



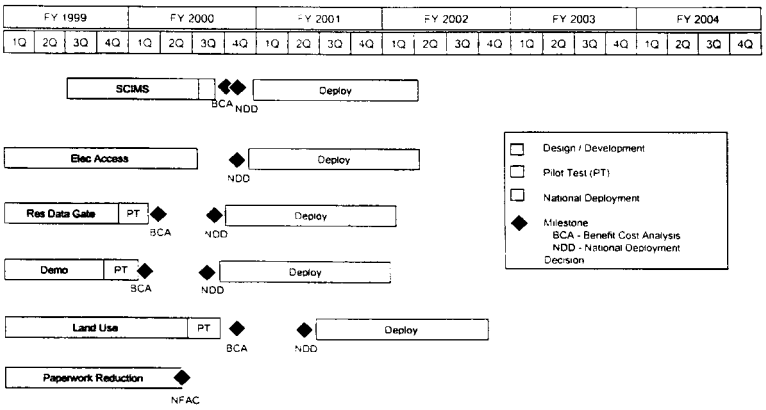
Service Center Implementation
Administration



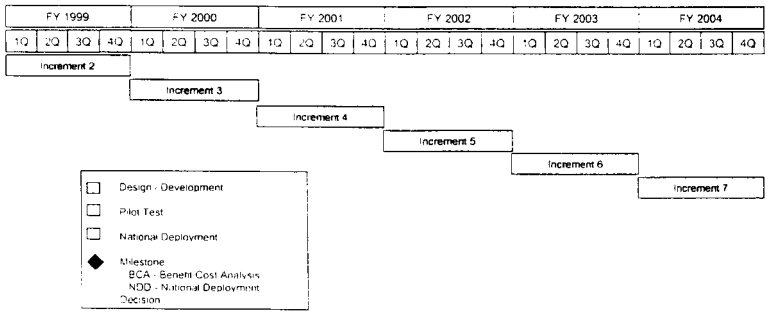
USDA

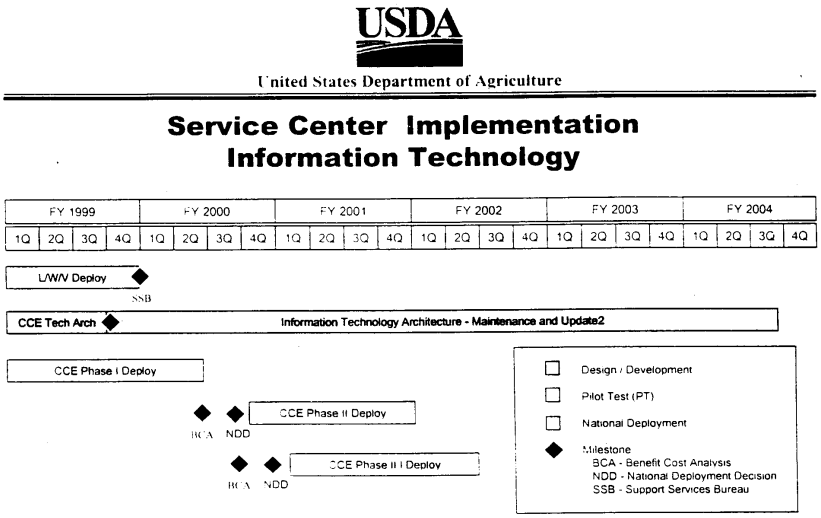
United States Department of Agriculture

Service Center Implementation
Common Business Support



Service Center Implementation
Base Data





FISCAL YEAR 2000 FUNDING FOR COMMON COMPUTING ENVIRONMENT

Question. For fiscal year 2000, Congress appropriated $12.6 million to your office for the Common Computing Environment. Once Congress approves expenditures of these funds, what will you require to be completed in terms of planning and management of the Service Center Modernization Initiative (SCMI) before you allow the funds to be spent, and whom in the Department are you going to hold responsible and accountable for its success?

Answer. The Deputy Secretary of Agriculture recently enhanced the role of the Chief Information Officer (CIO) in managing the information technology component of the Service Center Modernization Initiative (SCMI). In March 2000, the CIO's role will be modified from one of oversight and facilitation to one that includes direct responsibility for implementation. The CIO will have direct involvement in CCE planning and acquisition decisions. The CIO will also be responsible for developing the necessary management mechanisms to ensure that the IT modernization activities are conducted in full cooperation and coordination with the administrative and program business elements of the overall modernization effort. Expanding the CIO's role will ensure that the necessary planning has been done, consistent with legislative and other requirements, and that there is an appropriate management structure in place to ensure successful acquisition, deployment and operation of investments funded from this account.

SERVICE CENTER MODERNIZATION FUNDING REQUEST

Question. For fiscal year 2001, USDA requested $75 million for its common computing environment as a separate line item, and an additional $62.4 million from service center agency budgets. First, why did USDA decide not to include this request under the Office of the Secretary to ensure that these expenditures would be closely watched at that level? Second, for the record, could you provide for the record a detailed explanation of exactly what these funds will be used for?

Answer. These expenditures will be closely monitored by the Deputy Secretary. However, we believe the Chief Information Officer (CIO) has the needed expertise to direct the acquisition and implementation of the Common Computing Environment (CCE). Therefore, the $75 million request for hardware and software acquisitions is included in the CIO's budget.

With respect to the $62.4 million in agency funds, we interpreted congressional action on our previous centralized funding requests to mean that Congress wanted to retain the base funding the agencies were contributing to modernization in the agency budgets and provide any increased funding under a central account.

Following is a summary of planned uses of fiscal year 2001 modernization funding:

—$75 Million Common Computing Environment Fund

These funds will be used specifically for the acquisition and deployment of shared hardware and software to implement a CCE for the Service Center agencies. Depending upon final fiscal year 2000 activities, the planned acquisitions and amounts are as follows:

—$1.5 million for technical architecture maintenance, piloting, operations and deployment support;
—$33.3 million to complete the acquisition of network/communications servers/software to fully connect the CCE workstations and provide for remote management;
—$15 million to begin acquisition of application servers/software needed to host business applications;
—$14.6 million for workstation and server software, including GIS;
—$8.1 million for shared peripheral equipment including networked printers and plotters; and
—$2.5 million for training.
—$62.4 Million in Agency Funds

Planned use of agency funding is as follows:

—$22.7 million to continue BPR and pilot testing and related change management training and program management costs;
—$23.6 million for continued acquisition of base data needed for GIS applications, and
—$16.2 million for individual employee CCE equipment such as workstations, portable printers, and data collection devices.

SERVICE CENTER BUSINESS PROCESS REENGINEERING

Question. Over the past several years, GAO has been supportive of USDA's effort to modernize the service centers computer systems but very critical of the Department's approach of focusing first on buying new technology without clearly understanding how one-stop services will be delivered at all sites. What is the department's status of defining business process for its service centers?

Answer. Business process reengineering (BPR) is at the heart of the Service Center Modernization Initiative (SCMI). BPR analyzes the service center agencies' current program and administrative processes to see how they can be streamlined and integrated to improve the effectiveness and efficiency of USDA's service to customers. Our BPR efforts to date have given us the understanding of our basic business processes needed to move forward with the CCE and have served as the basis for defining the CCE technology architecture. We recognize that the CCE will need to support business as we know it today as well as any changes in that business over the next decade. That is why our CCE architecture is designed around open, interoperable and scalable systems. We look at the CCE as the basic technology infrastructure to support county-based program delivery through the first decade of the 21st century. Failure to move forward will hamper our ability to service our customers and respond to the needs of the future.

There are 20 active BPR projects focusing on core business areas such as lending, managing risk, conservation and environment, community development and outreach, and administration. Each of these projects is tested in a laboratory environment before being piloted in the field and deployed nationally.

SCMI has initiated the reengineering design of approximately 60 percent of the Service Center business processes and will reengineer the remaining 40 percent of the business processes as resources permit. The BPR project designed to streamline human resources administration has completed all testing and piloting and is being deployed nationally. BPR projects involving the lending, community development, managing risk, conservation, and administrative areas are scheduled to complete testing and piloting in fiscal year 2000 and be deployed nationally in fiscal year 2001.

ONE-STOP CUSTOMER SERVICE

Question. If I were a customer, what can I expect in terms of one-stop service at an office where only NRCS is located but I want to apply for a farm loan?

Answer. Currently, you could expect an NRCS employee to generally describe the farm loan programs and provide some written information and a referral to the FSA office servicing your county. As we complete the development and pilot testing of some of the reengineered process and install full CCE technology, the level of service provided will increase. In the future, you should also be able to go into the NRCS only office and through a user-friendly kiosk or computer terminal run through an automated question/answer process to pre-qualify for a loan and submit an application for the loan. You would have the option of scheduling an appointment with the

FSA loan officer either at his or her base Service Center or at the NRCS office or going on-line automatically, using the computer or kiosk and a two-way video connection, to discuss your loan application and needs. The NRCS employee could assist you to get started with the technological connection, but since he or she is a conservationist and not a loan officer, the technology connection will deliver the one-stop service that we envision. In order to achieve these and other beneifts of the CCE, it is critical that the funds requested in the fiscal year 2001 President's budget be appropriated.

SERVICE CENTER MODERNIZATION/INFORMATION TECHNOLOGY

Question. In light of the e-business revolution, what steps is the Department taking to give a fresh look at the way it does business across all agencies and whether its organizational structure at headquarters is appropriate to deliver benefits and services to customers in the new millennium?

Answer. Modernizing the county-based agencies is the primary effort underway to reengineer the way business is conducted across agencies. We are also taking steps towards implementing unified financial, human resources, procurement, and other administrative systems that will substantially change the way business is conducted in our headquarters complex. Our fiscal year 2001 budget for the Office of the Chief Information Officer requests funding for e-government initiatives that will allow us to develop a corporate strategy for e-government, including taking advantage of opportunities to leverage agency initiatives across the Department. In addition, part of the $75 million requested for the Common Computing Environment will provide enabling technology to support e-government activities in the USDA Service Centers. Most USDA agencies are at the initial stage of e-business, which we refer to as e-government. Agencies are providing a wealth of information about their programs and services, as well as market data and other information, to citizens via the Internet. However, agencies are also increasingly exploring ways to use the Internet to enable farmers, rural residents, and other customers to actually conduct secure business transactions with the Department online. In some cases, this involves working with other Federal agencies on web sites that will provide citizens a common online access point to programs and services so a customer can get to important program information without having to know which specific agency provides the service.

CIO PRIORITIES

Question. With a new Chief Information Officer (CIO), what are the three highest priority issues, in order, for the CIO to address at the Department? What are the time frames for addressing these issues? How will the CIO be held accountable and what authority have you provided to him?

Answer. Among the CIO's highest priorities are to: provide effective leadership and oversight to the Department's Service Center Modernization Initiative, specifically the information technology component; enhance the security of our financial and information assets and protect the privacy of our customers; and improve the corporate management of the Department's telecommunications resources. With the Congress' support, we expect to make significant progress on each of these issues this year. The CIO is personally committed to these priorities. He has all of the authority vested in him by the Office of the Secretary and by the Congress through the Clinger-Cohen Act and is working closely with the USDA management.

LESSONS LEARNED FROM THE YEAR 2000 COMPUTER PROBLEM

Question. To its credit, USDA recently made a successful transition to the Year 2000. In preparing for Y2K, the Department spent more than $50 million to get its information systems ready. What were the positive lessons learned, and how are they being applied today at USDA?

Answer. Our Y2K success, as well as the successful transition through the Leap Year rollover, was the result of partnership and close collaboration between the Information Technology and Program Management officials. The involvement of program officials in what was previously viewed as an IT issue ensured that accountability would rest with the system users, not just the IT departments. Program managers have also learned valuable lessons about the role of IT in their business operations. This principle will continue to apply as the Department addresses cybersecurity and other key IT issues. The use of Independent Verification and Validation—IV&V's—to provide independent assessments throughout the Y2K project has also been demonstrated to be a very positive tool with which to better assess and manage our critical IT investments. In addition, the Business Continuity and Contingency Plans—BCCPs—developed by each mission area have helped prepare us to

continue providing vital programs and services should any future problem threaten to disrupt our mission-critical systems. A close collaboration between program and IT officials, the use of IV&V's, and BCCPs will continue to characterize how we manage information technology at USDA.

Question. Beside making the actual transition itself, to what extent has the Department been able to capitalize on its Year 2000 investment and make added improvements in the Department-wide use of information technology?

Answer. USDA has been able to capitalize on the transition by improving the use of information technology in several key areas. The need to purchase Y2K compliant equipment accelerated efforts to upgrade computers in the county-based agencies; modernize the equipment in our Agricultural Research facilities; and upgrade many of our mission area software applications.

SPENDING TO RESOLVE YEAR 2000 COMPUTER PROBLEM

Question. For the record, what was the total dollar amount spent by the Department on Year 2000 fixes and what does this include?

Answer. The total amount spent on USDA's Y2K activities since fiscal year 1996, including supplemental funding, was approximately $188 million. This included funds for hardware and software upgrades and replacements, renovation, validation and implementation of systems undergoing repair, and technical assistance. Emergency supplemental appropriations in fiscal years 1999 and 2000 provided $57 million of this amount.

OUTREACH/TECHNICAL ASSISTANCE

Question. The fiscal year 2001 budget requests additional resources for USDA outreach and technical assistance activities (e.g., the Department's Office of Outreach, the Outreach Program for Socially Disadvantaged Farmers and Ranchers, and various outreach efforts of the USDA agencies). Please provide a list of all outreach activities of the Department of Agriculture, by agency, account and activity. Please provide the fiscal year 1999, fiscal year 2000, and proposed fiscal year 2001 funding levels for each of these programs/activities, along with a brief description of each program or activity and how it is distinguished from the various other outreach/technical assistance activities of the Department.

Answer. The Department is in the process of preparing a report that will provide these details. We will make that report available to you as soon as possible.

DETAILEES

Question. Provide a list, by USDA agency, of each employee detail or assignment (by employing agency, title, and position) in each of fiscal years 1999 and 2000 to date for a period of up to 32 days, and identify the agency to which that detail or assignment was made and the purpose of the detail assignment.

Answer. Not Included.

Question. Provide this same information for employee details/assignments made for a period of more than 30 days, and indicate the dollar amount of the reimbursement made to the employing agency for each detail/assignment.

Answer. Not Included.

ADVISORY COMMITTEES, PANELS, COMMISSIONS, AND TASK FORCES

Question. Provide a list of the advisory committees, panels, commissions, and task forces funded in each of fiscal year 1999, 2000 (planned), and proposed to be funded for fiscal year 2001, and the amount of funding in each of these years to be allocated for each.

Answer. The following table lists advisory committees, panels, commissions, and task forces funded in fiscal years 1999, 2000, and 2001 and the amount of funding for each year.

[The information follows:]

USDA ADVISORY COMMITTEES

Policy Area and Committee Title	1999 Actual	2000 Estimate	2001 Estimate
FOOD, NUTRITION AND CONSUMER SERVICES:			
National Advisory Council on Maternal, Infant and Fetal Nutrition	$42,611	$47,350	$50,000

USDA ADVISORY COMMITTEES—Continued

Policy Area and Committee Title	1999 Actual	2000 Estimate	2001 Estimate
FOOD SAFETY:			
National Advisory Committee on Meat and Poultry Inspection	36,314	61,350	67,000
National Advisory Committee on Microbiological Criteria for Foods	35,770	37,350	40,000
Total, Food Safety	72,084	98,700	107,00
RESEARCH, EDUCATION AND ECONOMICS:			
Advisory Committee on Agricultural Biotechnology	.....	125,400	108,050
Forestry Research Advisory Council	14,342	23,350	27,000
Strategic Planning Task Force on Research Facilities	65,340	.....	.....
USDA/Hispanic Association of Colleges and Universities	19,140	17,350	21,000
USDA/American Indian Higher Education Consortium	.....	56,350	60,000
Subotal, CSREES	98,822	222,450	216,05
National Genetic Resources Advisory Council	4,508	13,850	17,000
National Nutrition Monitoring Advisory Council	.....	32,350	35,000
Dietary Guidelines Advisory Committee	98,185	47,350	.....
Subtotal, ARS	102,693	93,550	52,000
Advisory Committee on Agriculture Statistics	6,155	23,350	30,000
Subtotal, NASS	6,155	23,350	30,000
Advisory Committee on Small Farms	.....	127,350	150,000
Total, Research, Education and Economics	207,670	466,700	448,050
MARKETING AND REGULATORY PROGRAMS:			
Advisory Committee on Foreign Animal and Poultry Diseases	10,405	16,250	19,660
General Conference Committee of the National Poultry Improvement Plan	11,776	7,280	10,430
National Wildlife Services Advisory Committee	18,100	15,450	18,100
Subtotal, APHIS	40,281	38,980	48,190
National Organic Standards Board	16,909	47,350	50,000
Subtotal, AMS	16,909	47,350	50,000
Federal Grain Inspection Advisory Committee	27,451	28,350	32,000
Subtotal, FGIS	27,451	28,350	32,000
Total, Marketing and Regulatory Programs	84,641	114,680	130,190
FARM AND FOREIGN AGRICULTURAL SERVICES:			
Agricultural Policy Advisory Committee for Trade	14,120	11,470	14,120
Agricultural Technical Advisory Committees for Trade in:			
Animal & Animal Products	14,110	11,460	14,110
Fruits and Vegetables	14,110	11,460	14,110
Grains, Feed, and Oilseeds	14,110	11,460	14,110
Sweetners and Sweetner Products	14,110	11,460	14,110
Tobacco, Cotton, and Peanuts	14,110	11,460	14,110

USDA ADVISORY COMMITTEES—Continued

Policy Area and Committee Title	1999 Actual	2000 Estimate	2001 Estimate
Emerging Markets Advisory Committee	32,507	30,050	32,700
Edward R. Madigan Agricultural Export Excellence Award Board	.....	12,350	15,000
Subtotal, FAS	117,177	111,170	132,370
Advisory Committee on Beginning Farmers and Ranchers	26,490	32,350	70,000
National Drought Policy Commission	407,658	440,350	.....
Subtotal, FSA	434,148	472,700	70,000
Advisory Committee on Risk Management	.....	77,350	100,000
Subtotal, RMA	.....	77,350	100,000
Total, Farm and Foreign Agricultural Services	551,325	661,220	302,370
NATURAL RESOURCES AND ENVIRONMENT:			
Task Force on Agricultural Air Quality Research	49,443	47,350	50,000
USDA/1890 Task Force	1,559	12,350	15,000
Total, Natural Resources and Environment	51,002	59,700	65,000
OFFICE OF THE CHIEF ECONOMIST:			
Commission on 21st Century Production Agriculture	183,332	347,350	120,000
Subtotal, Advisory Committees	1,192,665	1,795,700	1,222,610
Contingencies/Reserve	607,335	4,300	577,390
TOTAL, ADVISORY COMMITTEES LIMITATION	1,800,000	1,800,000	1,800,000

QUESTIONS SUBMITTED BY SENATOR ARLEN SPECTER

DAIRY

Question. Milk prices dropped to $9.63 per hundredweight at the end of 1999, the lowest price in 21 years. Over the past several years, price swings of 30 to 40 percent from one month to the next have become common. Pennsylvania is the fourth largest dairy producer and there are approximately 9,900 dairy farms which produce $1.73 billion worth of milk each year. Over the past decade, however, Pennsylvania has lost an average of 300–500 farmers per year. Between 1993–1998, Pennsylvania lost 11.4 percent of its dairy farmers. What action is the Administration taking to help dairy farmers who are facing record low milk prices?

Answer. The Commodity Credit Corporation (CCC) is purchasing cheese and nonfat dry milk to support the price of milk. The extension of the price support program through 2000 has permitted the CCC to purchase almost 1 million pounds of cheese and 156.5 million pounds of nonfat dry milk to support the price of milk. CCC expects to purchase another 1–9 million pounds of cheese and 100–150 million pounds of nonfat dry milk in fiscal year 2000. The change in the wholesale beverage milk price formula as part of USDA's market order reform will help dairy farmers this year. Now the beverage milk price is adjusted by the higher of the milk for cheese price or the milk for butter/nonfat dry milk price. Since USDA is supporting the nonfat dry milk price, the wholesale beverage milk price is about $1.40 per hundredweight higher than it would be without CCC's administration of the milk price support program. The higher beverage milk price increases dairy farm income by over $800 million for fiscal year 2000. The price support purchases also yield farmers an income increase of another $800 million through the increased wholesale price of

milk solids and cheese. The Administration's proposal to strengthen the farm safety net includes extending the milk price support program for 2 more years, until the next Farm Bill. The Farm Service Agency is also making $123 million in Dairy Market Loss Assistance payments to dairy farmers this spring.

DROUGHT

Question. The Mid-Atlantic States suffered $2.5 billion in losses as a result of the drought in 1999. Pennsylvania alone suffered $700 million in drought losses. While the fiscal year 2000 Agriculture Appropriations bill provided $8.3 billion in disaster assistance for farmers, the vast majority of this money went to farmers in the Midwest to compensate for low commodity prices. Only $1.2 billion was provided for natural disasters which had to compensate for all natural disasters nationwide, including Hurricane Floyd, flooding in the Midwest, livestock loss and fishery loss. What action is the Administration taking to provide assistance to farmers hit by drought?

Answer. The Administration is implementing all the programs within our authority to alleviate the financial hardship caused by drought. These programs include the crop disaster program, crop insurance, non-insured assistance program, emergency conservation program, the livestock assistance program, the pasture recovery program, and emergency loans.

FISCAL YEAR 2000 SUPPLEMENTAL REQUEST

Question. Does the Administration plan to seek additional funds for farmers in the fiscal year 2000 Emergency Supplemental Appropriations Bill?

Answer. The Department is currently working with OMB to develop a supplemental request for fiscal year 2000. The supplemental will likely include authority to use unobligated Emergency Conservation

Program funds to repair farm structures and equipment damaged by Hurricanes Dennis, Floyd, or Irene. The request will also include language to allow CCC funds to be used to fund loan forgiveness for loans made by producer-owned associations that suffered losses from Hurricanes Dennis, Floyd, or Irene. We also plan to request selected funding for the Rural Housing Service.

PLUM POX

Question. On October 20, 1999, the USDA announced that the Plum Pox virus was found on peaches grown in Adams County, PA. This is the first discovery of the Plum Pox virus in the United States. The virus infects many fruit species, including peaches, apricots, plums, and almonds and causes the fruit to fall prematurely from the tree. This outbreak has the potential to cause severe damage to the PA fruit industry. The orchards have been placed under quarantine and the USDA has recommended destroying all of the fruit trees in the infected region. What action have you taken to ensure the swift distribution of indemnification money to PA fruit farmers?

Answer. We are considering a compensation plan based on sound economic principles, and the compensation plan is still under review.

Question. When can farmers expect to receive appropriate compensation?

Answer. As soon as the funding is announced, we will be proposing regulations on how producers can participate.

YEAR 2000 DIETARY GUIDELINES

Question. The proposed Year 2000 Dietary Guidelines for Americans, currently under review by the Secretaries of Agriculture and HHS, make changes to the 1995 Guidelines for fats and sugars. The proposed Year 2000 guideline advises: "Choose a diet that is low in saturated fat and cholesterol and moderate in total fat" and advises "if you drink alcoholic beverages, do so in moderation." However, in regard to sugar, the proposed guidelines state "Choose beverages and foods that limit your intake of sugars." Why do the proposed guidelines use "moderation" language in connection with fat and alcohol but use "limit" language concerning sugar?

Answer. The Dietary Guidelines Advisory Committee was charged with reviewing the 1995 Dietary Guidelines and determining if, on the basis of current scientific and medical knowledge, revisions were warranted. The Committee is composed of leading academic researchers. Collectively, they embody immense expertise in evaluating research studies in the areas of nutrition, medicine, and epidemiology. The recommendations from the Committee for all guidelines are based on their scientific judgements of the information available in the peer-reviewed scientific literature. As a general principal, I trust science. Let me get some more specific details as to why the specific wordings were chosen.

[The information follows:]

According to the Committee's final report, the term "moderation" in relationship to total fat intake was used for the following reasons:

—The proposed change in terminology from low to moderate represents the committee's view that a change in perception has occurred in the meaning of these two terms with respect to total fat. This change is not accompanied by a change in the numerical recommendation (30 percent) for the maximum percentage of energy provided by fat.

—There has been a long-standing belief among experts in nutrition that low-fat diets are most conducive to overall health. This belief is based on epidemiological evidence that countries in which very low fat diets are consumed have a relatively low prevalence of coronary heart disease, obesity, and some forms of cancer However, populations in these countries tend to be rural, consume a limited variety of food, and have a high energy expenditure from manual labor. Therefore, the specific contribution of low-fat diets to low rates of chronic disease remains uncertain. Particularly germane is the question of whether a low-fat diet would benefit the American population, which is largely urban and sedentary and has a wide choice of foods.

—Another reason for not overly restricting intake of total fat comes from evidence that populations consuming higher quantities of unsaturated fats have a favorable profile of blood lipoproteins and a relatively low prevalence of coronary heart disease, provided that intakes of saturated fats are low. Thus, the recommendation for a diet moderate in total fat is based in part on the recognition that unsaturated fats carry potential benefits.

—The committee further held the concern that the previous priority given to a "low-fat intake" may lead people to believe that, as long as fat intake is low, the diet will be entirely healthful. This belief could engender an overconsumption of total calories in the form of carbohydrate, resulting in the adverse metabolic consequences of high-carbohydrate diets.

According to the Committee's final report, the use of the term "limit" in relationship to sugars intake was for the following reasons:

—The committee recommends changing the wording of the guideline to include the word limit because intake of sugars has increased steadily since the early 1980s.

—Although dental caries continue to provide a major rationale for this guideline, the committee expressed very serious concern about current trends in the consumption of sugars by the U.S. population. These trends raised concerns because of their coincidence with other undesirable changes in the country's nutritional well-being, e.g., increasing rates of obesity and inadequate intakes of calcium that carry a risk of impaired long term bone health.

—Nationwide food intake survey data for all age groups demonstrate that consumption of soft drinks and other sweetened beverages like fruitades and tea increased dramatically over the past decade.

—Other data suggest that a significant proportion of the population may not be meeting its needs for calcium and other nutrients because of their displacement by the increased consumption of sweetened beverages.

The Committee concurred with the 1995 wording of the alcohol guideline, and therefore offered no rationale for use of the term "moderate" in relationship to alcohol consumption.

The Committee has submitted its final report to the Secretaries of Agriculture and Health and Human Services. The Secretaries are in the process of reviewing the report, and will publish the official Dietary Guidelines for Americans, Fifth Edition, after the review and clearance process is completed. The Dietary Guidelines for Americans, Fifth Edition, will form the basis for official nutrition policy of the Department.

WIC FOOD PACKAGING RECOMMENDATIONS

Question. I understand that the WIC program has made recommendations that juice products should be provided in a 46 oz. can which was the least expensive package available at the time of the recommendation. However, it has been brought to my attention that a 46-oz. glass packaging alternative could be made available to WIC consumers at a slightly reduced cost. From a standpoint of good sanitary practice, the glass jar can be resealed and is 100 percent recyclable. Does WIC plan to provide an updated list of packaging recommendations that takes into account current costs and benefits?

Answer. Federal WIC regulations do not restrict the form of packaging allowed for authorized juices. State agencies are responsible for determining the brands and

types of WIC foods authorized for use in their State from among those foods authorized in Federal WIC Program regulations. They are also responsible for determining allowable packaging sizes. Some States may currently be allowing the 46 ounce glass bottle of juice.

State decisions may be influenced by a number of factors such as cost, product distribution within a State, and WIC participant acceptance. They are not obligated to authorize every available food allowed via Federal WIC requirements. Additionally, the State can limit the type, e.g., frozen concentrate, single strength, etc., or the brand, e.g., the least expensive.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

BIOTECHNOLOGY

Question. With respect to genetically-engineered foods do you think that labeling of such foods should rely on science-based criteria?

Answer. The issue of labeling is unresolved. It is a debatable proposition whether labeling can e science-based. Studies are inconclusive regarding the food safety risk associated with using GMOs. The recent National Organic Standards regulations preclude the use of GMOs, but it is based on marketing needs for the industry, not science-based criteria.

GMO CROPS AND LIVESTOCK

Question. Scientists, farmers and ranchers have been genetically-modifying crops and livestock for centuries, have they not?

Answer. The genetic makeup of crops and livestock has been improved by selection and cross- breeding for thousands of years, with increased precision as the rules of genetics have become better understood over the past century and a half. The modern tools of biotechnology have made these processes more rapid, precise, and better controlled than ever in the past. However, it shoud also be noted that these tools also enable the movement of genes into crops and livestock, and in some instances traits that could not have previously been introduced by traditional means.

GMO CROPS AND MANDATORY LABELING

Question. In the immediate term, please speak to thwe difficulty farmers would face if forced to segregate crops for the purpose of mandatory labeling?

Answer. There is no mechanism, measure, or verifiable test presently in place to certify whether a segregated commodity is GMO free. However, the Grain Inspection, Packers and Stockyards Administration is requesting nearly $2 million to develop such tests.

Question. Please indicate how mandatory labeling requirements might undercut our ability to negotiate trade openings abroad?

Answer. Assuming products were required to indicate whether it contained a genetically- modified organism, USDA believes this requirement may limit our markets abroad. There is no overall consensus whether and under what circumstances labels would apply and whether the perceived benefits associated wiht a label can be achieved.

On a related note, the United States is a signatory to the Biosafety Protocol held in Montreal earlier this year. This agreement leaves GMO decisions to the state. It reflects the lack of consensus among the signatories on the GMO issue. It will impact bio-engineered seeds, where an Informed Agreement process is in place so that an importing country can decide whether to approve or disapprove of its entry onto their soil. If approved, documentation must accompany this shipment specifying seed identyu and traits. The Protocol does not mandate or encourage countries to segregate or label products used for feed or food, nor does it mandate any transaction-by-transaction notice and consent procedure.

GRAIN STORAGE LOAN PROGRAM

Question. Do you believe that beyond the immediate term, that additional storage capability will assist farmers if segregation and identify-preservation is necessary?

Answer. Yes, based upon the Department's evaluation of current storage utilization, additional storage facilities would allow farmers to segregate or preserve the identity of certain crops if necessary.

GMO CROPS AND MANDATORY LABELING

Question. Are you concerned that there is a risk that mandatory labeling could scare consumers in an unwarranted way that would make them think falsely that their food is not safe and encumber processors to such an extent that farmers would quiot using biotechnology?

Answer. USDA is concerned about the marketing risks associated with mandatory labeling of bio-engineered crops and genetically modified agricultural products for traditional commodities. Whether or not labels can truly capture all the necessary information remains a debatable proposition. Meanwhile, some farmers are limiting or discontinuing the use of seeds that are genetically engineered.

Question. Would you expect that if consumers demanded particular information—that the marketplace would, in effect, drive companies to label absent a government mandate?

Answer. While the USDA encourages a market approach, it must uphold policies that are fair. USDA is concerned that these decisions may not be based upon a rational science-based approach, but instead focus on the perceived risks. The trends indicate a move toward voluntary standards, where some notable firms have already announced a ban on genetically modified foods. Whether one agrees with the merits of this approach, voluntary standards by some notable firms may create a catalyst to all producers to provide a label, in lieu of a government requirement.

Question. Please provide additional information on the NAS review of our regulatory structure to ensure that it is as effective as possible.

Answer. In 1986 a regulatory regime for biotechnology products was established by the National Academy of Sciences (NAS). This organization used a coordinated framework, with shared responsibilities for biotechnology products among the USDA, EPA, and FDA. USDA recently proposed a further review by the (NAS), through the National Research Council (NRC). The NRC has since established a Committee on Biotechnology, Food and Fiber production, and the Environment. Establishing the committee through NAS will bring the best science to address the issues facing our regulators now and in the future. For example, a current study is underway on genetically modified pest protected plants which puts NAS in a unique position to judge the merits of introduction of these new products into our environment. It also allows NAS to further develop information obtained from its last general biotechnology study in the 1980s to assure the regulatory structure is as effective as possible.

STORAGE FACILITIES

Question. What is the scope of storage facilities eligible under the President's request?

Answer. The eligibility will include grain storage facilities including all necessary permanently attached fixtures.

Question. Do they include storage capacity for livestock feed such as silos and pits?

Answer. High moisture grain storage facilities will be eligible to receive a loan. Pits and silos will not be eligible because the program will be geared toward the storage of grain.

HACCP MODELS

Question. With respect to inspector shortages, some have been told the implementation of HACCP models program will allow the agency to change in-plant staffing configurations. Please tell me your time line for implementation of these new staffing arrangements.

Answer. The Food Safety and Inspection Service (FSIS) has developed a time line for implementing changes as a result of the HACCP-based Inspection Models Project (HIMP). I have asked FSIS to provide information on the time line for the project.

[The information follows:]

In the models phase of the HIMP the staffing of each plant is reduced to the complement needed for HIMP inspection procedures. In inspection activities the 30 plants scheduled to participate in the models phase of the HACCP-based Inspection Models Project are operating under new staffing configurations. Data are being collected about inspection workload to validate the staffing configurations in use in the models plants, and to determine further staffing configuration proposals. If the new inspection procedures are proven to be effective, based on data collected by a third party, the Agency plans to publish a proposed rule this summer that would propose extending HIMP procedures to all young chicken slaughter plants under Federal inspection. Consultations and negotiations with the National Joint Council (NJC), rep-

resenting inspectors, would be necessary to discuss the impact on inspector working conditions, including changes in staffing configurations. FSIS will not make any permanent changes until the new system is demonstrated to be effective, the rule has been presented to the public for comment, and is reviewed prior to any final decision.

Question. For the county-based agencies (FSA, NRCS, RD), please provide an, estimate of the degree to which these agencies contract with private sources for services, both at headquarters and in the field, which have traditionally been performed by Federal employees, such as accounting, loan servicing, information technology development and maintenance, etc. Include estimated expenditures and FTE levels for fiscal year 2000 and for fiscal year 1995. Finally, please describe the process used to analyze decisions to contract our to insure that the service level is not compromised and that cost savings are actually achieved.

FARM SERVICE AGENCY

Answer. The following services are performed at FSA Headquarters and our Kansas City Administrative Office (KCAO). These services are of a type traditionally performed by government personnel.

Category	Degree	FY 1995 Expenditure/FTE	FY 2000 Expenditure/FTE
Accounting	N/A	None	None
Loan Servicing	N/A	None	None
IT Support Services, PC Help Desk and Mail Room Operations.	High	$35,000,000 220 FTE	$42,100,000 230 FTE
IT Maintenance	Low	None	None

These positions have never been staffed by government personnel, but have been performed by contractors because the government lacks the employees with the skill levels, needed to perform these efforts in-house. Only after the agency performs a capability assessment to determine if the effort can be performed by government personnel is the effort awarded to contractors. Typically, large system operation and maintenance is provided by contracts.

NATURAL RESOURCES CONSERVATION SERVICE

Answer. The Natural Resources Conservation Service's (NRCS) strategic information technology development model is based on the Government's development of its business requirements. A capability assessment is then made to determine whether the NRCSI business requirements can be achieved in house or if contract services are required. Typically IT project management is performed with NRCS personnel; while contract support services are used for the actual software development. The following matrix identifies the degree, estimated expenditures, and FTE levels to which NRCS contracts with private sources for services.

Category	Degree	FY 1995 Expenditure/FTE	FY 2000 Expenditure/FTE
Accounting	N/A	None	None
Loan Servicing	N/A	None	None
IT Development	High	$7,000,000 88 FTE	$4,700,000 59 FTE
IT Maintenance	Low	None	None

RURAL DEVELOPMENT

Answer. In 1999, the Rural Housing Service's Centralized Servicing Center in St. Louis used task order contracts (under the Office of Personnel Management's temporary services contracting rules) to acquire the services of approximately 50 persons to perform one-time tasks and to provide transitional support. All other loan portfolio administration tasks are performed by government personnel. other than these specific CSC related temporary services, all other contract services are commercial in nature and are awarded based on the mandatory sources, socioeconomic preference programs or competition requirements contained in the Federal Acquisition Regulation.

The information technology systems used by Rural Development for portfolio administration tasks are supported by a combination of government and contractor staff. If the required services are determined to be inherently governmental, only in-house resources are used. In those cases where the government possesses a capability similar to a commercial service provider, the decision to contract out is based on the duration and nature of the tasks involved: the ability to timely meet statutory or other external deadlines, and the level of expertise and number of staff resources required to successfully complete the tasks. All laws, regulations and guidelines on contracting out for services are followed.

The total number of contract actions for program support services, whether awarded by formal contracts or simplified purchase procedures, have been coming down since 1995, due largely to changes in the budget and in how the program is conducted in the field. In fiscal year 1995, the total amount of service contracts was $57 million, while in fiscal year 2000, we anticipate awards equaling $38 million or less All formal contracts (actions above $100,000) for program support services are essentially continuations under existing contract options or are new competitions for services that have been traditionally contracted out. The single exception to this trend in the past 5 years occurred with the contracts awarded in fiscal year 1995 to support the Dedicated Loan Origination and Servicing (DLOS) system at the CSC. The upward blip in the trend resulted from a number of high dollar amount contracts awarded for CSC support, such as the DLOS system's hardware and software, and the related contracts for a tax reporting service, force-placed insurance service, and escrow investment and disbursement service.

In the headquarters, contract services, such as for information technology support, have been relatively stable or have involved the acquisition of unique services like the DLOS actions described above. Approximately 126 fewer actions occurred in 1999 than in 1998. The trend thus far into 2000 appears to continue downward. In the field, almost all program support services are awarded using simplified purchasing methods (small purchases) and average less than $10,000 each. The majority are commercial in nature (real estate appraisals, inventory housing repairs, caretaker services, legal foreclosure services, title services, commercial credit reports, etc.); and, the annual number and amount of awards are dependent on program loan cost funding levels.

Because Rural Development's service contracts are based primarily on functional Statements of Work, they require the contractor to deliver specified results rather than a specific number of workers. Information concerning the number of contractor employees performing a contract is not collected. No cost comparison studies were required under current Federal Acquisition Regulation rules, nor done for these program support contracts, since they were for commercial services not normally performed by government employees. The support contracts require the timely delivery of commercial services at fixed prices, and at specified levels of quality, without regard to the number of employees used by the contractor. The following matrix identifies the degree, estimated expenditures, to which RD contracts with private sources for services.

Category	Degree	FY 1995 Expenditure/FTE	FY 2000 Expenditure/FTE
Accounting	N/A	None	None
Loan Servicing	N/A	None	None
IT Development	N/A	None	$469,000 No FTE comparison
IT Maintenance	N/A	$5,000,000	$7,500,000 No FTE Comparison

QUESTIONS SUBMITTED BY SENATOR CONRAD BURNS

ADMINISTRATION IGNORING CONGRESSIONAL REQUEST

Question. I am concerned that this budget was put together without any input from Congress, or from producers. There is a failure to implement many of the focus areas that farm- state senators have been consistently pushing for. Why did the administration ignore the requests we have made over and over?

Answer. The Administration has tried to be responsive to the needs of producers and others while also being responsible with the use of the taxpayers' money. The farm safety net and other priority initiatives in the budget include many elements consistent with proposals advanced by key members of Congress and others. Obvi-

ously, not every worthy idea can be accommodated in the budget, but the Administration has put forth a set of reasonable and specific proposals for consideration. Congress can, of course, accept, reject or modify the proposals put forth in the budget.

Question. Why is this Administration asking for less money than last year? Emergency spending was a good portion of the expenditures last year. Under the circumstances, I believe we need to take a close look at where the markets are, and decide what we are going to do to actually help the producers who are faced with low commodity prices.

Answer. The Administration has proposed a supplemental income assistance program specifically to aid producers of crops with depressed prices. This proposal attempts to supplement the deficiencies the current production flexibility contract payments which are neither based on current production or prices. And, the safety net proposal is designed to provide a more stable basis for providing aid to producers in crisis than the expensive unpredictable ad hoc emergency assistance of the level enacted over the past couple of years. Outlays for the Commodity Credit Corporation will likely reach a record $27 billion this year due in large part to the $9 billion emergency aid package enacted with the fiscal year 2000 budget. Outlays for fiscal year 2001 by CCC under our regular programs are projected to be over $15 billion, which is still relatively high since commodity prices are not projected to improve significantly if at all although the AMTA production flexibility contract payments will be $1 billion lower in 2001 as required by the 1996 Act.

FSA STAFFING

Question. Your market analysts are not calling for a significant price upswing during the upcoming 12 months, meaning we will again see a high level of activity in FSA's LDP and Price support programs. The Administration has proposed a new conservation payment program to help small farmers, saying the majority will be eligible for payments up to $30,000. Part of that same initiative is to increase CRP acres from 36.5 million acres to 45 million acres, meaning there will be more contracts to administer. You are also implementing a farm facility loan program. How will staff levels be allocated to cover these programs?

Answer. FSA fiscal year 2001 non-federal staff year levels are based on performing workload activities similar to fiscal year 2000, with the exception of assumed decreases for crop and market loss assistance programs and somewhat lower loan deficiency payments. These activities account for the proposed decrease of 622 temporary FTE's. Staffing impacts associated with the proposed "Farm Safety Net Initiative" have not been determined and are not included in the proposed fiscal year 2001 staffing levels. If the Farm Safety Net Initiative or any other legislative assistance package is enacted, we would work with OMB and the Congress to address staffing requirements. However, I would note that, except for CRP, the conservation proposals would be administered by the NRCS, thereby impacting their workload. Furthermore, increasing CRP enrollment to the proposed 40 million acre level would occur over a number of years, not just in fiscal year 2001, and the relatively small acreage increment in fiscal year 2001 could probably be absorbed in terms of agency workload. We are concerned about the farm facility loan workload in 2001, as the program was announced for implementation too late for administrative funding to be considered in the budget.

Question. FSA's need for temporaries has caused Supplemental Appropriations requests at least twice in the last 2 years. If there is a continuous need for this help, why isn't USDA budgeting for it?

Answer. Recent supplemental funding has allowed FSA to avoid budgeted permanent employee separations, and commit additional temporary staff resources to meet increased workload requirements due to the economic crisis in agriculture. FSA cannot budget for emergency and disaster program activity in advance of legislative requirements, and as a result must respond to increased workload demand through supplemental requests for funding and staffing resources.

Question. If we are increasing FSA programs, but decreasing available staff, what are you doing to accommodate that?

Answer. In November, 1999 FSA received $56 million in additional funding which allowed FSA to retain critical permanent county level staff and commit additional staff resources to meet increased farm loan program workload and address program delivery and payment processing needs for marketing assistance loans and loan deficiency payments this past fall and winter. The workload for these programs was and is still high and new emergency programs were added by the Congress last fall.

FSA is reviewing its potential needs with the Department for additional fiscal year 2000 supplemental funding. This supplemental funding would permit the

Agency to pay for more temporary staff years in order to complete implementation of over 20 new emergency disaster provisions in a timely way and also to ensure that producer payments, including loan deficiency payments, are made timely in coming months.

Question. Are you increasing technology, or are there any efforts being made within FSA to streamline the commodity and direct lending programs to ease workload, and take the burden off farmers?

Answer. FSA is currently working towards posting market prices on the Internet for use by the Agency's customers for market loan repayments or loan deficiency payments. The process would automatically calculate the loan deficiency payment for the farmer.

For Price Support Loan and Loan Deficiency Payment Programs, FSA provided an Internet-based reporting system for access by Federal entities, industry, and general public. Data excludes producer-specific information, but does provide loan and loan deficiency payment information. Users can also initiate queries for reports by commodity for any active crop year.

FSA was one of the first agencies to use smart cards. For the Agency's Peanut program, through the use of smart card technology to store sales information, FSA assures fair and equitable quota allocations to peanut growers.

FSA has several projects underway to streamline direct lending to reduce workload for producers and FSA staff. The Agency has developed procedures to reduce documentation requirements for loans under $50,000 and for repeat loan customers with acceptable loan performance history. The revised procedures have been finalized by the Agency and will be transmitted to the Department and then the Office of Management and Budget (OMB) for final approval and publication. These procedures will reduce the required paperwork on qualified loans to a few pages. The Agency is also revising procedures for processing emergency (EM) disaster loans. The new procedures must be cleared by OMB and published for public comment, which we expect in late summer, 2000. As proposed, the changes to the EM program will reduce the submission requirements for producers and simplify the calculations, that must be performed by field staff. In addition to these two initiatives, FSA has undertaken a major initiative to streamline all other direct loan regulations. This project will reduce the affected regulations by nearly half, eliminate several forms, and simplify processes and procedures for making and servicing direct farm loans. Because of the sweeping nature of this project, completion is not projected until 2002.

Question. What is the status of allowing farmers to electronically file for USDA/FSA programs?

Answer. FSA has taken the lead role in organizing a multi-agency effort to develop the electronic filing capability defined by HR–852 and S–777. FSA intends to develop capabilities even if the bills do not become law. This effort is being integrated with the Secretary's paperwork reduction initiative and the electronic access initiative (EAI), which is a component of the Service Center Initiative (SCI). Significant achievements have been made in building the fundamental components of the desired capability. We will provide more detailed information for the record.

[The information follows:]

The Paperwork Reduction Implementation Team (PRIT) developed a five-phase approach to meet the requirements of the bills. This approach is being utilized to prioritize and fund development efforts. The technical infrastructure is being developed under the Service Center Initiative (SCI).

Phase I.—Place digitized forms on the Web. Customers complete on-line but mail fax to USDA service center. News and information for farmers consolidated and organized for simplified access.

Phase 2.—Forms completed on-line and e-mailed to USDA service center.

Phase 3.—Intelligent forms that perform basic field edits.

Phase 4.—Forms linked to service center data bases. Fields pre-filled with customer data.

Phase 5.—Forms replaced with on-line software applications.

The short-term priorities are to implement phases 1 and 2. USDA deployment of forms on the web site is limited to forms with prior OMB approval for on-line collection including approval of the customer instructions. A small number of forms among the three service center agencies and RMA already meet this criteria.

PRIT is currently seeking approval from OMB for the deployment of Phase I. In addition, FSA makes available electronically on a daily basis:

—market rates,

—CCC rates,

—Farm Loan rates,

—News releases via FSA's news listserver. Farmers and producers can subscribe to the news list through the FSA web site.

FSA also provides burley tobacco lease and transfer information online for selected states. The Agency is also establishing a website for each Service Center that will be available to the general public, including farmers, producers, and vendors. That site will provide the public with national and local farm program news and information, including notices of meetings for farmers to attend.

CIVIL RIGHTS

Question. The budget mentions you wish to federalize county office employees. This will ease administration—none of us can disagree with this. You have stated this is necessary for a variety of reasons, including to make them more directly accountable to you for civil rights reasons. However, over 90 percent of the complaints are about Federal employees working in farm lending programs. What are you doing to make them more accountable? What energies are you expending to rectify this larger, more real problem? How many people have you disciplined and/or fired over these matters?

Answer. I have clearly communicated to all USDA employees my expectation that every customer and every employee be treated fairly and equitably with dignity and respect. There are no exceptions and no excuses.

Our employees have an enormous role to play in maintaining a positive, equal opportunity environment. Therefore, we have provided civil rights training for nearly all USDA employees. We are conducting compliance reviews of the USDA agencies and are monitoring the compliance review activities of the agencies' own civil rights offices. We are improving our policies on accountability and discipline in civil rights cases. The new policy will require an investigation into conduct whenever a settlement agreement is approved or a finding of discrimination is issued. Over 90 disciplinary actions have been taken against employees, ranging from removals to letters of reprimand.

I am holding agencies accountable for meeting civil rights goals. For example, the Farm Service Agency's annual performance plan contains measurable, annual targets for its goals to: increase the number of small, limited-resource, and socially disadvantaged family farmers and ranchers elected to County Office Committee positions; increase the number of program and employee complaints processed on time; increase workforce diversity; and increase the number of loans to beginning and socially disadvantaged farmers/ranchers. In fiscal year 1999, the number of FSA direct and guaranteed loans made to minorities and women increased 25 percent from the number made in fiscal year 1998 and 50 percent from the number made in fiscal year 1997.

Question. How many staff years of field level employees have been consumed by doing the research on the Pigford Vs. USDA lawsuit?

Answer. We estimate that the full-time equivalent (FTE) of almost 240 field level staff years will be used during fiscal year 2000 for Consent Decree activities related to the Pigford vs. USDA lawsuit. About 80 percent of this estimated staff year usage will have been expended by the end of March. Existing agency field level employees have been doing the work at Headquarters and in the field, but this has necessarily diverted them from their normal duties of loan making, loan servicing, and other ongoing Farm Service Agency workload.

NATIVE AMERICANS CLASS ACTION LAWSUIT

Question. What should we expect now with the class action lawsuit brought by the Native Americans?

Answer. *Keepseagle* v. *Glickman* is a class action lawsuit filed on November 24, 1999, in the District Court for the District of Columbia on behalf of Native Americans. The Complaint alleges discrimination under the Equal Credit Opportunity Act and Title VI of the Civil Rights Act of 1964 in the access to and participation in USDA's farm programs. In addition, the Complaint alleges that USDA failed to process properly the civil rights complaints of Native Americans. The Plaintiffs are seeking damages in the amount of $19 billion. The Complaint defines the potential class as:

All Native American participants in FSA's farm programs who petitioned USDA at any time between January 1, 1981 through November 24, 1999, for relief from acts of racial discrimination visited on them as they tried to participate in the farm programs.

To date, the Plaintiffs have identified 5 potential class agents, 396 identified potential class members, and a potential class of 19,000 Native Americans. USDA filed an Answer to the Complaint on January 24, 2000. The Plaintiffs must submit a mo-

tion to certify the class by April 12, 2000. The lawsuit is in the early stages of litigation and USDA will continue to evaluate the merits and litigation risks as the case moves forward.

CIVIL RIGHTS SETTLEMENTS

Question. What is the status of the civil rights settlements? If this is what you consider a high priority, how long will it take you to respond to lesser priorities?

Answer. When I became Secretary of Agriculture, I made a commitment to addressing longstanding civil rights concerns in the Department. I am very pleased with the steps we have taken to address these issues and ask for your continued support as we continue the difficult process of remedying past abuses.

In April 1999, the Department entered into a class action settlement agreement with African-American farmers, providing compensation for those who felt they had been discriminated against in applying for USDA programs. The agreement provides for an independent facilitator to determine if each case meets the class definition, an independent arbitrator, and an independent adjudicator who all operate independently of USDA. In addition, the Department of Justice (DOJ) is responsible for coordinating most of the settlement payments in these cases.

Thus far, over 19,000 farmers have joined the class action suit, a much larger number than was expected. The adjudicator has made a final determination on over 40 percent of the claims and, in about 60 percent of these, decided in favor of the farmer. Because of the volume of claims to be paid, there has been some difficulty in coordinating the payments. In some cases, payments to farmers have been delayed. USDA, DOJ and the facilitator are working to solve these problems and all payments will be made as quickly as possible, with the goal of making payments within 90 days of the decision.

RESOLUTION OF CIVIL RIGHTS COMPLAINTS

Question. The Administration's budget suggests that there is strong support for USDA Civil Rights activities. Unfortunately, I find that very difficult to believe when, in Montana, we have cases that have been languishing at the Office of Civil Rights for years. What do you intend to do to get these cases resolved in a timely manner?

Answer. I understand that nearly half of these cases have been closed and the majority of the remaining cases are in various stages of the investigation process. We are working diligently to resolve these cases as quickly as possible and have taken steps to ensure that all cases alleging discrimination in USDA programs are resolved in a timely manner. However, conducting thorough and objective investigations is often time-consuming. Consistent with the recommendation of our Civil Rights Action Team, the Office of Civil Rights is being reorganized into separate units with distinct responsibilities for overseeing the timely and effective resolution of program and employment discrimination complaints. USDA also launched a new tracking system for processing program discrimination complaints in 1999.

EXPORT PROGRAM FUNDING

Question. Nearly every export program was cut. The Public Law 480 program was cut drastically, as was the Section 416 program. The export subsidy program shows a decrease in funds of $154 million. At a time when we are fighting for a place in the world market why are we cutting funds for important export programs?

Answer. The budget does not represent any reduction in the Administration's commitment to expanding overseas markets for America's farmers and ranchers. In many cases, the budget continues export promotion and trade programs at or near current program levels. This is true for CCC export credit guarantees, the Market Access Program, and Foreign Market Development Program.

In some cases, the budget reflects lower program levels for 2001, but this is due to special considerations. For example, the Export Enhancement Program is reduced to be consistent with the maximum program level established in its authorizing statute as well as the Uruguay Round export subsidy reduction commitments. Funding for the Public Law 480 program appears to decline, but this is due primarily to large funding balances which carried over from 1999 and have expanded substantially the level of funding available in 2000. In the case of section 416(b) food donations, the budget was sent to print before the recent decision to increase this year's programming by 3 million metric and, thus, does not reflect the full extent of this year's activity.

Question. Farm-states like Montana depend on export programs for their agricultural economy. The Foreign Market Development (FMD) Program and the Export Enhancement Program (EEP) especially provide much-needed help to farmers and

ranchers to create new product markets. How can USDA cut the EEP program and give no additional funding to FMD when President Clinton has heavily promoted global trade?

Answer. The Department has taken many actions to expand trade and develop new markets in recent years. We expanded substantially the level of programming under the CCC export credit guarantee programs in response the financial crises in Asia, Latin America, and elsewhere. Last year, we undertook a tremendous increase in food aid programming through the authority of section 416(b) and programmed the highest level of food aid in at least the past 25 years. We have reached two very important agreements with China which will provide significant benefits to America's farmers and ranchers. The President also has taken action to reform our policy on unilateral economic sanctions in order to provide additional sales opportunities in markets where previously U.S. exporters could not compete. Taken together, these actions plus others, clearly demonstrate the Administration's commitment to expanding trade.

There is always more that can be done of course. Funding for EEP has been reduced in order to comply with the limitation established in its authorizing statute and to meet our commitment to reduce export subsidies under the Uruguay Round Agreement. Nevertheless, to ensure that EEP funds are fully used, the Administration again this year is proposing that Congress pass legislation which would authorize the Secretary of Agriculture to reallocate unobligated EEP funds to support other export activities, including market development and foreign food aid. If this authority were available, the Department would have the option of expanding funding other export programs, one of which could be the Foreign Market Development Program.

FSIS INSPECTOR SHORTAGE

Question. Historically, Congress has fully funded the Food Safety Inspection Service's budget. Yet every year there is a shortage of inspectors. These shortages have caused backups at the plant and financial losses for producers. Our commitment to funding food safety programs is proven every year, but if the agency is missing the mark in projecting its needs, this problem will become worse. How can the agency assure that it has asked for the funding necessary to hire all needed inspectors for this year and next?

Answer. The budget is based upon historical levels of industry growth and includes a level of funding necessary to ensure that the Government meets its responsibilities for providing inspection services without disruption to the industry.

TELECOMMUNICATIONS TO RURAL AREAS

Question. I have been a major proponent of bringing telecommunications to rural areas. Bringing internet access to Montana farmers and ranchers increases market opportunities. It provides valuable information on agricultural research. A vast amount of information is made available to better their farm operations and improve their bottom line. The internet is becoming an increasingly valuable tool for agricultural producers and Rural Utilities Service (RUS) funding is an important part of that. How can this administration promote development and a better way of life for agriculture and then decrease funding for a program which offers rural areas an opportunity to dig out of the agricultural crisis?

Answer. Since 1993, RUS has provided over $112 million in loans to eight telecommunications borrowers in Montana and has funded 13 distance learning and telemedicine projects across the state totaling $3.9 million in grants. We are pleased to report that the Administration's funding request for fiscal year 2001 is actually higher than the current fiscal year appropriation. Our infrastructure lending levels are proposed to remain at the same level as this year, but our distance learning and telemedicine program is requesting a $100 million increase in loans, to $300 million total, and a $5 million increase in grants, to a total of $25 million. In addition, under the authority of the distance learning and telemedicine loan and grant program, the administration is seeking $100 in loans and $2 million in grants for a pilot program to promote broadband initiatives and internet service.

CONSERVATION SECURITY PROGRAM

Question. $1.3 billion for the conservation in the farm safety plan is a fairly large increase over last year's budget. This funding must not be used as the only route to provide assistance to farmers. Nor should it be used solely for set-asides. How can USDA assure that the conservation funding will truly be help for agricultural producers and not an avenue to lock more land out of production?

Answer. The Conservation Security Program (CSP)—the centerpiece of the President's initiative—is a new voluntary program targeted to family farmers and ranchers who would receive a direct payment for maintaining or improving their natural resources. The program is built on the concept of helping people who actually work the land and keeping that working land in agricultural production in a sustainable condition. The CSP is not a cost-share program, but would be another conservation tool in the USDA "toolbox" of conservation programs.

The CSP is not intended to take land out of production. In fact, land that is currently enrolled under a Federal conservation easement would not be eligible for the CSP, unless the easement agreement allows agricultural production to be continued. Conservation easement or similar long-term conservation protection programs provide payments for a variety of purposes, including conservation, farmland protection, and flood reduction. Under such easements, program participants must protect and maintain the land in a prescribed manner and have agreed to do so in exchange for the program payments. Since these lands are adequately protected by contract, additional payments under the CSP would not be responsible. This policy would make ineligible land enrolled in programs such as the Conservation Reserve Program, easement feature of the Wetlands Reserve Program, Debt Cancellation Conservation Contract Program, Water Bank, Emergency Watershed Protection Program floodplain easements, and similar Federal programs.

Question. Why is this Administration focusing on "Conservation Programs" when what is broken in agriculture is the Market side?

Answer. The Conservation Security Program is one piece of the policy mix in dealing the agricultural economy. It is not intended to be connected in any way with the price of the commodities being produced or to try to fix market issues. The CSP would build upon the existing conservation technical infrastructure and complement other USDA programs. Direct annual payments would be made to producers to financially recognize them for good land stewardship that produces the environmental benefits which we all enjoy—clean water and air, reduced soil erosion, improved wildlife habitat, and sustainable soil. Payment levels would be based on the comprehensiveness of producers' conservation efforts.

LANDS LEGACY INITIATIVE

Question. The Administration's budget includes $236 million as part of the Land's Legacy Initiative. Of that, $130 million will be used to acquire lands for recreation, wildlife habitat, and watershed protection. A portion will be used to establish and expand community forests and open spaces. Has the USDA lost sight of the producer and what the USDA was created to do? The "A" in USDA stands for "agriculture" not "acquisition of lands". Setting aside such sums of money for purchasing land for wildlife habitat is not my idea of assisting our producers. Was any thought given to offering producers incentives based on Conservation plans? Purchasing more land will simply take it off the tax rolls and further over burden our Counties and the States. When did USDA go into the business of land acquisition? What programs will go without funding or with limited funding to allow such purchases?

Answer. The Land's Legacy Initiative contains the Farmland Protection Program (FPP) administered by the Natural Resources Conservation Service (NRCS). The FPP is beneficial to agricultural producers because it is used to purchase conservation easements from landowners enabling the land to remain in agricultural use rather than being converted to other uses. This program was authorized in the Federal Agriculture Improvement and Reform Act of 1996 (H.R. 2854/Public Law 104–127) for the purpose of purchasing conservation easements or other interests on lands with prime, unique, or other productive soil to limit non-agricultural uses of the land. The authorization language requires that all lands in the FPP have a conservation plan on any highly erodible lands. Other incentives based on conservation plans are not authorized for the program at this time. The 1996 Federal Agriculture Improvement and Reform Act of 1996 authorized $35 million for the FPP and all funds have been exhausted. However, demand for the program continues to increase, agricultural producers want to sell the development rights for their farms and be assured that their family farms will remain in agricultural use for future generations. The funding for the FPP will not impact other NRCS conservation programs.

The Forest Service (FS) also supports the Lands Legacy Initiative primarily through two of its program areas. The Land Acquisition Program acquires lands, waters and related interests within the National Forest System as authorized by the Land and Water Conservation Fund Act of 1965 (Public Law 88–578). Many of the acquired lands are located in congressionally designated areas such as Wilderness, National Recreation Areas, Wild and Scenic Rivers and National Scenic Trails. Land

acquisitions also improve forest management through consolidation of boundaries and providing access to existing National Forests and Grasslands. Land acquisition funds are provided through the Land and Water Conservation Fund under the Department of the Interior. In fiscal year 2001, a total of $130 million has been requested for acquisition, management, forest and wilderness inholdings and cash equalization.

The second FS mission area that focuses on the Lands Legacy Initiative is State and Private Forestry. The purpose of these programs is to maintain working landscapes, to assure the economic vitality of communities and individuals through sustainable management of the natural resource base on which they rely. Among the State and Private Forestry programs, the Forest Legacy Program (FLP) conserves resource values of forest land, emphasizing lands of regional and national significance that are threatened with conversion to nonforest uses. Working in partnership with State Foresters, local governments, land trusts and interested landowners, the Forest Service supports the acquisition, by States or local entities, of conservation easements or fee simple title to unique lands. The program provides a cost-effective mechanism to protect critical wildlife habitat, conserve watershed functions, and maintain recreation opportunities.

Another State and Private Forestry program, the Urban and Community Forestry Program works to assist local communities in managing trees, forests, urban parks, greenspace and vegetation in order to improve urban lands livability, and reduce sprawl that encroaches on rural working lands. Through planning, demonstration projects, and technical assistance, Urban and Community Forestry programs improve air quality, diminish noise pollution, cool air, reduce erosion, and cut water treatment costs.

Finally, the FS will also serve as a key partner with USDA's Rural-Business Cooperative Service to make loans available through a new USDA revolving loan program to State, local and tribal governments in order to establish a green trust partnership that enables communities to protect open space, limit sprawl, enhance air and water quality, and reduce greenhouse emissions

PROJECT TERMINATIONS

Question. The Administration's budget proposes a 50 percent increase in funding for development, production, and commercialization of biobased products and bioenergy. This sounds like a glorious boost to research funding. However, what would you suggest I tell the producers of the Northern Great Plains when they ask why the funding for agriculture research at the Sidney ARS facility was cut?

Answer. The President's budget required that very difficult choices be made. All of the projects are evaluated within the ARS research portfolio. Decisions are based on (1)the relevance of the research project in addressing critical issues; (2) the availability of sufficient funds to conduct the research; and (3) the overall impact of the research on American agriculture. The research recommended for elimination at Sidney is in the area of irrigated crop rotation research. Other research activities at Sidney, such as biological control of invasive species like leafy spurge and the wheat stem sawfly were considered higher priority.

Question. These people are more interested in the leafy spurge and sawfly research that acutely hit them in their wallet. There is also $561 million for Invasive species research. This is for fiscal year 2001. Aren't leafy spurge and sawfly invasive species?

Answer. Yes. Leafy spurge (Euphorbia esula) is an invasive weed from the Mediterranean and Northern Europe, and wheat stem sawfly (Cephus cinctus) is an invasive insect from Eastern Asia and China. New natural enemies from Europe have been found for leafy spurge, and will be introduced after testing them. This work is based out of the ARS European Biological Control Laboratory in Montpellier, France. Biological control of the wheat stem sawfly, based out of the ARS Biological Control Laboratory in Beijing, China, is also progressing well. A promising parasite of the sawfly has been introduced to quarantine in Bozeman, in a program conducted in cooperation with Montana State University. It will be released after testing if it appears to be restricted in its host range to the pest.

Question. What makes them so important in 2001 and not now?

Answer. Leafy spurge and wheat stem sawfly are as important now as they will be in fiscal year 2001. Funding for these projects is not proposed for termination.

Question. Why cut these programs one year and boost them the next?

Answer. As stated above, funding for research on leafy spurge and wheat stem sawfly will continue.

GLOBAL CHANGE RESEARCH

Question. What do you suggest I tell the producers that depend on these grass roots programs when they see $32 million being set aside for Global Change research?

Answer. ARS research on global change addresses challenges that face agricultural producers and provides a wide array of environmental benefits. Research on rangelands indicates that woody species such as mesquite are replacing the more desirable grasses. Among the possible causes being investigated are altered climate and increasing atmospheric concentrations of carbon dioxide, a greenhouse gas. ARS research shows that increasing concentrations of carbon dioxide stimulate growth of some weeds more than crops. Work on managing crops, rangelands, and soils to sequester carbon dioxide into plants and soils increases soil organic matter, which benefits crop productivity, decreases erosion by wind and water, and suppresses leaching of agricultural chemicals into waterways. Other ARS researchers are working on ways to use weather and climate models to predict and avoid risks to agriculture associated with extreme weather events.

BUILDINGS AND FACILITIES

Question. The Agricultural Research Service (ARS) Buildings and Facilities budget was cut by $14 million. This concerns me greatly. As agricultural producers look for new ways to increase profits and enhance production, it is extremely important that they have facilities available to conduct research and hold classes. As an example, I was extremely pleased that last year $530,000 was included for a new building at Fort Keogh in Miles City, MT. This agricultural research station had been operating on a shoe-string and is in major need of a new facility. The new building will help sheep and cattle ranchers learn about new methods and utilize agricultural research. If we hope to ever dig agriculture out of the hole it's in, innovation must be encouraged. Can the USDA find a way to restore the funding necessary for new innovation in agriculture?

Answer. The fiscal year 2001 Federal budget submitted by the President recommends a number of new initiatives to address changing priorities facing agriculture and the American consumer. The research budget proposed for ARS reflects an increase of $97.8 million in support of new research initiatives in emerging and exotic diseases in plants and animals; agricultural genomics and genetics; human nutrition; invasive species; food safety; food quality protection; air quality; biobased products and new non-food and commercial uses of agricultural commodities; global climate change; integrated ecological sciences; and agricultural information dissemination.

Examples of new innovations that would result from expanded research initiatives proposed in fiscal year 2001 include developing new methods for the biological control of invasive weeds and other pests important to agriculture; finding new markets for biobased feedstocks and products to increase economic opportunities for agricultural producers and rural communities; developing new ways to increase carbon storage in soils and determining ways to predict and investigate climate change impacts on agriculture; improving the economically desirable traits of livestock, poultry and aquaculture species; and expanding diagnostic capabilities to prevent acts of biological and chemical terrorism on U. S. agriculture and a host of other new innovations.

MARKET INFORMATION PROGRAM

Question. The Economic Research Service (ERS) budget was cut by $10 million. ERS provides important market information to agricultural producers. Many Montana producers rely on reports issued by ERS for cattle numbers and market reports. Again, the USDA is not giving producers a fighting chance to make their way in global markets. How will you change this?

Answer. The agency's request for 2001 is $55.4 million, a net decrease of $10 million from the 2000 appropriation of $65.4 million. The change consists of four parts: a $1 million increase for an initiative on structural changes and concentration in food and agriculture; a $.5 million increase to support a global research and outreach initiative; a $.7 million increase for a study on carbon sequestration; and a $12.2 million decrease for evaluations of food stamp, child nutrition, and WIC programs. Funding for these evaluation studies in 2001 is included in the Food and Nutrition Service (FNS) budget. The net decline has no implications for the ERS market information program. ERS continues work closely with other agencies in supporting the USDA market information program and meeting the needs of American producers. The agency continues to publish a monthly report on the livestock sector

outlook. This report includes analysis of major market developments, as well as key data on cattle, hogs, poultry, and dairy. ERS has an active program of research supporting the cattle industry and the work of other USDA agencies which relates to cattle. Examples include work on cattle cycles and our role in developing the Department's new price reporting program.

BIOTECHNOLOGY

Question. In regards to Frito Lay's recent announcement that they will no longer use genetically modified corn in response to consumer concerns—is USDA working with these companies and processors to make sure that the public is receiving the proper information on food safety and the potential benefits of technological advancements in genetically enhanced crops?

Answer. USDA's regulatory processes are open and transparent and the information on the safety reviews undertaken by USDA's Animal and Plant Health Inspection Service (APHIS) are made available to the public. Companies that are regulated by APHIS, or by the Food and Drug Administration (FDA) or the Environmental Protection Agency (EPA), are well aware of the extensive reviews that biotechnology products have undergone. Food manufacturers have spoken with me and other USDA officials regarding their concerns on these issues. In my view, we do not have a role in trying to influence companies as they decide how to respond to what they perceive to be their customers' demands, whether domestic or foreign. In addition, the responsibility for assuring the safety of food falls to FDA.

However, we do believe that we need to devote more energy to demonstrate to the public our commitment to ensure that concerns are addressed. USDA has developed a web site on biotechnology to address key questions for the public and we have formed an internal Biotechnology Communications Committee to ensure that our various agencies provide consistent messages on topics that arise. This group is also working with the communications offices at FDA and EPA to improve interagency coordination in public outreach.

Question. Additionally, Frito Lay is the largest user of cotton seed oil in the U.S. 60 percent of cotton seed oil is produced from genetically enhanced crops. It is past time to give some serious thought on how to address biotechnology. What plans does USDA have to do so?

Answer. A key responsibility we have as a Department is to defend the integrity of our regulatory processes and decisions. This is a role our regulatory and policy officials perform in public meetings throughout the U.S., as well as in bilateral and multilateral fora. It is vital for our continued credibility that we continue in this role, and are seen as balanced and impartial, rather than as simply pro-biotechnology.

There has been increased media attention to various potential risks posed by biotechnology and there have been questions raised by some about the adequacy of the existing Federal regulatory system for biotechnology products. It is to be expected that, as for any new technology, questions will continue to arise. To ensure that we can address, in an authoritative manner, any scientific issues that may arise, I have asked the National Research Council of the National Academy of Sciences to set up a Standing Committee on Biotechnology. The membership on this committee and its charge will be announced shortly. The first task of the Standing Committee will be to examine the risk assessment process and the assumptions underlying it as used by USDA's Animal and Plant Health Inspection Service in its safety reviews of biotechnology products for agricultural use. The Standing Committee will in that study consider whether we are addressing all of the relevant scientific issues appropriately, and identify any areas where USDA might improve its regulatory oversight based on the most recent scientific knowledge. It will also consider how most appropriately to monitor biotechnology products that have been approved for commercial use.

A variety of other issues have been raised by critics either of the technology itself, or of some of its key agribusiness proponents. A number of these complex questions need to be aired in a balanced public forum and the implications raised carefully considered, in order both to shed light on the public debate and to provide me with important recommendations to help guide future USDA activities. On February 4, 2000, USDA announced the membership on our new Advisory Committee on Agricultural Biotechnology which will address these issues. Representatives of the Grocery Manufacturers of America and other groups along the food production and distribution chain are represented on the committee. The committee will meet for the first time on March 29–30, 2000, in Washington, DC.

Additionally, we believe that it is essential that there be accurate information available about the economic impacts on farmers who use biotechnology-derived

crops, and on the environmental effects of their use in terms of inputs such as pesticides. We are increasing our data-gathering efforts in these areas. As niche consumer markets develop for identity-preserved non-biotechnology commodity streams or value-added biotechnology-derived products, USDA will have a role in certifying the testing methods used to verify the contents of a shipment through its Grain Inspection, Packers, and Stockyards Administration, and validating the identity of value-added products through its marketing and regulatory agencies.

WHEAT LOAN DEFICIENCY PAYMENTS

Question. In the last agricultural appropriations bill, Representative Lucas included language which would provide an LDP for grazing wheat. Although grazing wheat is not mechanically harvesting the crop as the 1996 Farm Bill specifies, the USDA did set a precedent when they allowed an LDP for silage. When does the USDA expect to have the program in place to give an LDP to producers that graze their wheat crop?

Answer. The language you refer to was in the conference report and not in the bill. It is my understanding that the current law, however, only allows USDA to make LDP payments to producers who actually harvest their loan eligible crops. The Federal Agriculture Improvement and Reform Act of 1996 provides for marketing assistance loans with respect to certain commodities that are produced on farms containing eligible cropland covered by production flexibility contracts and on any production of extra long staple cotton or oilseeds. LDP's are an option available under the marketing assistance loan program that allows a producer to receive an LDP from CCC provided the producer agrees to forgo obtaining a marketing assistance loan. Marketing assistance loans and LDP's are made on the actual harvested production of the commodity. Producers who do not harvest a crop do not have a commodity to pledge as collateral for a loan. Therefore, a producer is not eligible for an LDP on a commodity that was utilized as pasture.

In short, with respect to the conference report language request to include wheat acres utilized for pasture to the commodities eligible to receive an LDP, my understanding is that I do not have the authority to base marketing assistance loans, and subsequently LDP's on anything other than actual harvested production. Such a change would require legislative action by Congress.

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

SETTLEMENT OF PROGRAM CIVIL RIGHTS CASES

Question. I continue to hear of problems at USDA related to civil rights issues. Please provide the status of ongoing issues regarding the civil rights settlement with plaintiff Black farmers and any other major issues before the Department including those involving Native Americans.

Answer. I am committed to ensuring the civil rights of USDA's customers and employees. I am very pleased with the steps we have taken to address these issues and ask for your continued support as we continue the difficult process of remedying past abuses.

In April 1999, the Department entered into a class action settlement agreement with African-American farmers, providing compensation and closure for those who felt they had been discriminated against in applying for USDA programs. The agreement provides for an independent facilitator to determine if each case meets the class definition, an independent arbitrator, and an independent adjudicator who all operate independently of USDA. In addition, the Department of Justice (DOJ) is responsible for coordinating most of the settlement payments in these cases.

Over 19,000 farmers have joined the class action suit, a much larger number than was expected. The court-appointed adjudicator has made a final determination on over 40 percent of the claims and, in about 60 percent of these, decided in favor of the farmer. Because of the volume of claims to be paid, there has been some difficulty in coordinating the payments. In some cases, payments to farmers have been delayed. USDA, DOJ and the facilitator are working to solve these problems and all payments will be made as quickly as possible, with the goal of making payments within 90 days of the decision.

Regarding other major issues, I have been told that the Department is working to resolve 13 employment-related and 4 program-related class action cases. One of these is a complaint alleging discrimination against Native Americans. The complaint was filed on November 24, 1999 and an answer to the complaint was filed by USDA on January 24, 2000. The class would be comprised of all Native American

participants in Farm Service Agency programs who complained to USDA about discrimination in farm programs between January 1, 1981, and November 24, 1999.

CIVIL RIGHTS INVESTIGATION AND ENFORCEMENT

Question. Please provide details involving the Department's ongoing activities regarding civil rights investigation and enforcement as they relate to both client and employee issues.

Answer. Since last year, the Office of Civil Rights (CR) has developed procedural manuals and standard operating procedures and realigned the program and employment divisions. All CR program complaint files are being reviewed to determine priority for investigation and appropriate resolution. CR will provide management diversity training to all USDA managers in headquarters and each agency will provide similar training to their managers in the field. Consistent with the recommendation of our Civil Rights Action Team, the Office of Civil Rights is being reorganized into separate units with distinct responsibilities for overseeing the timely and effective resolution of program and employment discrimination complaints. USDA also launched a new tracking system for processing program discrimination complaints in 1999

The Program Compliance Division has scheduled evaluations of agency civil rights programs to assess whether the offices are properly staffed and to determine the level of enforcement of applicable civil rights statutes, regulations, and policies. I understand that four agencies will be evaluated this year: the Natural Resources Conservation Service, Rural Development, the Foreign Agricultural Service, and the Office of Inspector General. Employment compliance reviews are scheduled or are being conducted throughout the Department to identify any violations of employee civil rights. All agency heads were evaluated on civil rights performance during fiscal year 1999, and there was improved performance in all but two agencies. Over 90 disciplinary actions, including removal, have been taken against employees for discrimination or misconduct related to civil rights.

We have nearly eliminated the backlog of more than 1,000 old program civil rights complaints. We are providing the support needed to resolve the cases under the class action lawsuit brought by Black farmers (Pigford v. Glickman). The adjudicator has made decisions in about half of the cases filed to date.

USE OF SECTION 2501 FUNDS

Question. Please provide a detailed analysis of your historical, current, and projected (fiscal year 2001) use of section 2501 funds including the results from such use (both results sought and realized).

Answer. Congress began funding the 2501 program in fiscal year 1993 to provide training and technical assistance to small and disadvantaged farmers. The initial funding level was $1 million and has increased to $3 million on an annual basis. In fiscal year 2000, $5.2 million of additional funding has been made available from the Fund for Rural America. The fiscal year 2001 Budget requests a program level of $10 million to fund the program at the level recommended by the Civil Rights Action Team's Report. Additional information follows.

[The information follows:]

Fiscal year 2000 is the final year for 23 of the 26 projects that have been funded. Final project reports will be submitted in the first quarter of fiscal year 2001. I am particularly encouraged by projects such as those at the Federation of Southern Cooperatives/Land Assistance Fund in Georgia and Tuskegee University in Alabama. They have provided outreach and technical assistance that has increased ownership of farms and ranches by socially disadvantaged citizens.

For example, Georgia reported 111 counties with a population of black farmers. Statewide, from 1992 to 1997, there was an increase of 95 black farmers. Eighteen of these counties were in the 2501 program and they reported an increase of 66 black farmers. Thus, the 2501 projects contributed to 73 percent of the total increase in black farmers in Georgia. Nearly all counties reporting increases in black farmers had double-digit percentage increases.

In Alabama, 8 of the 12 project counties showed an increase in black farm numbers between 1992 and 1997. In Bullock, Lowndes, and Hale Counties the increases were 46 percent, 42 percent, and 25 percent, respectively. USDA intends to build on these successes of the Federation of Southern Cooperatives/Land Assistance Fund and Tuskegee University.

For fiscal year 2001, USDA plans new outreach projects. We are currently preparing a request for proposals for new projects to be published in the Federal Register. We plan to evaluate proposals by the end of the fiscal year so we will be ready to make awards upon enactment of fiscal year 2001 appropriations. The planned Mi-

nority Farm Register and Small Farms Register and the increased agreements with community organizations will also help the program meet its objectives.

FUND FOR RURAL AMERICA

Question. The budget justification indicates that $60 million in budget authority is being obligated under the Fund for Rural America in fiscal year 2000. Of that amount, $5.2 million is being added to the amount already appropriated for section 2501 activities. It has been brought to my attention that interest has been expressed by the University of Arkansas at Pine Bluff (an 1890 Institution) to further develop a demonstration farm in the vicinity. I also understand that you visited this site in 1998. Would funding provided through section 2501 be appropriate for use in development of the facility as envisioned by UAPB, or would any other program included under the Fund for Rural America?

Answer. The University of Arkansas at Pine Bluff partnered with the Natural Resources Conservation Service to establish a National Wetland Water Management Center on a 870-acre farm in Lonoke, Arkansas. I visited this Center in 1998. Successful technology from this farm is transferred to the State's small farmers, many of whom are socially disadvantaged. Five small farmers who are participants in the University's 2501 project are also demonstration farmers with the Center.

Section 2501 provides funds for training and technical assistance to small and disadvantaged farmers. In April 2000,the Office of Outreach intends to solicit new proposals for 2501 grants to be awarded in fiscal year 2001, subject to appropriations. Demonstration projects like this one, may well meet the requirements for a grant under the 2501 program and we encourage all proposals.

USER FEES

Question. The fiscal year 2000 Appropriations Act includes language requiring information to be submitted with the budget in the event unauthorized user fee revenues are assumed in the overall budget. The budget proposal for the Agriculture Subcommittee includes $600 million in such fees, most of which are related to USDA programs. In the event these fees are not authorized, what items within the proposed budget do you want reduced in order to keep our spending within prescribed limits?

Answer. The budget is based upon a current law request. Should the authority for user fees not be approved by the authorizing committee this current law request would not have to be revised.

COMMISSION ON 21ST CENTURY AGRICULTURE

Question. The 1996 Farm Bill included a provision authorizing the Commission on 21st Century Agriculture to examine and recommend options for farm policy to replace the current farm law. What is the status of this commission and when should its report be released?

Answer. The Commission on 21st Century Production Agriculture has been actively meeting since February 1998. Most recently, the Commission met January 27–28, 2000, in Washington, D.C. with policy experts from around the country to discuss the future of agricultural policy in the United States. The next meeting is scheduled for March 7, 2000. The Commission and staff are working to develop recommendations for future farm policy and expect to publish a report January 1, 2001 pursuant to § 183b and § 184b of the Federal Agricultural Improvement and Reform Act of 1996.

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FARM*A*SYST/HOME*A*SYST

Question. The Farm*A*Syst/Home*A*Syst program funded by CSREES has proven itself to be an integral component of Departmental strategies to improve water

quality and protect the environment through its national network of state Farm*A*Syst programs. Congress has recognized the value of this program by directing CSREES to fund the program by name including funding for national headquarters in Madison, WI and for grants to states from the water quality accounts. While we recognize that the Integrated Accounts are generally competitive, the intent of Congress to specifically fund the existing Farm*A*Syst program is clear. Still, CSREES has thus far refused to provide the funding for this valuable program as directed by Congress. Please inform this Committee how you interpret the direction of Congress to fund the Farm*A*Syst/Home*A*Syst program at no less than fiscal year 1999 levels and how you intend to comply with congressional direction.

Answer. Section 406 of the Agricultural Research, Extension and Education Reform Act of 1998 (Public Law 105–185) provides the authority to award grants to colleges and universities in accordance with section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3103) on a competitive basis for integrated agricultural research, education, and extension projects. CSREES is finalizing the fiscal year 2000 Water Quality Program Request for Proposals (RFPs) in which the national and state Farm*A*Syst/Home*A*Syst providers may compete openly for grants. The funds available under Sec. 406 of the RFP far exceed those spent on Farm*A*Syst/Home*A*Syst in fiscal year 1999.

SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION

Question. I have long been a supporter of the Sustainable Agriculture Research and Education programs and I applaud the Department for budgeting additional funding for the SARE program for the first time in many years. For too long this valuable program has received inadequate funding and inadequate support from the Department, relative to spending on research for conventional agriculture. However, as you know, sustainable agriculture includes a wide range of cultural, biological and other practices designed to ensure that farms are both economically and environmentally sustainable. While I strongly support research and education to support organic agriculture, I am concerned that the Administration's proposal is limited solely to organic when the field of sustainable agriculture is much broader. Why did the Administration limit its SARE increase to organic when the research needs of the broader system of sustainable agriculture is in equal need of new research and education funding?

Answer. The SARE program has supported over 200 projects related to organic agriculture. The increase requested in the fiscal year 2001 President's Budget for SARE will enable the agency to focus all of the current funding to the needs of the broader system of sustainable agriculture while targeting organic agriculture through the increase. The existing SARE program has significant experience with organic farming and marketing issues under the larger umbrella of sustainable agriculture, and an innovative structure. The SARE structure consists of regional organization with strong stakeholder involvement; integration of research with extension and outreach; multi-institutional collaboration; and a commitment to on-farm research that is well-suited to the involvement of organic stakeholders and to addressing organic farming and marketing research and extension in a holistic manner. The SARE initiative on organic research and extension will serve an expanding and increasingly active constituency of producers and consumers.

BIO-TERRORISM

Question. I understand the Federal government is developing an ongoing strategy for defense against bio-terrorist activities. Please outline the role of USDA in this effort.

Answer. The U.S. agricultural food and fiber production system is uniquely vulnerable to deliberate introduction of highly infectious diseases and pests, particularly those of foreign origin. USDA has successfully prevented widespread damage caused by numerous accidental introductions of non-endemic plant and animal pests and diseases in the past by rapidly responding to outbreaks and implementing appropriate control measures. The Department is participating in an inter-agency effort regarding bio-terrorist threats affecting agriculture.

METHYL BROMIDE

Question. Please provide information regarding USDA activities regarding the search for a methyl bromide alternative.

Answer. The USDA is working with the U.S. Environmental Protection Agency (EPA), States, industries, including the Crop Protection Coalition, to address high priority needs of commodities and products in both soil and postharvest fumigation. Co-chaired by ARS, USDA participates in a USDA/EPA methyl bromide working

group, established by the Secretary Glickman and EPA Administrator, to review potential alternatives for efficacy and EPA registration status. A long list of action items has been identified relative to registration and some registration problems were recently resolved due to that effort.

[The information follows:]

Agricultural Research Service Research Program: In 1999, ARS reviewed its methyl bromide research program with growers and other methyl bromide users in meetings in Florida and California to receive input on the methyl bromide research program to make sure it is properly focused on the highest priority problems. In addition, ARS organized a field trip of USDA and EPA personnel to study issues particular to the floral and nursery industries in California. ARS also provides a representative to the Montreal Protocol Methyl Bromide Technical Options Committee to conduct assessments of the availability and efficacy of methyl bromide alternatives and to provide technical advise to the Montreal Protocol on related issues.

ARS conducts research at 20 Federal laboratories to find alternatives to present soil fumigation and postharvest uses of methyl bromide as follows:

At Weslaco, Texas, and at Orlando and Miami, Florida, ARS is developing alternative quarantine treatments for citrus, vegetables, and subtropical fruits, as well as studying ways to minimize phytotoxic effects of these treatments. Emphasis is placed on pest-free zones, irradiation, heat and cold treatments, and advanced quarantine pest detection systems.

At the Hilo/Honolulu, Hawaii, ARS laboratory, alternatives are being developed for tropical fruit infested with fruit flies, especially Mediterranean and oriental fruit flies, to allow export of Hawaii-grown fruit to foreign markets and mainland United States, and to protect mainland United States from introduction of pests present in Hawaii. This research focuses on irradiation, heat and cold commodity treatments and on techniques to eradicate fruit flies.

At Manhattan, Kansas, ARS is developing alternatives to use of methyl bromide to fumigate flour mills, food processing plants, and other structures for insect infestations. Building heat-ups alone and in combination with other treatments such as diatomaceous earth are the approaches being researched.

Research to develop alternatives to soil fumigation with methyl bromide to control pathogens and weeds is conducted at 15 ARS locations. Methyl bromide is used to some extent on more than 100 crops, although nearly 80 percent of all the preplant methyl bromide soil fumigation is used on just four crops—strawberries, tomatoes, ornamentals/nursery crops, and peppers. Alternatives to methyl bromide soil fumigation include host plant resistance, biological control, alternative chemicals, and different cultural practices, either alone or in combination.

At Washington, D.C., biological control and alternative, naturally-occurring chemicals are being evaluated as alternatives to methyl bromide for control of soilborne diseases of ornamentals.

At Beltsville, Maryland, biological control agents are being identified and their mode of action determined to improve control of diseases of vegetables.

At Kearneysville, West Virginia, natural plant volatiles are being evaluated as alternative fumigants and compost and other cultural methods identified for disease and weed control.

At Fresno, California, integrated strategies are being tested that involve host plant resistance, biological control and alternative chemicals for control of disease, nematodes and insects of strawberries, grapes, tree fruits, and vegetables. The application of alternative chemicals using irrigation systems is being tested.

At Riverside, California, research is under way to reduce methyl bromide emission in strawberry and vegetable production and to track the movement and degradation of methyl bromide and alternative fumigants.

At Davis, California, work is directed at using host plant resistance and cultural modifications to manage diseases in tree fruits and nuts.

At Salinas, California, research is aimed at finding biological and cultural control methods to manage strawberry and vegetable diseases, and characterize the ecology of pathogens.

At Wenatchee, Washington, disease problems in tree fruit production are being identified, and strategies for their control are being sought.

At Corvallis, Oregon, biological controls are being investigated for diseases of ornamentals and nursery crops, and the role of beneficial microorganisms in disease and weed management is being explored.

At Stoneville, Mississippi, biological control agents to control weeds in vegetables are being identified and characterized.

At Tifton, Georgia, the emphasis is on finding cultural methods and alternative chemical treatments and integrated strategies for control of nematodes and diseases on vegetables, and on identifying alternative herbicides for control of weeds.

At Byron, Georgia, research is aimed at improving cultural practices and host resistance to manage nematodes and diseases in peaches and other tree fruits.

At Gainesville, Florida, work is under way to find alternative soil treatments, such as solarization, flooding, or heating, to control pests, weeds, and pathogens in vegetables.

At Orlando, Florida, integrated methods involving biological control, cultural practices, and alternative chemicals are being developed for control of weeds, nematodes and diseases in tomatoes, peppers, and other vegetables.

At Charleston, South Carolina, alternative fumigants, host-plant resistance, and cultural practices are being explored as alternative disease management strategies in vegetables and fruits. The survival and spread of soilborne pathogens as influenced by other microorganisms and the environment is being determined.

In addition, field-scale validation projects that were begun in fiscal year 1996 were continued in Fresno, California, and Orlando, Florida, to determine if the most promising experimental alternatives were effective, economically feasible, and adaptable to commercial production systems of strawberries, vegetables and perennial crops.

Cooperative State Research, Education, and Extension Service Research Program: Research dollars in Hatch, Special Research Grants, and NRI was $298,000 for fiscal year 1998 and $778,000 for fiscal year 1999. It is estimated that $2.8 million will support methyl bromide activities in fiscal year 2000. The Methyl Bromide Transition Program is a $2 million competitive grants program designed to support the discovery and implementation of practical pest management alternatives for commodities affected by the phase out of methyl bromide. This new program will focus on short to intermediate term solutions for all commodities at risk using either combinations of presently available technologies or newly developed practices. The emphasis of the new funding will be towards integrated management approaches, their development and implementation, including research, education and extension activities on all commodities at risk.

USDA's Interregional Research Project No. 4, (IR–4) began addressing the methyl bromide issue in 1998. A team was formed to work on discovery and development of safe products and new technologies that have the potential to fill the void in tomato and strawberry production created when methyl bromide is phased out. Much work has already been done and is ongoing with the standard products currently used to control the same spectrum of pests as methyl bromide. A weakness of all of the standard products is poor or no control of annual and perennial weeds. IR–4 has ongoing programs to address this for tomato producers and a new program is evaluating materials for crop safety and control of yellow and purple nutsedge in tomatoes. Weed control in strawberries is also being approached. IR–4 is also evaluating new, unregistered products as methyl bromide alternatives for strawberries and tomatoes. Strawberry field trials began this fall and tomato trials are scheduled for early in 2000.

METHYL BROMIDE

Question. What changes in agricultural production and marketing have occurred in the private sector in anticipation of the loss of methyl bromide?

Answer. Currently, there are no substitutes that are as efficient or cost effective as methyl bromide. Continuing research and field trails of alternatives will provide substitutes when the phase-out in completed in 2005. However, without methyl bromide, some production changes may take place in areas of the U.S. where alternatives are not cost effective for production of certain crops. There are some new materials in field trials at this time that hold promise as replacement chemicals but are not commercially available at this time.

USDA data are not currently available to show changes in production and marketing due to the anticipated loss of methyl bromide. Economic models predict production declines and acreage shifts for such crops as tomatoes, peppers, cucumbers, watermelons, and strawberries in California and Florida if methyl bromide is no longer available. The U.S. is scheduled to reduce methyl bromide consumption by 25 percent in 1999, 50 percent in 2001, 70 percent in 2003, and 100 percent in 2005. USDA data from 1997 to 1999 show stable or increasing acreage and production of affected crops. USDA estimates of methyl bromide-treated tomato, pepper, strawberry, and eggplant acreage in Florida were stable or increasing from 1992 to 1998 (available in even years only), while methyl bromide-treated strawberry acreage in California decreased between 1996 and 1998.

MINOR USE PESTICIDES

Question. Please outline the efforts of USDA to assist in the development and availability of minor use pesticides.

Answer. The Pest Management for Minor Crops (IR–4) Program is a highly effective effort between the State Agricultural Experiments Stations, CSREES, and the Agricultural Research Service (ARS). IR–4 provides the national leadership, coordination, and focal point for obtaining data to support the regulatory clearance through the U.S. Environmental Protection Agency (EPA) for pesticides and biological control agents for specialty food crops such as fruits and vegetables as well as non-food crops like ornamentals.

In many cases, the agricultural chemical industry cannot economically justify the time and expense required to conduct the necessary research for products with limited market potential. With assistance from IR–4, producers of small acreage crops such as vegetables, fruits, nuts, and herbs have expedited access to pest control products. In order to accomplish the above, a four step process has been developed for food crops. Step one involves research prioritization. Because of limited resources, IR–4 requests and receives input from stakeholders on potential research projects. Yearly workshops are conducted that involve growers, commodity organizations, university research and extension specialists, EPA staff, and industry representatives to determine which projects are the most critical to minor crop agriculture. Step two is research planning. Research protocols are written after careful review and comments from stakeholders. Step three is research implementation. A typical IR–4 program consists of both field and laboratory phases. For the field work, researchers apply the crop protection chemical to the target crop according to the experimental protocol. The crop is harvested and transferred to the laboratories where the chemical residues in the crop, if any, are determined. All field and laboratory research is conducted under EPA Good Laboratory Practices. Step four is data submission and approval. The data are critically reviewed and formatted into a regulatory package and submitted to the EPA for the review. If appropriate, the EPA will approve the submission and grant a pesticide food tolerance to support registration of the use on the minor crop. The process for ornamental crops is similar, however, these crops do not require a pesticide tolerance.

Question. Please provide any economic data available regarding the cost to producers due to the unavailability of these products.

Answer. At this time, data and/or models are not available to allow for development of a comprehensive economic analysis of the impact of the unavailability of pesticides that are needed for minor crops. In total, minor crops farm gate value is $40 billion or 40 percent of total U.S. crop value.

IR–4 has a few specific examples of economic impact as a result of their work. IR–4 has developed and submitted data to EPA for the insect growth regulator tebufenozide on blueberries, blackberries, raspberries, canola, cranberry, mint, and turnip. This chemical received the 1998 Presidential Green Chemistry Award because of its unique ability to control problem pests without damaging non-target organisms and the environment. Many consider this Reduced Risk pesticide an efficacious alternative for many high risk pesticides which are under EPA scrutiny associated with the Food Quality Protection Act (FQPA). The Cranberry Institute has estimated the use of tebufenozide will provide economic benefits ranging from $17 to $35 million annually depending on the severity of the target pest infestations.

In an another example, the clearance of the herbicide pyridate on the ultra-minor crop garbanzo beans—chickpea, grown on only 15,000 acres in the states of Washington, Oregon and Idaho has resulted in a net revenue increase of more than $3.3 million on the part of producers. This single registration combined with changes in government farm programs has allowed garbanzo beans to become an important rotational crop in certain production systems in the Pacific Northwest region.

Finally, IR–4 is currently assisting sweet corn growers in Wisconsin and other North Central states with the clearance of the herbicide glufosinate. IR–4's data has supported an EPA-approved Emergency Exemption. The emergency exist due to the cancellation of cyanazine and use restrictions of other triazine herbicides to protect the ground water. The University of Wisconsin has estimated that without the emergency approval of glufosinate for Wisconsin sweet corn, losses to Wisconsin farmers would exceed $2.9 million and the loss to Wisconsin overall economy would be much greater.

As EPA continues to implement FQPA, we expect to see many older chemical pesticides come under increases scrutiny. A likely outcome is the reduction or elimination of existing tolerances. The impacts on minor crops are potentially severe because there are few registered alternatives. The IR–4 program mitigates these im-

pacts by helping to assure that modern pest management tools are available to minor crop producers.

MINOR USE PESTICIDES

Question. Please describe your ongoing collaboration with EPA regarding the development of minor use pesticides in order to protect producers, consumers, and the environment.

Answer. Though IR–4 has worked closely with EPA since the Agency's inception, the two groups started some new initiatives in 1998 to build better coordination and cooperation. First an EPA/IR–4 Technical Working Group was formed. This group meets quarterly and focuses on a number of important issues involving better productivity and efficiency in handling minor crop registrations. Some highlights of this collaboration effort are noted as follows:

For the first time in IR–4's history, a three-year work plan with a schedule of all of IR–4's projects and petitions has been submitted to the EPA. This will allow the Agency to schedule their petition review process more efficiently, more importantly it will allow EPA to schedule and review IR–4 submissions along with the submissions from industry on the minor crops.

EPA and IR–4 have developed a standard format summary for IR–4 data submissions. This summary has saved EPA significant time in reviewing IR–4 submission, with a savings estimated as much as two months, and eliminating EPA funding of expensive external contract review to develop a similar summary.

IR–4 proposed to EPA that they utilize existing IR–4 and industry data to establish crop group tolerances for most minor uses of the reduced-risk pesticides, spinosad and azoxystrobin. EPA has approved IR–4's proposals. This resulted in direct savings of over $1 million for IR–4 in field residue and laboratory analysis expenses in 1999. These resources were directed to developing solutions for other import minor crop pest control needs. More importantly, EPA approval will allow grower access to these two new materials almost three years earlier than under normal circumstances.

EPA has also developed new procedures directions in order to allow IR–4 to have certain minor uses classified as Reduced-Risk. Prior to the modification, industry was required to submit a comprehensive justification document. The new process is streamlined requiring only pertinent data in order to allow EPA to make the classification.

Finally, one of the IR–4 scientists has been assigned to EPA, working on the staff of the Director of the Office of Pesticide Programs. That IR–4 scientist provides day to day linkages from IR–4 to EPA, including working closely with EPA's Minor Use Team Leader and Ombudsperson to support efforts to address minor crop policy issues and challenges brought about by FQPA implementation.

DAIRY FORAGE/INTEGRATED FARMING SYSTEMS

Question. For a number of years, funding has been provided through the ARS Dairy Forage Center in Madison, WI for research related to Integrated Farming Systems. In fiscal year 1997 a cooperative agreement was executed between ARS and the University of Wisconsin and the Michael Fields Institute, a non-profit research organization, for work related to Integrated Farming Systems. Please provide information showing the level of funding provided for Integrated Farming Systems each year since fiscal year 1997 including an explanation of activities by ARS, the University of Wisconsin, and the Michael Fields Institute.

Answer. The levels of funding assigned to the Integrated Farming Systems research area conducted by or funded through the U.S. Dairy Forage Systems Research Center (USDFRC) by year are as follows: $500,000 in fiscal year 1997; $497,100 in fiscal year 1998; $490,900 in fiscal year 1999, and $501,600 in fiscal year 2000. ARS, the University of Wisconsin (UW) and the Michael Fields Agricultural Institute (MFAI) all conducted research under these funds. The USDFRC has provided funding for this project, conducted research, and participated in the annual meetings of cooperators. The UW provides leadership and conducts research. The MFAI conducts research on the project, publishes a quarterly newsletter and a Profitable Farming Update Series (2500 subscribers), and cooperates on the development and testing of a Software Decision Making Program "Crop Rotation Options Program" (CROP).

Question. Provide information explaining specific actions taken by the ARS Dairy Forage Laboratory since 1997 in support of the Integrated Farming System's mission.

Answer. The U.S. Dairy Forage Research Center (USDFRC) conducted research on (1) developing low-input management of intensive grazing systems, giving em-

phasis to procedures that provide needed supplements to growing and lactating dairy cattle without nutrient buildup in pastures and loss to the environment; (2) evaluating and developing cropping systems that provide quality feed for profitable dairy farms in an environmentally safe manner; (3) developing strategies for managing nutrients in crop-livestock systems with special emphasis on animal manure to, at minimal cost, maximize nutrient recycling and minimize environmental risks, (4) investigating surface loss of phosphorus and nitrogen from pasture paddocks that have been managed in different ways, and (5) cooperating in a multi-agency/institute project on farm diversification—"Small Grains Initiative", the goal is to incorporate small grains and legumes into a normal corn-soybean rotation while considering production and marketing objectives.

Question. Please provide materials showing ongoing activities at the Dairy Forage Center including what is proposed for fiscal year 2001.

Answer. The activities given in the answer to the previous question related directly to the Integrated Farming Systems mission. The Dairy Forage Center conducts several lines of basic research that help to support the systems research. These lines address (1) inefficient soil fertility management that reduces forage quality and yield and adversely affects water quality; (2) inability to fully exploit the plant genetic potential and manipulate the genetics by environment interactions for improved forage quality; (3) excessive harvest and storage loss of forage nutrients; (4) plant cell walls limit the consumption and digestion of forages; (5) excessive loss of forage protein during digestion in the rumen; (6) insufficient integration of research information to allow field evaluation of management options (systems approach) in the dairy forage enterprise.

Additionally, for fiscal year 2001, using currently available funds, new thrusts will be initiated in the areas of (1) evaluating how modification in forage phenolic and fiber affect the production and utilization of forage crops by dairy animals and the cycling of nitrogen and carbon on dairy farms and (2) the development of forage legumes that are productive, pest resistant, persistent, non-estrogenic, high-quality, and compatible in mixtures with grass for silage, hay and grazing.

Full funding of the President's fiscal year 2001 budget request for bioenergy will support the development at USDFRC of improved methods for harvesting, handling, and storing herbaceous biomass and chemical characterization of feedstock quality parameters affected by management and storage.

The President's budget also proposes that the USDFRC investigate the function of important genes in crops. Full funding for this initiative will allow the application of the ARS system for regulating gene expression to enhance the quality and value of cool season forage and turf grasses.

AQUACULTURE RESEARCH FUNDING

Question. It was my understanding that there were discussions in fiscal year 1999 to transfer $400,000 from the Kearneysville, WV ARS facility to Leetown, WV for work at the NCCCWA. I further understand that Senator Byrd was opposed to this transfer. I now learn that a total of $1.3 million was transferred. Please explain the level of all transfers (including specific project increases and decreases) from Kearneysville to Leetown and also indicate whether Senator Byrd was appraised in advance of these transfers.

Answer. Your understanding of the discussion in fiscal year 1999 on the transfer of funds between the ARS Kearneysville, WV, facility and the NCCCWA at Leetown, WV, is correct.

The aquaculture grant which provides funding in the amount of $1.3 million to the Fresh Water Institute at Shepardstown, WV was transferred to the new Cold Water Aquaculture Center at Leetown, WV. These funds were initially appropriated in fiscal year 1989 and managed from headquarters from 1989 through 1995. These were eventually transferred to the ARS facilities at Kearneysville, WV beginning in 1996 for closer program coordination. These are extramural funds and are not implemented inhouse. Since these are aquaculture funds, they are more appropriately managed at the new aquaculture facility at Leetown. No inhouse funds were transferred from Kearneysville.

Question. If Senator Byrd was not so appraised, please explain.

Answer. Our failure to appraise Senator Byrd of this move was based on our clear understanding from the conception of the National Center for Cool and Cold Water Aquaculture that there should be a close working relationship between the NCCCWA and the Fresh Water Institute. We believed that the transfer was consistent with Senator Byrd's desires.

CLIMATE CHANGE TECHNOLOGY

Question. The Budget includes funding for the Climate Change Technology initiative of which $300,000 would be directed to the Appalachian Farming Systems Center in Beaver, WV. Please explain how the Climate Change Technology initiative fits in with the newly recognized mission of the Beaver, WV center which is to assist small farmers in Appalachia.

Answer. Successful and productive research through the Climate Change Technology initiative conducted at the Appalachian Farming Systems Research Center will provide expanded economic opportunity for small farmers in Appalachia. Funding through the Climate Change Technology initiative would be used to quantify the rates of soil carbon sequestering of alternative farming systems. The funds will also be used to identify and develop grasses and trees that have a high value as energy biomass. Development of perennial legumes that are suitable for the acid, low-fertility soils of the region is an important part of the core program to improve pasture productivity for cow-calf operations, and could also be used in a system to produce biomass for energy or value-added products. Research results will be used to develop farming systems that best meet small-farm economic and environmental goals including greater diversification of farm products, trading in carbon credits, and an improved ability to sustain production during droughts. Additionally, carbon sequestration in soils improves the soil's capacity to store nutrients and to hold water, which is especially beneficial during droughts.

INVASIVE SPECIES

Question. Your fiscal year 2001 budget provides significant increases to battle invasive species. Please identify the most significant invasive species threats facing Wisconsin and what the Department is doing to eradicate or manage these species.

Answer. The most significant invasive species threats facing Wisconsin are gypsy moths. To combat this pest, we are cooperating with the State of Wisconsin on survey and regulatory activities, as well as on the eradication of isolated outbreaks. Bacterial spraying is planned for 85,000 acres, including sites in Madison, Janesville, Beloit, and Wausau. In fiscal year 1999, the bacteria that attack the pest were sprayed last year on about 54,000 acres. With the funds requested in our Invasive Species request, we would conduct pathways analyses to develop target invasive species (such as gypsy moth) for national survey through cooperative agreements and development of response capabilities. These analyses will help us target invasive species for national and State survey and activities. Another significant threat in Wisconsin is the Eurasian Water milfoil (*Myriophyllum spicatum L.*). This submerged aquatic weed originates from Europe, Asia, and North Africa. It is rapidly spreading throughout the United States by invading lakes, ponds, and reservoirs. It is especially troublesome in nutrient rich waters with high motor boat use. Due to its unique growth habits, Eurasian Water milfoil competes aggressively with native plants. The plant's ability to grow in eutrophic conditions over a broad temperature range also contributes to its competitive edge over native plants.

Question. Please describe efforts taken by the Department in working with foreign nations to help avoid the introduction of these species?

Answer. We have over 80 foreign service officers assigned to over 30 countries around the world that are high risk for the entry of invasive species. These officers work with foreign governments and exporters to minimize the risk of entry of invasive species in agricultural imports through activities such as preclearance programs, the certification of export facilities, and the establishment of inspection protocols. In addition, we have control programs in select countries to reduce the threat of key invasive species, such as Mediterranean fruit fly, foot-and-mouth disease, and screwworm.

Question. To what extent would the problem of invasive species be controlled by an increase of border personnel?

Answer. An increase in border personnel could significantly enhance our capability to exclude invasive species, as well as improve our response to threats from various exotic pests, and provide us with opportunities to examine emerging pathways, such as rail cars entering the U.S. from Canada. This is why we are requesting additional inspectors through our Agricultural Quarantine Inspection (AQI) program. Also, the revenue from our AQI user fees that took effect on January 1, 2000, will help in our exclusion efforts by providing for the hiring of additional inspectors, expanded canine teams, and state-of-the-art high-definition x-ray machines.

Question. To what extent will the inspection levels included in the fiscal year 2001 budget accomplish this objective?

Answer. While our AQI program of user fees will bolster our border efforts with more staff years. Our fiscal year 2001 Invasive Species request does not include po-

sitions at the borders or ports-of-entry. The new positions we are proposing for this program are statisticians and program analysts at the State, regional, operational methods, and policy levels. These personnel would collect, validate, and use import and pest data to diagnose and predict the pathways of various invasive plant pests and animal diseases into the United States. They would also evaluate the impact of new inspection strategies at ports of entry.

Question. To what extent is USDA working with other federal agencies on border inspections to halt the introduction of invasive species?

Answer. About half of our Invasive Species request is targeted to help establish a new partnership with the U.S. Departments of Commerce, Interior, EPA, while seeking greater collaboration with State agencies and other stakeholders, through increased use of grants. For example, we plan to incorporate existing educational grants to the States with the goal of expanding public knowledge on the types of invasive species under USDA regulation. To address the needs of the nation's plant health industries and the State plant health agencies, we plan to increase cooperative funding and grant opportunities that increase the efficient use of Federal and State resources involved in the protection of the environment, and plant and animal health.

ANIMAL WELFARE

Question. The fiscal year 2000 appropriations bill included an increase of $1 million above the previous year level (nearly $500,000 above the budget request). How is the $1 million increase being incorporated in the fiscal year 2000 plan of operations?

Answer. APHIS intends to use this increase to hire additional inspectors; expand inspections of existing facilities; replace vehicles; provide necessary training for our inspectors; and purchase imaging and communications equipment to provide documentation and evidence of violations.

Question. Please provide a summary of fiscal year 1999 Animal Welfare activities including number of investigations, the nature of violations, enforcement actions, and their outcomes.

Answer. In fiscal year 1999, APHIS investigated a total of 313 cases. Examples include a case where USDA and the U.S. Attorney's office in Oregon successfully prosecuted 9 people for their roles in a pet-theft ring. Charges included providing false information concerning the suppliers of dogs sold into research. Two of the people received sentences of 4 to 6 months of home detention and 1-year term of probation, and they agreed to be permanently disqualified from being licensed under the AWA. They were also prosecuted in the State Circuit Courts for theft of companion animals.

Another example occurred in October 1998, when APHIS settled a case with an airline which agreed to donate $25,000 to an APHIS-approved organization to research methods to promote the safe and humane handling of pet animals during transportation. The results of this research will be disseminated to all carriers registered under the Animal Welfare Act.

A particularly innovative enforcement case settled in August 1999, involved a major primate reasearch laboratory. Terms of the settlement included reducing the number of chimps at the facility by 300 over a 3-year period; submitting to a review of their animal care program by an external team of experts; establishing an independent compliance official with access to all facilities, records, and animals; and a $100,000 civil penalty, held in abeyance, assuming no new AWA violations.

The budget proposes a $5 million increase in these activities for the coming year. In addition, legislation relating to the Safe Air Travel for Animals Act is in conference which might affect USDA program activities.

Question. Would any of the request for the fiscal year 2001 be tied to new regulatory activities not related to the Safe Air Travel for Animals Act?

Answer. None of the request for fiscal year 2001 is specifically related to the Safe Air Travel for Animal Act. APHIS intends to use this increase to maintain current activities; expand inspections of existing facilities; provide necessary training; and hire additional inspectors. This would include an overall increase in oversight of registered airline carriers.

Question. Has USDA reviewed the pending Safe Air Travel for Animals Act to determine if it would have any affect of USDA operations or budget?

Answer. APHIS has a copy of and has reviewed the proposed Act.

Question. If so, what were the findings?

Answer. One area of significant impact of the proposed Act arises from the requirement for airlines to notify USDA 24 hours prior to any live animal transport. If the intent is to have USDA inspect those flights with live animal shipments, it

would have a major impact since there are approximately 500,000 animals shipped annually. Additionally, if USDA is to be responsible to inspect cargo areas of aircraft to assure compliance with the Act, this would require extensive training for USDA inspectors.

AGRICULTURAL CONCENTRATION

Question. Concentration and the structure of agriculture. There is an ongoing debate about the changing structure of the U.S. farm sector and the extent to which the concentration of marketing power is harmful to small independent family farmers. I hold the unique position of serving as not only the ranking member of the Agriculture Appropriations Subcommittee, but also as the ranking member on the Judiciary Subcommittee on Antitrust, Business Rights, and Competition. Therefore, I have special interest in this debate. What are your overall views of this debate and do you think moratoriums on mergers, as was proposed last year, would be appropriate?

Answer. Moratoriums on mergers may not necessarily be appropriate. However, USDA feels concentration and vertical coordination in agriculture requires increased vigilance. USDA is applying scrutiny to a number of proposed mergers and will take appropriate action to mitigate any detrimental effects that might be caused by those mergers.

USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) has responsibility for enforcing the Packers and Stockyards Act, including investigating competitive practices, trade practices, and ensuring financial protection for producers in the livestock industry. The Justice Department, along with the Federal Trade Commission, has primary responsibility for enforcing the traditional antitrust statutes, including the Sherman Act and the Clayton Act.

Question. Do you think USDA should have authorities similar to those at the Justice Department to examine and address problems related to the structure of the U.S. farm sector?

Answer. It may not be necessary to pursue additional authority at this time. On August 31, 1999, the USDA signed a Memorandum of Understanding (MOU) with the DOJ and FTC. The MOU calls for the three agencies to cooperate on issues related to monitoring competitive conditions in the agricultural marketplace. The agencies will confer regularly to discuss and review law enforcement and regulatory matters to increase each agency's understanding and to improve each agency's effectiveness in carrying out its respective legal responsibilities, so there is no need for separate authority at this time.

RAPID RESPONSE TEAMS

Question. The fiscal year 2001 budget request includes an increase of $1.3 million for Rapid Response Teams at GIPSA. What have the Rapid Response Teams, alone or in conjunction with other USDA activities, done to address small producer concerns regarding their perceived disadvantages in the market place?

Answer. To date, small producer concerns and problems have been addressed in the following ways. First, the Rapid Response Teams have met with producers in Missouri and South Dakota provide local, on-site counsel and assistance to producers in order to enhance communication and respond to specific producer complaints and concerns to proactively respond to potential violations of the Packers and Stockyards Act as well as consider new legislation passed by these states. Second, the Rapid Response Teams have responded to small-producer complaints and concerns regarding two poultry integrators and one livestock auction market. Swift, decisive action by the rapid response teams protected the producers' interests and prevented or minimized financial harm. These actions were most beneficial to small producers, who may not have the resources to properly protect their interests.

Question. Provide a listing of locations and reasons for deployment of Rapid Response Teams in fiscal year 1999 or, to the extent information is available, in fiscal year 2000. Describe specific incidents or corrective actions that were taken in fiscal year 1999 or in fiscal year 2000 resulting from the deployment of these teams.

Answer. In July 1999—Sioux Falls, Brookings and Mitchell, South Dakota—the Rapid Response Teams addressed concerns of cattle and hog producers that packers allegedly violated the Packers and Stockyards Act since enactment of South Dakota's mandatory livestock price reporting law on July 1, 1999. The portion of the law prohibiting packers from discriminating in prices paid for livestock was declared unconstitutional by a U.S. District Court on July 26, 1999. An investigation was completed by GIPSA's Denver regional office, and is under review at GIPSA headquarters.

[The information follows:]

September 1999—Kirksville, Marshall, Maryville and Mexico, Missouri—The Rapid Response Team responds to livestock producers' concerns that packers may have violated the Packers and Stockyards Act when Missouri's new mandatory livestock price reporting law was enacted on August 28, 1999. Enforcement of the Missouri law is presently held in abeyance pending a Federal court decision on its constitutionality, but the law initially generated a considerable amount of controversy and misunderstanding among producers and the packing industry. Swift action by the Rapid Response Team enhanced communication between GIPSA, the state of Missouri, producers, and the packing industry. Possibly as a result of the pro-active actions of the Rapid Response Team, no violations of the Packers and Stockyards Act and regulations were found.

November 1999—Excel, Wichita, Kansas—The Rapid Response Team responds to an issue concerning two Excel plants that were harvesting kidneys before carcasses were weighed on the hot weight scale, resulting in carcass weight being short about 2 pounds per carcass. Excel made $710,791 in restitution to its feedlot suppliers, who were expected to reimburse their customers.

January 2000—Tecumseh, Nebraska—The Rapid Response Team responds to complaints concerning a broiler processor that ceased operations on January 14, 2000, owing 29 poultry growers $461,619 for unpaid poultry obtained under a poultry growout contract. A team of Packers and Stockyards investigators was immediately dispatched to the plant to marshal trust assets, determine who was unpaid, and assist them in filing trust claims under the Packers and Stockyards Act. Emergency funding of operations under a bankruptcy court order was agreed to, allowing for the purchase of feed and for processing of chicks on hand to continue until all birds have been processed. All valid trust claims, calculated to total $250,820 will be fully funded.

February 2000—Jackson, Mississippi—The Rapid Response Team responds to poultry growers' concerns of unfair treatment under the Packers and Stockyards Act as a result of complaints made by poultry growers about changes to their growout contracts. The poultry firm's management and grower representatives negotiated amendments to the original contract offer that improved grower pay and addressed other grower concerns. Most growers have signed the negotiated contract.

February 2000—Paxinos, Pennsylvania—A packer ceased operations in February 2000, owing approximately $175,000 for livestock. An immediate investigation resulted in sellers receiving payment in full without further delay and/or litigation expense to collect the amounts owed

February 2000—Williston, North Dakota—The investigation concerns the proper payment for leased livestock sold at auction. The investigation is pending.

February 2000—Blackfoot, Idaho—An auction market operated without the required surety bond. The Rapid Response Team worked with the auction market and its surety company to immediately reinstate the bond before further sales were held. The investigation is continuing.

CRANBERRIES

Question. In the fiscal year 2000 Consolidated Appropriations Bill, Congress directed USDA to evaluate the current supply/demand situation in cranberries to make purchases to relieve the downward pressure on cranberry prices. Several Senators from the nation's top cranberry producing states also wrote you last winter urging you to take action to purchase surplus cranberry supplies.

Please update this Committee on the status of your efforts to address the oversupply situation in the cranberry industry.

Answer. USDA has made efforts to assist the industry through several purchases of cranberry products for distribution through domestic food feeding programs. In 1999, USDA purchased 1.0 million pounds of cranberry/apple juice. In 2000, USDA has purchased an additional 5.0 million pounds of cranberry/apple juice and for the first time, purchased 3.7 million pounds of trail mix, of which one-fifth or approximately 750,000 pounds consisted of dried cranberries. USDA is aware of the situation that the cranberry industry still finds itself in and is presently considering the feasibility of an additional purchase of cranberries.

ORGANIC RULES

Question. The budget request of fiscal year 2001 includes an increase of $614,000 for reporting of organically grown fruits and vegetables and a net increase of $703,000 for organic market protection and promotion. When do you expect to publish a final rule on National Organic Standards?

Answer. USDA will release its revised organic standards proposed rule in early March. We expect to have a final rule in place by the end of 2000.

Question. Please provide information regarding steps taken by the Department to offset the initial costs of accreditation services from within available funds.

Answer. The proposed rule will provide for a waiver in the accreditation fees during the first 18 months of the program. This will provide an incentive for certifying agents to become accredited under the new national program as soon as possible.

GIPSA AND BIOTECH GRAINS

Question. There is growing debate over the use of biotechnology as related to agricultural production, such as the discussion about segregation of grain that may or may not have been genetically altered. Please describe the activities of GIPSA regarding this issue.

Answer. USDA, through the Grain Inspection, Packers and Stockyards Administration (GIPSA) establishes standardized quality grades and testing methodologies. These standards are used every day by sellers and buyers to communicate the type and quality of cereals, pulses, and legumes bought and sold. Biotechnology is affecting this program in two fundamental ways: (1) increased consumer demand for conventional crops has created a need for reliable testing methodologies to distinguish bio-engineered from conventional crops; and (2) an anticipated increase of new value-enhanced traits will create an expanded need for standardized testing methodologies to measure the enhanced quality attributes.

To meet the market's need for impartial, professional verification of biotechnology testing technologies, GIPSA announced on November 12, 1999, that it would establish a biotech reference laboratory. The laboratory will evaluate and verify the validity of analytical procedures used to detect and quantify biotechnology traits in grains and oilseeds and establish sampling procedures for use in testing genetically enhanced grains and oilseeds. However, questions remain as to the capability of the U.S. marketing system to segregate conventional and biotech crops. Accurate and consistent testing technology is essential as the market struggles to segregate crops in an efficient and effective manner.

Question. If this debate becomes more heated in the coming months, especially if it becomes more complicated by trade considerations, do you think the levels currently requested for fiscal year 2001 will be adequate?

Answer. It appears that GIPSA's request for an additional $1.98 million and 10 staff years is adequate. This projected need is based on GIPSA validating the performance of methodologies and accrediting commercial laboratories to provide testing services. If market conditions create a need for direct Federal testing, additional funding will be necessary to develop expanded methodS for the testing capabilities of GIPSA's technical center in Kansas City, Missouri. Once methods are developed, these tests will be funded by user fees.

MILK FORWARD PRICE CONTRACTS

Question. Please outline the steps you are taking to ensure that the Department meets its statutory obligation to establish a pilot program for forward price contracts between milk producers and milk handlers by the beginning of March.

Answer. USDA has developed a proposed rule to implement the program, a Program Announcement, a set of Questions and Answers about the program, and a Forward Pricing Pilot Program Fact Sheet and Disclosure Statement. The proposed rule will be published at the beginning of March with a 15-day comment period. A final rule implementing the pilot program will be published as soon as possible after comments received on the proposed rule are addressed.

HACCP

Question. I am aware of a recent court challenge rising out of Texas related to your authorities under HACCP. Can you provide an update to this action?

Answer. Supreme Beef's legal action contesting USDA's authority to promulgate the *Salmonella* performance standard regulations and to suspend inspection for failure to meet that standard continues. Both USDA and Supreme Beef have filed cross motions for summary judgment. On February 14, 2000, USDA held the suspension of inspection for Supreme Beef in abeyance after the company committed to take action to meet USDA regulatory standards. The suspension will remain in abeyance pending verification by USDA that Supreme Beef's corrective and preventive measures are effectively implemented.

Question. In the event USDA does not prevail in the particular action, what would be the effect on the HACCP program overall to USDA food safety operations?

Answer. USDA is not able to predict either the basis or the scope on which the judge might rule in the Supreme Beef litigation. However, in a worst case scenario under which the judge overturned the USDA's authority to require that establish-

ments meet microbiological performance standards, the current approach to food safety might be disrupted. The use of Hazard Analysis and Critical Control Point (HACCP) systems itself is a process requirement, not a substantive performance standard. The current *Salmonella* performance standards for carcasses and ground products serve as direct, pathogen-based measures of the accomplishments of establishment HACCP systems.

Question. What have been the reactions to this action form within the meat and poultry industry and from consumer advocates?

Answer. Industry and consumer advocates share our concern for establishing the most effective food safety system possible. Several, but not all, industry organizations have joined in filing amicus curiae briefs in support of Supreme Beef. Conversely, consumer groups are expected to file an amicus curiae brief in support of USDA.

EGG SAFETY ACTION PLAN

Question. I have heard some concern from egg producers about the Egg Safety Action Plan released by the President's Council on Food Safety on December 10, 1999. There is concern that the extensive environmental testing requirements might be particularly costly for egg producers. What is the Administration's estimates of the total cost for testing? Of egg diversion?

Answer. Total cost estimates for environmental testing will be developed as USDA and HHS progresses through the rulemaking necessary to implement the Egg Safety Action Plan.

Question. What are the relative differences in effectiveness and cost of testing eggs rather than production environment?

Answer. The Salmonella Enteritidis (SE) Pilot Project, conducted by FSIS prior to the development of the President's Shell Egg Action Plan, showed that testing manure in the layer houses was effective in identifying flocks with SE infected eggs. Based on the cost of analysis, the number of samples required, and the degree of correlation associated with the analytical results, it is more cost effective and practical to conduct environmental testing rather than testing eggs to determine SE infection in a layer flock.

Question. Since public funds pay meat, poultry and egg product inspection cost, including costs for Salmonella testing in meat and poultry, would the use of taxpayer funds be appropriate in this case as well?

Answer. The meat and poultry industry currently pay for the costs of *E. coli* testing. *E. coli* testing under the Pathogen Reduction/HACCP rule serves the same purpose that microbiological testing under the Shell Egg Action Plan would serve, which is to ensure that their food production processes are under control. Accordingly, the cost of environmental testing requirements is a cost that should be borne by the egg production industry.

Question. Egg producers have expressed concern about the possibility of inconsistent enforcement of regulations if the Administration relies heavily on state agency personnel to implement the Plan. Please list steps that the Department of Agriculture will take in order to ensure consistent enforcement of any eventual federal egg regulations by state agencies.

Answer. The 2000 budget for the Food Safety and Inspection Service requests an additional $2.0 million to begin implementation of the Shell Egg Action Plan. Under the plan the agency plans to provide State agencies the training and information necessary to ensure consistent enforcement of egg regulations by State and Federal agencies.

Question. The Food and Drug Administration has proposed a warning label on egg, which differs from the food safety and handling label required on meat and poultry products required by the Food Safety and Inspection Service. In your view, should safe handling labels on meat, poultry and eggs be consistent?

Answer. Safe handling labels on meat, poultry, shell eggs and processed egg products should be consistent in providing appropriate information to consumers to ensure safe handling.

Question. CDC first identified internally contaminated eggs as a source of Salmonella enteritidis infection in the late 1980's. Many consumer groups are concerned about the length of time it took for USDA and FDA to develop an action plan to address this public health problem. What steps could be taken to reduce the government's reaction time to food safety problems in the future?

Answer. The establishment of the President's Council on Food Safety has helped ensure that food safety problems in the future will be quickly identified and responded too. The Council provides the necessary forum for ensuring increased agency cooperation and coordination for addressing complex food safety issues. In addi-

tion, the Food Safety and Inspection Service (FSIS) and the Food and Drug Administration (FDA) have signed a Memorandum of Understanding to facilitate the exchange of information about establishments under dual jurisdiction of FSIS and FDA and emerging food safety issues.

FSIS INSPECTOR SHORTAGES

Question. To what extent have inspector shortages caused disruptions in the meat and poultry industries over the past year as reported on a month to month basis?

Answer. The additional funding included in the fiscal year 2000 budget for inspection staffing has permitted FSIS to hire additional inspectors to staff meat, poultry and egg products plants and will help to minimize inspector shortages. Inspector shortages have occasionally caused plants in certain locations to alter production practices to accommodate inspector staffing problems. Since the beginning of December, 1999, the agency estimates that there has been a minimal disruption to the industry due its inability to have an inspector available at all times an establishment wants to operate.

Question. What assurances can you provide that projected staff year reductions for fiscal year 2001 will not continue or exacerbate problems of inspector shortages?

Answer. The projected staff year reductions are based on two separate and distinct initiatives. In both cases, USDA is committed to a full and complete public dialogue and will not move forward unless the changes are demonstrated to be effective. If the data and analysis support the change, USDA anticipates being able to implement staff year reductions without exacerbating inspector shortages.

Question. What is USDA doing to improve inspector recruitment activities?

Answer. USDA has taken a number of actions to improve inspector recruitment activities. Those actions are outlined in the paper developed by the agency, which I will provide for the record.

[The information follows:]

FSIS' FOOD INSPECTOR RECRUITMENT EFFORTS

Background

A number of factors have made it difficult to successfully recruit individuals to fill vacant positions in Field Operations. In the case of Veterinary Medical Officers, positions are not competitive in today's job market. Top quality candidates for Food Inspector positions are also in short supply in many locations, due to many factors. The work is typically very demanding, with strict physical requirements. Remote locations often have a limited applicant pool, and many who do apply have conflicts of interest that do not allow them to serve in a regulatory capacity. In the case of Intermittent Inspector positions, the requirement to be on-call with no guarantee of hours, and the limited benefits, make that position less attractive to most applicants than other options in the current job market. The Food Safety and Inspection Service, however, is confident it will recruit a well-qualified and diverse workforce.

FSIS efforts to increase the number of inspectors include:

—Refocusing efforts within Human Resources to increase the number of applicants on standards registers for field occupations. Applicants to these registers are solicited through a variety of recruitment initiatives such as on-campus visits, conventions, advertisements, direct mailings, and posted announcements on the Internet and at all Office of Personnel Management Service Centers. FSIS also publishes job opportunities in agricultural publications, such as the Cattlemen's Journal and Farm Bureau. FSIS recruits from veterinary schools, Hispanic-serving institutions, and historically black colleges and universities, as well as at veterinary conventions and agricultural career days at universities where candidates are identified. In addition, public notices about FSIS jobs are available at all State employment agencies.

—Recruiting and hiring 80 more inspectors by the end of the fiscal year to achieve a target employment level of 7530.

—Broadening the emphasis of FSIS' recruitment program to include other scientific backgrounds to meet current and future hiring needs and conducting recruitment training in September to train new recruiters in this area.

—Asking current agency personnel to assist in publicizing recruitment needs.

—Asking candidates who applied for inspector positions in areas surrounding locations with shortages if they would be interested in a position in locations that are experiencing shortages.

—Providing Veterinary Medical Officers with a recruitment bonus up to 25 percent of their salary, particularly in areas where there are fewer candidates. This has been approved in eastern Pennsylvania, Iowa, and Nebraska. FSIS is also

exploring additional options, such as relocation and retention bonuses for inspectors.

—Scheduling inspector entrance tests in locations where there is a need for inspectors. FSIS conducts tests in 10–12 locations around the nation each month. These tests are spread out geographically.

—Exploring alternative ways to fill other than permanent (OTP) full-time positions, such as permanent part-time tours of duty, and term and temporary appointments. We will be working with the inspectors union to explore the feasibility of options identified.

—Collecting and analyzing exit interview data to identify possible retention issues.

—For an application, contact Keith McFarlin at 1–800–370–3747, ext. 2580, or visit the U.S. Government official site for jobs and employment information at www.usajobs.opm.gov.

Question. In the event that inspector shortages remain a problem, what steps can the Department take in the management of food safety operations to reduce the harmful effect of these shortages to industry and the ultimate consumer?

Answer. The 2001 budget requests the funding necessary for a sufficient number of inspectors to meet industry demand. Our intensified recruitment program is showing results that should prevent future shortages.

HACCP INSPECTION MODELS

Question. Please provide an update on the HACCP Inspection Model in place, including a description of any problems that might delay full implementation of the HACCP Inspection plan by the fourth quarter of fiscal year 2001?

Answer. The HACCP-based Inspection Model Project is progressing as planned. I have asked the Food Safety and Inspection Service to provide an update on the project for the record.

[The information follows:]

At present, 24 plants slaughtering young chickens, swine, and turkeys are listed as volunteers in the HACCP-based Inspection Models Project (HIMP). Baseline data collection, which measures current inspection program performance, has been completed in sixteen young chicken plants, four swine plants, and two turkey plants. Baseline data collection will be completed in a fifth swine plant in March and will begin in the third young turkey plant the first week of April.

Seven young chicken and two swine plants have entered the models phase, in which the plant assumes post-mortem responsibilities while FSIS conducts oversight and verification inspection. Of these, six young chicken plants and one of the swine plants are in a models transition phase that precedes the collection of data for measuring plant performance under new models phase procedures. One young chicken plant and one swine plant are now in the actual models data collection phase.

A public meeting on HACCP-based Inspection Models Project is scheduled in March. Input from this meeting should help us identify any problems that may delay the implementation schedule as planned.

FOOD RECALLS

Question. Consumer groups have criticized USDA recently in the Washington Post Magazine for taking too long to issue a recall notice in the Sara Lee outbreak, an outbreak where 100 people became ill and 21 died from hazardous bacteria, Listeria, in ready-to-eat meat products. What was the reason for the delay in issuing a recall in this case?

Answer. Sara Lee initiated a voluntary recall. USDA did not have any positive laboratory results that would have mandated requesting the announcement of a recall any earlier. Sara Lee took action before there was a USDA laboratory result from intact Sara Lee product that was positive for Listeria *monocytogenes,* or a legally sufficient, epidemiological association between the product and the illnesses could be established On the same day Sara Lee announced the recall, USDA posted a recall Notification Report on its website, and faxed and e-mailed the same report to over 300 public health and food safety officials throughout the country.

LISTERIA TESTING

Question. Consumer groups have criticized USDA for failing to require testing of ready-to-eat meat products and plants for Listeria. While USDA recommended such testing, it has not issued regulations to mandate testing for all processors. Does USDA have any concerns that this voluntary policy will result in uneven adherence with the testing recommendation?

Answer. We are concerned about the voluntary policy and we are currently evaluating the need to require testing for *Listeria.*

Question. Would mandatory testing provide public health protections and a level-playing field for the industry?

Answer. Mandatory testing for *Listeria* could further enhance the safety of meat and poultry products by reducing the risk of *Listeria* entering the food supply.

Question. Has USDA considered this?

Answer. USDA is considering the need for mandatory testing for Listeria *monocytogenes* and is gathering additional information to determine the need for rulemaking.

DAIRY MARKET LOSS PROGRAM

Question. As you know, last year the Agriculture Appropriations bill provided $125 million in emergency relief payments for dairy farmers. While I appreciate the Secretary's decision to target the funding to small operations, I am concerned that the payments may not get into farmers' hands until this spring. Please tell this Committee what caused the delay in the announcement of the sign up period, particularly given that USDA is using the same process to distribute payments used in fiscal year 1999.

Answer. The Dairy Market Loss Assistance Program was implemented in February, 2000. Payments will be issued in March. Though the process remained relatively unchanged, an amendment to the regulations was necessary to implement the program. The amendment to the regulations is anticipated to be published in the Federal Register on or about February 16.

Question. You've called for an end to ad hoc emergency payments for agriculture and proposed instead the two-year stop-gap safety-net plan. That proposal provides only for an extension of the dairy price support program, which is viewed inadequate by most farmers. I know that dairy farmers would prefer a more meaningful solution to price volatility than emergency payments, but given the regionalism I have encountered, emergency payments have been the only way I have been able to get assistance into the hands of dairy farmers.

Since you have excluded dairy and livestock from your safety net proposal when prices are so low, will you support emergency assistance for milk and livestock producers this year?

Answer. The Administration's safety net proposal includes the proposal to extend the milk price support program which was estimated to cost $300 million and $200 million for a pilot livestock insurance program. However, the dairy situation has worsened since the proposals were developed which makes the dairy price support extension even more critical and could increase the cost of the program. It is not clear yet if other livestock producers will need emergency aid in 2000.

Question. And if so, how much funding do you think will provide adequate income in light of our low milk prices?

Answer. It is too premature to determine funding levels for 2000. It is clear that milk producers will be stressed as dairy prices are expected to average about 40 percent less in fiscal year 2000 than fiscal year 1999. Poultry prices are down but red meat prices are up. If the current dry conditions in most parts of the country continue, there may be great need for emergency assistance for milk and other livestock producers. We are willing to work with Congress to determine adequate funding levels as the condition of milk and livestock producers becomes clearer in 2000.

NAD DECISIONS

Question. I am concerned about recent reports that 86 percent of the decisions of regional hearing officers that are favorable to farmers were overturned by the Director of the National Appeals Division, but that only 5 percent of adverse decisions were overturned at the national level. Is the Department's analysis consistent with these figures?

Answer. The Department has taken a close look at this issue and is concerned with the misconceptions that have been raised. While it is unclear what specific figures were used by the Farm Journal, the Department's analysis shows similar trends. However, it is important to consider the fuller context of the roles of the parties in the adjudicative process in order to understand why these numbers are not indicative of bias. Provided for the record is the most recent Departmental analysis of this matter.

[The information follows:]

Each NAD appeal is adjudicated on its own merits. The basis for NAD determinations and its procedures are specified in Title 7 Code of Federal Regulations, Part 11. The NAD Director has no control over the numbers or merits of any case for

which a review of a hearing officer's determination is timely requested by a party. By law, Title II, Subtitle H, of the Federal Crop Insurance Reform and Department of Agriculture Act of 1994, the Director upholds, reverses, modifies or remands hearing officer determinations on review.

If a hearing officer determines error in an agency's administrative decision, only the head of an agency may seek a review. In most cases, however, no error is found by hearing officers. In fiscal year 1999, for example, no agency error was determined by hearing officers in 75 percent of the cases appealed to NAD. If error is determined by a hearing officer, the head of the agency must state specific reasons why the hearing officer's decision is wrong, including violations of statutes and regulations. Under USDA regulations, the Director must base his decision on the laws and regulations of the agency and their generally applicable interpretations. Moreover, an appellant cannot challenge the validity of agency regulations because only the federal courts can determine that an agency regulation is invalid.

NAD has no jurisdiction over the appropriateness of agency regulations. Agencies promulgate their own regulations. Given agency expertise with respect to its own regulations, the head of an agency will select for review only those cases in which the hearing officer's determination is not consistent with the agency's laws and regulations. This results in a higher percentage of reversals of hearing officers' determinations in cases taken on review by the head of an agency. On the other hand, there is a far greater number of cases in which the hearing officer determines no agency error. In these cases, the hearing officer found that the Agency correctly applied its own regulations, and it is highly unlikely that the Director would determine on review that both the hearing officer and the agency misconstrued the latter's own requirements. Thus, there is a very low percentage of reversals of hearing officer's determinations in cases taken on review by appellants.

In 1997, the USDA Inspector General issued a comprehensive report on NAD covering part of the period in which reversal rates were reported as such by the Farm Journal. The report found that NAD hearings were not appropriately focused on whether adverse decisions were consistent with laws, regulations, and agency policies and procedures, . . . NAD hearing officers exceeded their authority and substituted their judgment for that of the agency. The report recommended that NAD update its written guidelines, improve its management information system, and provide employee training on the proper exercising of authorities and responsibilities. In response, NAD has published its latest rules of procedure in the Code of Federal Regulations (Title 7, Part 11, Subpart A), is continuing improvements to its management information system, and has conducted employee training on topics surrounding the adjudicative process and exercising of authorities. Included in NAD's 2001 budget request is a funding increase that would allow the Division to set in motion a comprehensive and continuous employee training program. A copy of the report is provided for the record. (Evaluation report No. 50801–2–AT, March 1997)

[The information follows:]

EXECUTIVE SUMMARY

Purpose

This report presents our evaluation of decisions rendered by the National Appeals Division (NAD) to individuals and others who were originally denied U.S. Department of Agriculture program benefits and who appealed those denials. Our evaluation was performed as part of the Office of Inspector General's farm program strategy designed to ensure overall program integrity and assist program managers to find solutions for known or potential program weaknesses. Our review concentrated on administrative appeals related to Commodity Credit Corporation programs administered by the Farm Service Agency (FSA). The review included an (1) examination of the agencies' documentation used to support their adverse decisions and present their cases to NAD hearing officers and (2) evaluation of the hearing officers' decisions and of NAD director reviews.

Those who appeal to NAD need to demonstrate that when the agency made its adverse decision, either it (1) did not base the decision on proper criteria (i.e., laws, regulations, or procedures), (2) did not consider all relevant evidence, (3) relied on evidence that was inaccurate, or (4) relied on evidence that did not prove a violation of the stated criteria. NAD must confine its rulings to the criteria upon which the adverse decision was based and not substitute its judgment for that of the agency.

Results in brief

NAD hearings were not appropriately focused on whether adverse decisions were consistent with laws, regulations, and agency policies and procedures. In some cases, this occurred because FSA did not clearly show the criteria used and the evi-

dence it considered in making its adverse decision. In other cases, NAD hearing officers exceeded their authority and substituted their judgment for that of the agency. We concluded that significant resources were expended by NAD, FSA, and the appellants to arrive at decisions that misconstrued agency program requirements. Improper decisions like these could either deny an appellant benefits to which he/she is entitled or hinder FSA's efforts to pursue program abuses. We also found that FSA personnel did not always adhere to decisions made by the State and/or county committees when presenting the agency's cases at NAD hearings.

Management controls over NAD hearings need to be strengthened. We concluded that NAD needs to:

—update its written guidelines clarifying policies and procedures for evidentiary hearings and director's reviews,

—improve its management information systems to help ensure that the division adheres to timeframes established by legislation and that resources are used efficiently and effectively, and

—provide training which better explains the differences between the authority and responsibilities of NAD and those of the agencies.

We also concluded that FSA needs to improve training for State and county office personnel to ensure the quality of adverse decisions and to ensure that adverse decision letters provide sufficient information to explain the basis for the adverse decisions.

Key recommendations

We recommended that FSA clearly show the criteria and evidence used in making its decisions by providing sufficient information in adverse decision letters to explain the authority and basis for the decisions, and that any modifications to the initial adverse decision are adequately explained and related to any new evidence or criteria.

In order to ensure that NAD hearing officers do not substitute their judgment for that of the agency, we recommended that the NAD director require hearing officers to limit the scope of NAD hearings by identifying the laws, etc., that the appellant claims the agency did not adhere to, and the evidence that the appellant contends was erroneous or omitted. Hearing officers should also state whether the appellant contends there is no reasonable basis for the agency's determination. In addition, we recommended that hearing officers limit their determinations to whether an agency complied with applicable laws, regulations, and generally applicable interpretations.

To strengthen management controls over NAD hearings, we recommended that NAD formalize and update its policies and procedures, improve its management information system, and provide training for hearing officers and reviewing officials which ensures they understand the difference between NAD's authorities and those granted to the agencies.

Agency position

In their written responses to the report, both NAD and FSA agreed with the findings and recommendations. Based on their responses, we agreed with their management decisions for 6 of the 11 recommendations.

INTRODUCTION

Background

The Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994, Public Law 103–354, required the Secretary of Agriculture to establish and maintain an independent National' Appeals Division (NAD) within the Department to handle administrative appeals. On December 27, 1994, a notice was published in the Federal Register (59 F.R. 66,517) establishing NAD. NAD was assigned responsibility for all administrative appeals formerly handled by NAD of the former Agricultural Stabilization and Conservation Service and by the National Appeals Staffs of the former Farmers Home Administration (FmHA), the former Soil Conservation Service (SCS), the Commodity Credit Corporation, and the Federal Crop Insurance Corporation.

Current agencies whose appeals are assigned to NAD include (1) the Farm Service Agency (FSA), (2) the Rural Development Service (RD),[1] and the Natural Resources Conservation Service (NRCS).

[1] RD includes the Rural Housing Service, the Rural Utilities Service, and the Rural Business-Cooperative Services.

NAD is headquartered in Alexandria, Virginia, and has 3 regional offices and 65 field locations in 37 States. As of September 30, 1995, NAD had 131 fulltime employees-including 80 hearing officers and 12 reviewing officials.[2]

Under Public Law 103–354, a participant has the right to appeal an agency's adverse decision to NAD if the request is made no later than 30 days after the date on which the participant first received notice of the decision. The appellant (participant) has the right to have a hearing by NAD within 45 days after NAD receives the request for the hearing.

The act requires the appellant to bear the burden of proving that the agency's adverse decision was erroneous. The hearing officer must consider any information presented regardless of whether the evidence was known to the agency official, employee, or committee making the adverse decision at the time the decision was made. The hearing officer must also leave the record open for a reasonable period after the hearing to allow the appellant or agency to submit information necessary to respond to new facts, information, arguments, or evidence.

If a NAD hearing officer upholds an adverse decision by the agency, the appellant may submit a written request to the NAD director for review of the hearing officer's determination. The written request must be filed no later than 30 days after the date on which the appellant receives the hearing officer's determination. If a NAD hearing officer reverses the agency's adverse decision, the head of the agency may make a written request to the NAD director for a review of the determination. The notice must be filed no later than 15 business days after the date of the hearing officer's determination. When requested by the appellant or the agency, the director, or designated NAD official, will review the hearing officer's determination to determine whether it is supported by substantial evidence. Exhibit A presents a flowchart of the NAD administrative appeals process for FSA adverse decisions.

From October 1, 1995, through September 30, 1996, NAD hearing officers reversed FSA's adverse decisions 35.8 percent of the time compared to 24.7 percent for RD cases and 21.7 percent for NRCS cases. Table 1 shows a comparison of hearing officers' determinations on FSA, RD, and NRCS cases. A comparison of hearing officers' determinations in the three NAD regions is provided in exhibit B.

TABLE 1.—HEARING OFFICER DETERMINATIONS

(October 1, 1995 through September 30, 1996)

	Agency Reserved		Agency Upheld		Modified		Total Number
	Number	Percent	Number	Percent	Number	Percent	
FSA	666	35.8	1,073	57.6	123	6.6	1,862
RD	368	24.7	1,090	73.1	33	2.2	1,491
NRCS	18	21.7	63	75.9	2	2.4	83
Total	1,052	30.6	2,226	64.8	158	4.6	3,436

Also, during fiscal year 1996, NAD hearing officers were overturned on 114 of 772 FSA cases (see table 2). Exhibit B provides information concerning director review requests made by appellants and by agencies.

TABLE 2.—DIRECTOR'S DETERMINATIONS

(October 1, 1995 through September 30, 1996)

	Hearing Officer Reversed	Hearing Officer Upheld	Modified	Total
FSA	114	636	22	772
RD	14	323	20	357
NRCS	.....	49	.....	49
Total	128	1,008	42	1,178

[2] Reviewing officials perform Director reviews.

Objectives

Our evaluation was performed as part of the Office of Inspector General's (OIG) farm program strategy designed to ensure overall program integrity and assist program managers to find solutions for known or potential program weaknesses. Our review concentrated on administrative appeals related to Commodity Credit Corporation programs administered by the FSA. The review included an (1) examination of the agencies' documentation used to support their adverse decisions and present their cases to NAD hearing officers and (2) evaluation of the hearing officers' decisions and of NAD director reviews.

Scope

The evaluation was conducted in accordance with "Quality Standards for Inspections" issued in March 1993 by the President's Council on Integrity and Efficiency. We conducted work at the NAD Headquarters in Alexandria, Virginia, and at FSA Headquarters in Washington, D.C. Fieldwork was performed during the period October 23, 1995, through October 4, 1996. We used judgmental sampling to select cases for review in order to focus our resources on problem areas identified during our discussions with personnel from NAD and FSA.

Methodology

To accomplish the evaluation objectives, we conducted interviews at both NAD and FSA Headquarters. We also telephonically interviewed NAD personnel from the three regional offices located in Golden, Colorado; Indianapolis, Indiana; and Memphis, Tennessee.

We reviewed NAD's authorizing legislation and regulations to provide background and criteria for evaluating the quality of NAD determinations and for evaluating NAD's overall operations.

We judgmentally selected and reviewed hearing records from 35 NAD cases based on problem areas identified by various sources such as congressional inquiries, discussions with personnel from NAD and FSA, input from various OIG regional offices, and whistleblower requests received by OIG.

—Three cases were reviewed because of a congressional inquiry.
—Ten cases were recommended for review by NAD.
—Ten cases were selected from a list of cases which FSA had planned to submit to the Secretary's office for review.
—Two cases were recommended for review by FSA National and State office personnel.
—Eight cases were identified by various OIG regional offices as problem cases.
—Two cases were from whistleblower complaints received by OIG.[3]

In selecting our sample, we picked cases which related to specific problem areas identified by the various sources including

—the preponderance of evidence standard for review,
—granting of equitable relief,
—remands,
—acceptance and use of oral testimony,
—acceptance and use of Office of the General Counsel (OGC) legal opinions, and
—use of NAD subpoena powers.

We reviewed NAD procedures related to these areas, reviewed the NAD hearing records as they pertained to the problems, and determined whether procedures provided sufficient guidelines to ensure that NAD's policies and procedures were clear.

For each of the 35 sample cases, we reviewed NAD determinations and evidence included in the hearing record and listened to tapes of the hearing. We reviewed the findings of facts and conclusions in the hearing officers' and review officials' determinations to evaluate whether they were consistent with the evidence presented at the hearing. We also evaluated the agencies' preparation and presentation of the adverse decisions for each case.

In addition, we (1) evaluated NAD's management information systems (2) attended training with NAD personnel and evaluated the training, and (3) followed up on a prior audit report and management alert.

OIG Audit Report No. 46001–1–At, issued September 29, 1995, presented the results of an audit performed at the request of the former FmHA administrator to evaluate hearing officer decisions and FmHA program staff decisions related to FmHA loans. In contrast, our current evaluation focused on the Commodity Credit

[3] We reviewed two whistleblower complaints (Nos. PS–4601–0001 and PS–4601–0002) as part of our evaluation of NAD appeals. However, administratively final NAD determinations can only be reviewed by a U.S. district court. Therefore, we were unable to make specific audit recommendations to address individual cases.

Corporation programs administered by FSA. Therefore, recommendations in the prior report were not applicable to FSA programs on which the current report focused.

During the course of fieldwork on Audit No. 46001–1–At, NAD was established as an independent agency responsible for various other programs. Although NAD was established as a new and independent agency, the initial organization of NAD was centered around the old FmHA's internal appeals organization. The prior audit report, as well as a management alert, dated February 8, 1995, included issues regarding the establishment of NAD. Management decisions were completed for all of the recommendations contained both in the management alert and the prior report.

Even though corrective action was taken on our prior audit recommendation to issue procedures for the issuance and enforcement of subpoenas, our current evaluation disclosed additional improvements needed in procedures related to subpoena power. (See Finding No. 3.)

FINDINGS AND RECOMMENDATIONS

I. NAD hearings were not appropriately focused on whether adverse decisions were consistent with laws, regulations, and agency policies and procedures

NAD hearings did not appropriately focus on whether adverse decisions were consistent with laws, regulations, and agency program policies and procedures. This occurred because (a) FSA did not always clearly show the criteria used (i.e., laws, regulations, etc.) and evidence considered in making its adverse decisions and (b) NAD hearing officers sometimes substituted their judgment for that of the agency. As a result, significant resources were expended by NAD, FSA, and the appellants in debating matters which were not within NAD's authority to determine. Additionally, resulting improper NAD determinations could either deny an appellant benefits to which he/she is entitled, or hinder FSA's efforts to pursue program abuses.

FSA did not always clearly show the criteria used and the evidence considered in making adverse decisions

Finding No. 1

FSA did not always adequately cite laws, regulations, and handbook instructions, nor relate the applicable criteria to the evidence considered when making adverse decisions. This often resulted in unclear and confusing issues during NAD hearings. Although FSA had implemented procedures to provide the required notification of decision,[4] we concluded that the notification did not always give sufficient information to the participant. Also, FSA personnel did not always adhere to their agency's determinations while presenting the agency's case to NAD.

When making adverse decisions, State committees (STC) and county committees (COC) should ensure the following.

—Relevant laws, regulations, and procedures are followed.
—All relevant evidence is considered and evidence used in making the decision is accurate and reliable.
—Judgment decisions are based on accurate, reliable, and convincing evidence and the decisions are reasonably related to the appropriate laws, regulations, and procedures.

FSA should provide sufficient information to the participants so they understand the basis for the decision, know what options are available if they dispute the adverse decision (i.e., appeal to the county or State level, mediation, NAD, etc.), and clearly understand the scope of NAD hearings. To explain the adverse decision, the agency's letter to the participant should address each of the three areas cited in the previous paragraph.

Our review of 35 NAD hearing records disclosed that the criteria, evidence considered, and basis for the agency's decision were clearly presented in the adverse decision letter for only 10 of the cases. For the remaining 25 cases we found the following. (See exhibit C.)

—Neither the criteria nor the evidence was cited in seven cases.
—Criteria was cited but the evidence was not in seven cases.
—Evidence was cited but the criteria was not in nine cases.
—There was no adverse decision letter in the hearing record for two cases.

[4] Public Law 103–354, section 274, requires: "Not later than 10 working days after an adverse decision is made that affects the participant, the Secretary shall provide the participant with written notice of such adverse decision and the rights available to the participant * * * for review of such adverse decision."

Even though OGC recognizes that appellants cannot challenge agencies' generally applicable interpretations,[5] it is important that both the appellant and the hearing officer understand the basis for the procedure. In many instances, handbook procedures are not provided as part of routine communication between FSA and participants because they are often tools or tests used to determine whether the participants have complied with laws, regulations, and contract requirements. In such situations, it is important for FSA to adequately relate the procedures to the laws and/or regulations so that the hearing officer can determine whether the procedures were correctly applied. An example follows.

NAD LOG NUMBER—95001121W

The appellant was denied program benefits because FSA determined that he did not provide the required active personal labor or management, and therefore was not actively engaged in farming. As criteria, FSA cited Handbook 1–PL, paragraph 154, which states that: "If a member of a joint operation receives a guaranteed payment for any part of a contribution of labor or management, exclude all of the specific type of contribution for which payment is received." However, FSA did not explain how the criteria related to the agency's determination that the appellant was not actively engaged in farming.

The hearing officer determined that "Nowhere in the regulation cited * * * is there any reference to withdrawing of funds being a constraint on eligibility," and concluded:

The appellant was unaware of the ramifications of these actions until notified by the CFSA [Consolidated Farm Service Agency] that he had been denied eligibility for program benefits because he was determined not to be actively engaged in farming * * *. Therefore, because the Appellant was not notified of the policy of the Agency prior to being determined ineligible for program benefits, the determination is unfair.

The hearing officer also concluded:

The Appellant denies he is receiving a "guaranteed payment" from the partnership and contends it is, in fact a draw.

It was clearly the intent of the Appellant for these funds to be considered a draw from his one-half of the partnership. The only documentation considered by the CFSA was in the form of the tax return. The tax return was prepared incorrectly for the intent of the Appellant.

The hearing officer did not conclude that the agency's procedure was wrong but that it was misapplied (e.g., definition of guaranteed payment). We concluded that the agency should have explained how the handbook procedure related to regulations which address contributions to farming operations, and why the appellant was not provided prior notification of the handbook procedure.

We also found that FSA personnel did not always adhere to COC, STC, or FSA National Office determinations and subsequent modifications while presenting the agency's cases to NAD hearing officers. In two of the sample cases, the FSA representative attending the hearings improperly determined that the finality rule (90-day rule) applied in those cases. In another case, the FSA representative improperly used the COC's initial determination of scheme or device, even though the adverse decision had been modified to a "failure to fully comply" determination which is based on different criteria. Details of the latter case follow.

NAD LOG NUMBER—95001142W

The COC determined that the appellant participated in a scheme to circumvent the provisions of the malting barley program. In an FSA State office appeal review, the STC determined that the "failure to fully comply" provision of the regulations better fit the circumstances of the case. A letter from the acting deputy administrator for farm programs approved the STC's request to handle the matter by stating: "Based on the determination of the State committee and the informal advice from your Regional Attorney's office this is your authority to handle the cases referred to in your memorandum under the "failure to fully comply' provision of the regulation."

The STC notified the appellant that "[T]he State Committee normally would have determined a scheme was used to obtain additional benefits and denied barley program benefits. However, after communication with your county committee, the state committee sought a more moderate solution."

However, the FSA representative at the hearing improperly contended that the appellant participated in a scheme or device to circumvent spot checking procedures.

[5] OGC comments included in NAD's Interim Final Rule, dated December 29, 1995.

In summary, we concluded that FSA needs to improve its adverse decision letters by ensuring they provide sufficient information to explain the authority and basis for the decision. Additionally, any modifications to the initial decision should adequately explain and relate to new evidence, criteria, or other reason for the modification. The initial adverse decision letter along with modifications should serve as FSA's primary evidence in presenting cases to NAD. This would reduce the time and resources needed by FSA in preparing and presenting cases to NAD. FSA representatives should adhere to the agency's determination when presenting cases to NAD. We also concluded that information provided to the appellant should relate handbook procedures to the appropriate law or regulation whenever necessary to clarify how the procedures apply to the applicable criteria and evidence.

Recommendation No. 1a (to the FSA Administrator)

Provide sufficient information in adverse decision letters to explain the authority and basis for the decision. At a minimum, the letters should provide a (1) brief summary of the applicable law or regulation and handbook procedure, (2) summary of the evidence used in making the determination, and (3) description of the adverse decision relating the evidence to the applicable criteria in order to show a reasonable basis for the determination.

Recommendation No. 1b (to the FSA Administrator)

Ensure that any modifications to the initial adverse decision are adequately explained and related to any new evidence or criteria, and that the modifications are sufficiently communicated to the appellant and to NAD. Also, ensure that FSA personnel attending NAD hearings adhere to determinations and any subsequent modifications made by the COC, STC, or FSA National Office when presenting the agency's case in NAD hearings.

FSA Response

In its March 21, 1997, response, FSA replied that it "accepts and agrees with the findings and recommendations of the audit."

OIG Position

FSA's response did not specify the actions it plans to take for these two recommendations. To reach management decisions, we need to be informed of the action to be taken and the timeframe for carrying them out.

NAD Hearing Officers sometimes substituted their judgment for that of the Agency

Finding No. 2

NAD hearing officers sometimes substituted their judgment for that of the agency. We concluded this occurred because hearing officers did not limit issues to whether the agency's adverse decisions were consistent with the laws, regulations, and generally applicable interpretations.[6] Instead of determining whether agencies complied with applicable criteria and considered accurate and relevant evidence in making their adverse decisions, hearing officers allowed discussion of broad issues for which they determined the merits of each party's position. As a result, the hearing officers' determinations often failed to identify where agencies had erred in their adverse decisions.

In 25 of the 35 NAD cases reviewed, we concluded that the hearing officers had not related their determination to relevant criteria. In 24 of the 25 cases, we also concluded that the determination was not related to relevant evidence. (See exhibit C.)

Legislation which authorizes U.S. Department of Agriculture (USDA) programs gives the Secretary authority to carry out the programs. This authority is delegated by the Secretary to the appropriate agency such as FSA, RD, NRCS, and other USDA agencies. In order to carry out these programs, certain steps are taken by the administering agency. Rules and regulations governing the programs are published in the Federal Register, and the administering agency establishes policies and procedures which are generally applicable interpretations of laws and regulations used in program administration. Agencies' adverse decisions must be made in accordance with the applicable laws, regulations, and the generally applicable interpretations made by the agencies to carry out programs.

NAD determinations, on the other hand, are based on information from the case record and whether the agency's adverse, decision is consistent with the laws and regulations of the agency, and with the generally applicable interpretations of such

[6] Generally applicable interpretations refer to the administering agency's interpretations of laws and regulations which are applicable to all program participants.

laws and regulations. In order for the hearing officer to overturn the agency's adverse decision, the appellant must show that the adverse decision was erroneous.

As presented in NAD's Interim Final Rule, OGC had determined: "NAD Hearing Officers are not administrative law judges. NAD has no jurisdiction over questions of law or the appropriateness of agency regulations. It simply decides the factual matter of whether an agency complied with such laws and regulations in rendering an adverse decision."

OGC further determined that "NAD is not a forum for appellants to challenge agency statutes, regulations, or the generally applicable interpretations of those statutes and regulations."

Based on our review of the applicable legislation and regulations, we concluded that issues appealable to NAD would include the following.

—The agency did not follow laws, regulations, and procedures.

—All relevant evidence was not considered.

—Evidence considered was not accurate.

—The agency had no reasonable basis for its judgment (i.e., the evidence had no relationship to the criteria used in making the adverse decision).

The NAD Hearing Officer Manual states that "[O]nly evidence that is relevant to the underlying issues should be considered." However, issues discussed at hearings were often broad and not related to whether the agency made an error in making its adverse determination. Therefore, considerable time was used to debate matters which were not within hearing officers' authority to determine.

The following is an example where excessive time (approximately 18 hours) was used because the hearing officer did not determine the appropriate scope of the hearing. More specifically, the hearing officer did not relate his determination to the relevant criteria, utilized unsubstantiated evidence in drawing conclusions, did not consider all relevant evidence, and did not apply the appropriate burden of proof standard.

NAD LOG NUMBER—9500104OW

The producers applied for benefits under the Disaster Assistance Program, claiming their crop was damaged by flooding. FSA denied the benefits, stating that the producers did not operate their farm in a workmanlike manner—they did not till the soil before planting their crops (a practice referred to as "no-till"), and they did not properly maintain a culvert that was necessary to drain the affected acreage. The producers appealed, and NAD reversed FSA's decision. NAD based its reversal on an SCS handbook published for another area of the State, and on the producers' unsubstantiated claim that their crop failed because of a natural disaster, not because they used improper farming methods.

FSA based its argument on the requirements stated in FSA Handbook 5–PA, paragraph 149. This paragraph provides that certain practices such as "cultural practices normal to the area or introduced by ES [Extension Service] or SCS to improve conservation" and minimum till and no-till practices customary to the area should not be considered unworkmanlike. FSA had determined that the producers' soil was not conducive to the "no-till" method and that the method was not normal and customary to the area.

Although the hearing officer focused on the tillage method used by the producers, he failed to appropriately address FSA's generally applicable procedures found in paragraph 149 of the handbook. Instead, he relied on the evidence supplied by the producers, an SCS pamphlet promoting "no-till" practices. We concluded that this pamphlet was irrelevant as evidence because it applied to a different area of the State, and to a soil type different from the type on the producers' farm.

Even though the producers' evidence did not apply to their farm, the hearing officer's finding of facts stated "Appellants' exhibits * * * demonstrate and promote conservation tillage (notill, minimum till, etc). Such practices are not uncommon in the area of Appellants' farm." From this assumption, the hearing officer concluded that "the practice of minimum or no tillage is an acceptable practice (more than acceptable by some) notwithstanding what some farmers in (the county] may practice." The producers did not contend that ES or SCS recommended the "notill" practice for their farm, and they did not provide any evidence of such a recommendation.

For the cause of the crop loss, the hearing officer used unsubstantiated evidence and concluded that "it is obvious that the development (of the crop] was retarded by lack of sunlight." The hearing officer inappropriately introduced this unsubstantiated evidence into the hearing record by asking the producer whether the crop could have been stunted by a "lack of sunlight." However, no evidence was introduced to show that there was a lack of sunlight or that the crop was affected by this condition.

In calculating the producers' crop yields, FSA determined that a contributing factor to the producers' crop loss from flooding was their failure to properly maintain a drainage culvert located on their farm. However, the hearing officer gave no consideration to this determination when making his decision.

The hearing officer utilized broad criteria defining overall eligibility for the Disaster Assistance Program payments to conclude that "the Appellants met their burden of showing that their crops failed due to flooding and subsequent drought conditions." However, we concluded that the hearing officer should have focused on more specific criteria in FSA Handbook 5–PA, paragraph 149, and should have specifically identified whether FSA's decision was erroneous, as it relates to the applicable criteria.

We concluded that by relying on broad criteria and failing to utilize relevant criteria and evidence, hearing officers used the "preponderance of evidence" standard (see Finding No. 3) to make determinations which they were not authorized to make, and failed to determine whether the producer met the burden of proving that the agency's adverse decision either contained an error or was based on one.

Recommendation No. 2a (to the NAD Director)

Require hearing officers to limit the scope of NAD hearings to matters relevant to the agency's alleged errors. In order to provide this assurance, the ISSUE section of the hearing officers' determination should

—identify the law, regulation, and/or procedure to which the appellant claims the agency did not adhere (ensuring that the criteria is not broad and vague),
—identify the evidence that the appellant contends was not considered by the agency or the evidence which was supposedly erroneous, and
—state whether the appellant contends there is no reasonable basis for the agency's determination.

NAD Response

In its March 21, 1997, response, NAD stated that "The format for a Hearing Officer determination was revised to include citations to relevant laws and regulations, specific exhibits entered into the record, and to address the burden of proof."

OIG Position

We concur with NAD's management decision for this recommendation.

Recommendation No. 2b (to the NAD Director)

Require hearing officers to limit their determinations to the factual matter of whether an agency complied with applicable laws, regulations, and generally applicable interpretations. In order to provide this assurance, the conclusion section of the hearing officers' determination should include the following.

—Cite the specific laws, regulations, and/or procedures which are relevant to determining whether the agency's adverse decision was in error, and avoid referring to broad criteria not specifically related to the alleged error. When determining that the agency failed to follow appropriate criteria, state how the agency erred.
—Cite the specific evidence used in drawing the conclusions, whether the agency had considered all relevant evidence, and identify what evidence was in error.
—Contain a description of how the relevant evidence did or did not logically relate to the relevant laws, regulations, and/or procedures. The description should also include a conclusion as to whether the appellant met the preponderance of evidence standard by showing that there was no logical relationship between the two, when applicable.

NAD Response

In its March 21, 1997, response, NAD stated:

As stated in response to recommendation 2a, the Hearing Officer determination format has been revised since the issuance of the 1995 determinations reviewed for the audit. There has also been specific training on writing of determinations and all Hearing Officers will have had substantial training and discussion on writing determinations by the end of this fiscal year.

The "Conclusions" section now cites specific laws and regulations which are relevant to determining whether the agency's adverse decision was erroneous or not. Specific statements are used to analyze evidence that was considered relevant and credible as well as setting forth the applicable regulations used in determining whether the agency's adverse decision was erroneous. Further, a specific conclusion is dedicated to determine whether the burden of proof has been met through a preponderance of the evidence.

OIG Position

We concur with NAD's management decision for this recommendation.

II. Management controls over NAD hearings need to be strengthened

Management controls over NAD hearings need to be strengthened. We concluded that NAD needs to (a) update its written guidelines and clarify its policies and procedures for evidentiary hearings and director's reviews, (b) improve its management information system (MIS) to provide performance measures at various NAD levels, and (c) provide training which better explains the differences between the authority and responsibilities of NAD and those of the agencies.

NAD needs to update its policies and procedures

Finding No. 3

NAD's policies and procedures did not always provide sufficient guidance to address issues arising during NAD hearings. As reported in NAD hearing officers sometimes substituted their judgment for that of the agency. We also noted that NAD did not have a formal system for maintaining current NAD policies and procedures, and that FSA instructions regarding appeals to NAD were not consistent with NAD regulations.

In selecting our sample of 35 cases, we picked cases which related to problem areas identified through discussions with NAD and FSA personnel and through inquiries made to various OIG regions. Some of the material issues which were causing difficulties at NAD hearings included

—the preponderance of evidence standard for review,
—granting of equitable relief,
—remands,
—acceptance and use of oral testimony,
—acceptance and use of OGC legal opinions, and
—use of NAD subpoena powers.

We reviewed NAD's regulations, policies, and procedures related to these areas, and NAD's hearing records as they pertained to the problems. The following discussion details areas where we concluded that NAD's policies and procedures need to be updated.

Preponderance of Evidence Standard

NAD legislation requires that the appellant bear the burden of proving that an agency's adverse decision is erroneous. However, NAD's Interim Final Rule, dated December 29, 1995, added that the appellant must prove that the decision is erroneous "by a preponderance of the evidence." In its comments to NAD's Interim Final Rule, FSA expressed concern that the inclusion of the "preponderance of evidence" standard shifted the burden of proof from the appellant to the agency by diluting the statutory requirement that the appellant must prove that the agency's decision was erroneous. FSA also commented that the "preponderance of evidence" standard conflicted with the law, and should be removed from the regulations.

We did not attempt to determine whether the "preponderance of evidence" standard was consistent with NAD legislation. However, we did find that neither NAD's regulations nor procedures explained how the "preponderance of evidence" standard was to be applied in NAD hearings.

As discussed in Finding No. 2, hearing officers sometimes used the "preponderance of evidence" standard to make determinations which they were not authorized to make, and, in doing so, failed to determine whether the appellant met the burden of proving that the agency's adverse decision either contained or was based on an error. NAD should provide written guidelines defining "preponderance of evidence" and explaining how this standard applies to evidence presented at NAD hearings.

Equitable Relief

Public Law 103–354 states that the NAD director shall have the authority to grant equitable relief in the same manner and to the same extent as the authority given to the Secretary. Although NAD has established procedures relating to equitable relief cases, we questioned whether such cases should be subject to review by hearing officers.

Equitable relief involves instances in which participants who have taken actions which could affect their eligibility, acted in good faith by relying on the actions or advice of an authorized representative of the Secretary. In these instances, the NAD director is authorized to grant relief to the participants by providing program benefits to the extent determined appropriate for fair and equitable relief.

Even though hearing officers do not have the authority to grant equitable relief, Public Law 103–354 includes the denial of equitable relief in the definition of an

adverse decision. In cases where the appellant challenges the agency's denial of equitable relief, NAD's Hearing Officer Manual instructs the hearing officers as follows:

[Y]ou should make findings and conclusions concerning the appropriateness of granting or denying such relief. If you determine that the agency erred in denying equitable relief, you may so hold and return the case to the agency for further action consistent with your determination. You do not have the authority to affirmatively grant equitable relief yourself, although the Director may do so if the case comes to him for review.

We concluded that such cases should not be subject to review by hearing officers since they have no authority to make a determination on the appeal. If hearing officers overturned agencies' denials of equitable relief, they would in effect be granting equitable relief. We concluded that cases involving denial of equitable relief should be reviewed only by the NAD director.

Remands

NAD's policies and procedures did not adequately address remands. There were no policies or procedures for establishing timeframes to complete remand cases. Also, there were no guidelines to explain what types of situations warrant a remand.

Public Law 103–354, section 278(b), requires the NAD director to issue a final determination or remand a case back to the hearing officer within 10 business days if a review is requested by the agency or 30 business days if requested by an appellant. NAD's Interim Final Rule, section 11.9(d)(1), states:

If the Director determines that the hearing record is inadequate or that new evidence has been submitted, the Director may remand all or a portion of the determination to the Hearing Officer for further proceedings to complete the hearing record or, at the option of the Director, to hold a new hearing.

Neither the legislation, NAD's Interim Final Rule, nor NAD's procedures establish timeframes for completing remand cases. We contacted the NAD regions and found that each region assigned new case numbers for remands. Regional office personnel told us that remands were handled as though they were new hearings for tracking purposes, and that hearing officers had 45 days to hold another hearing (if necessary) and another 30 days to make their determinations. Notifications of remands are sent to the regional offices. However, regional office personnel said that there is a time lag of 1 or 2 weeks before the notice is received and the hearing officer receives the case.

In one of our sample cases, the NAD appeal was concluded approximately 7 months after the request for appeal was filed. The hearing officer used 74 days to make his determination for the remand. The delay in processing the participant's appeal resulted in a congressional inquiry into the timeliness of the NAD process. The following is a summary of that case.

NAD LOG NUMBER 95000494E

RD disapproved the appellant's request to obtain funding for a waste water treatment plant. The agency determined that proposed basic engineering services (BES) fees were excessive as compared to fees charged for similar projects when agency funding was not involved. The appellant contended that the BES expenses were appropriate for the complexity of the proposed project and that a fee curve should not be used to establish BES expense limits.

The hearing officer reversed the agency's determination based on his determination that regulations did not authorize the agency to establish a fee curve maximum to evaluate proposed BES expenses. However, the hearing officer neither had the authority nor the expertise to determine whether the fees were reasonable. Further, from our review of the hearing record, and based on the reviewing official's conclusion which follows, we concluded that the appellant did not show that the agency's decision was adverse to the appellant (as opposed to a matter of general applicability) and did not meet the burden of proving that the agency's determination was erroneous.

During the director's review, the reviewing official concluded:

The data which the appellant submitted to show engineering fees on other projects is conflicting and does not readily identify the fees charged for projects not involved in Agency funding. We find no substantive evidence to support the HO's (hearing officer] finding that the proposed BES is not in excess of those ordinarily charged by the profession for similar work when Agency financing is not involved.

Further, we find no substantive evidence to support the Hearing Officer's determination that RD has approved other projects in which the BES exceeded the maximum allowable.

Even though the reviewing official's conclusion indicated that the appellant did not meet the burden of proof, the case was remanded to the hearing officer to "determine if the fees are reasonable." However, since the agency's decision was a matter of general applicability and the reviewing official determined that there was no substantive evidence to show that the agency's decision was erroneous, we concluded that the hearing officer's initial determination should have been overturned instead of remanded back to the hearing officer.

Acceptance and Use of Oral Testimony

NAD's policies and procedures do not provide guidelines to assist hearing officers in weighing oral testimony. FSA officials told us that one of their major concerns was that hearing officers were accepting unsubstantiated oral testimony as persuasive evidence.

NAD's Interim Final Rule, part 11.8(5)(ii), states:

Any party shall have the opportunity to present oral and documentary evidence, oral testimony of witnesses, and arguments in the support of the party's position * * *. Any evidence may be received by the Hearing Officer without regard to whether that evidence could be admitted in judicial proceedings.

NAD's Hearing Officer Manual instructs hearing officers to keep in mind that not everything that a witness says is factual evidence. However, NAD's policies and procedures do not provide general guidelines on how to weigh oral testimony. We found that hearing officers sometimes accepted and inappropriately relied on unsubstantiated oral testimony. The following is an example.

NAD LOG NUMBER—95001719E

FSA determined that the appellants participated in a scheme or device to evade payment limitations by misrepresenting their interest in the farming operation. The agency's evidence showed that the producers did not maintain separate bank accounts for their interest. The agency also noted that the producers had no evidence to show that cash rent was paid for the land, that they owned or leased the land, or that they supplied capital for the farming operation.

The hearing officer subsequently overturned FSA's determination largely on unsubstantiated oral testimony of the appellants. Little to no physical documentation was offered by the appellants to support the oral testimony. The reviewing official who conducted the director's review wrote: "Although the record contained little documentation of [the appellants'] 1993 farming activities, the Hearing Officer determined that the appellants' testimony sustained the burden of proof required to reverse CFSA's decision." [Underlines added.]

The reviewing official also concluded: "In the absence of testimony by CFSA personnel involved in accepting the appellants' applications for disaster and associated documents, the Hearing Officer accepted the appellants' testimony as persuasive."

We concluded that the hearing officer's reliance on unsubstantiated oral testimony, given the seriousness of an adverse decision concerning a scheme or device, was improper. As a result of NAD's decision, an assistant U.S. attorney declined prosecution of the case, and stated: "We are declining prosecution in this matter. While it appears that the (appellants] engaged in a scheme to defraud the Department of Agriculture * * * by accepting the [appellants] uncorroborated, and false statements, the NAD has undercut our ability to prove any criminal violations."

In many instances, especially where matters such as schemes and devices or bad faith determinations are made by FSA, hearing officers should ensure that oral testimony, other than expert witnesses providing an opinion, is substantiated by the appellant.

Acceptance and Use of OGC Legal Opinions

Even though NAD is in the process of establishing procedures to obtain independent legal opinions when needed, there are no procedures addressing situations in which a hearing officer should utilize OGC legal opinions obtained by the agency.

In the "NAD Notes" for February through March 1996, the director wrote: "OGC is developing a system to provide us independent legal opinions related to program issues. We will work with * * * OGC to effect an appropriate means of securing definitive legal opinions on the laws applicable to matters at issue * * *."

The hearing officers are further instructed to refer requests for legal opinions to NAD regional directors. However, situations arise where hearing officers must determine the relevance of OGC opinions obtained by the agency to their determinations, or where the agency's opinions from OGC should be included as criteria or evidence relevant to the NAD determination. In these situations, NAD procedures should instruct hearing officers to determine the relevance of OGC opinions to the administrative hearing and, when appropriate, include the opinions in making their

determinations. Independent legal opinions should be obtained when necessary to ensure that "definitive" opinions clarify any ambiguous ones.

The following is an example where the hearing officer improperly made a legal determination which was contrary to an OGC opinion obtained by the agency.

NAD LOG NUMBER—95000487W

In this case, the agency determined that the appellant acted in "Bad Faith" by illegally converting chattel property which was part of a farm operating loan. The agency based its adverse decision, in part, on an OGC opinion that the appellant's sale of chattel constituted conversion as defined by the appropriate State's statutes.

Although the agency had approved the sale through public auction of certain equipment owned by the appellant, the appellant sold the equipment prior to the public offering for less than the amount the agency determined the equipment was worth. The appellant received a check from the buyer which was made payable to both the appellant and the agency. Although, the check was neither deposited nor cashed, the purchaser refused to return the equipment.

The hearing officer incorrectly concluded that "since there is no acceptance of the offer by all parties (Appellant and Agency), the sale had not been executed, thus, no valid sale has occurred." From this conclusion, the hearing officer determined that the appellant had not illegally converted chattel property. Therefore, the hearing officer not only exceeded his authority by making a legal determination, but also erred in his determination (acceptance occurred when the purchaser agreed to the price and tendered the check to the producer).

For this appeal case, we concluded that the hearing officer should have considered the OGC determination when making his determination. If the hearing officer questioned the accuracy of OGC's decision, he should have requested assistance from the NAD regional director.

Subpoenas

Public Law 103–354 gives the NAD director and hearing officers the authority to issue subpoenas requiring the attendance of witnesses and the production of evidence. In response to OIG Audit Report No. 46001–1–At, dated September 29, 1995, NAD issued procedures for the issuance and enforcement of subpoenas. However, NAD procedures do not address instances where hearing officers may determine that the attendance of a witness is necessary even though no request is made by the appellant or the agency. An example follows.

NAD LOG NUMBER—95001333S

FSA determined that the appellant participated in a scheme or device designed to evade payment limitations. The appellant alleged that he acted only as a custodian of farm records, financing, and bills for another individual's farming operation. FSA concluded that the appellant was, in fact, the producer in that farming operation. Important evidence presented by FSA included a signed statement from the other individual stating that he had no interest in the farming operation other than as a hired hand.

As part of an appeal to the STC, the other individual had provided a signed statement in September 1989, showing that he was a separate person for payment limitation purposes. Subsequently, in April 1990, the other individual provided a statement to the county executive director recanting the September 1989 statement and showing that he was only a hired hand on the farm. Even though the agency had a signed statement from the other individual stating that he was not truly a producer in the farming operation for which the adverse decision was made, the hearing officer gave the statement little consideration by stating:

We find it significant to note that neither statement was prepared by [the other individual] and as addressed by Appellants the second statement was obtained by the county executive director and contained vague and ambiguous references to Appellants. Therefore, while this information was reviewed in making our decision, we did not consider the information to be compelling evidence.

The fact that the statement was prepared by someone other than the person who signed it was of little significance compared to the statement itself and the signature of the producer. The appellant claimed that the statement was coerced and false. However, he did not provide any evidence to support his claim. If the hearing officer believed that the statement may have been coerced or false, he had the authority to subpoena the other individual as a witness.

NAD needs to update its written guidelines to clarify its policies and procedures regarding when witnesses may be subpoenaed and establish a formal system to assist the NAD director in ensuring that the division's policies and procedures are consistently applied throughout the agency.

FSA Instructions Need Clarifying

We also noted a need for FSA to improve its instructions. FSA instructions regarding appeals to NAD were inconsistent with NAD regulations. FSA Notice APP–11 presented suggested notification language for initial COC decisions. The suggested language, in part, stated:

If you believe the decision by the County Committee is in error, you may elect any of the options in the following sequence:

—Reconsideration by the County Committee.
—Request mediation.
—Appeal to the State Committee.
—Appeal to the National Appeals Division.

You may elect these options in the indicated sequence. You may select any of the first three options, or you may skip any of the first three options and select a later choice, or skip all three and appeal to NAD.

We found that the suggested language was not consistent with NAD regulations which state:

A participant must seek an informal review of an adverse decision issued at the field service office level by an officer or employee of FSA * * * before NAD will accept an appeal of an FSA adverse decision. Such informal review shall be done by the county or area committee with responsibility for the adverse decision at issue. * * * After receiving a decision upon review by a county or area committee, a participant may seek further informal review by the State FSA committee or may appeal directly to NAD.

NAD regulations also allow an optional informal review for adverse decisions issued at the FSA State office level. The participant is not required to seek the informal review before appealing to NAD in these situations.

Recommendation No. 3a (To the NAD Director)

Implement a formal policies and procedures system by combining the current Hearing Officer Manual and various "NAD Notes" into a numbered and dated manual.

NAD Response

In its March 21, 1997, response, NAD stated that it had "created a directive system to disseminate NAD policies and procedures. The directives are to be numbered and incorporate expiration dates."

OIG Position

We concur with NAD's management decision for this recommendation.

Recommendation No. 3b (To the NAD Director)

Update NAD guidelines to clarify policies and procedures related to the following areas.

—Preponderance of evidence standard for review
—Granting of equitable relief
—Remands
—Acceptance and use of oral testimony
—Acceptance and use of OGC legal opinions
—Use of NAD subpoena powers

NAD Response

In its March 21, 1997, response, NAD replied:

The NAD Interim Final Rule and comments published in the Federal Register cover the areas addressed. Further, the issues of Preponderance of Evidence, Equitable Relief, OGC Opinions and Subpoenas are covered in the NAD Hearing Officer Manual. Subpoenas and Equitable Relief have also been addressed in NAD Notes.

OIG Position

We disagree with NAD's management decision for this recommendation. Based on our review of 35 cases, we continue to conclude that needs to provide additional guidance on the 6 areas enumerated in the recommendation.

Recommendation No. 3c (To the FSA Administrator)

Ensure that guidance given to State and county offices concerning NAD appeals is consistent with NAD regulations by updating Notice APP–11 to notify appellants that they must first seek an informal review of COC determinations before appealing to NAD.

FSA Response

In its March 21, 1997, response, FSA replied that it "accepts and agrees with the findings and recommendations of the audit."

OIG Position

FSA's response did not specify the actions it plans to take for this recommendation. To reach a management decision, we need to be informed of the actions to be taken and the timeframe for carrying them out.

NAD's Management Information System Needs Improvement

Finding No. 4

NAD's MIS does not provide information necessary to make key decisions for evaluating the division's performance. This occurred because NAD's data base was unreliable and current management reports were ineffective. As a result, NAD's management does not have sufficient means to ensure that the division adheres to timeframes established by legislation (i.e., hearing must be held within 45 calendar days of request) or ensure that resources are used efficiently and effectively.

In testimony before Congress addressing the 1997 appropriation, the NAD director stated:

The current tracking system was initially designed to handle only former FmHA type appeal cases and provide canned reports. The current tracking system does not meet NAD's monitoring and reporting needs and limits our ability to provide Congress and USDA critical data regarding the appeals handled by NAD.

An MIS should provide decision-makers with the necessary data to guide operations towards fulfilling the division's mission. The system must be effective and efficient so that reliable and timely information can be generated. A well designed system that incorporates these elements provides management with the necessary information to evaluate appeal case progress and employee performance.

A critical function of NAD's MIS is to track appeals to NAD in order to ensure that appellants are given a timely hearing and determination as prescribed by the timeframes required by law. In addition to tracking timeframes, the MIS is an important tool for measuring the performance of the division at all levels, and determining where resources are needed within the division to ensure efficient and effective operations. Management reports can be designed to identify problem areas in the performance of hearing officers, regional personnel, and national reviewing officers. Once problem areas are identified through these reports, the director can take appropriate action such as focusing quality assessment reviews in order to better identify the cause of problems, update policies and procedures based on problems identified, and determine training needs for both individuals and the organization.

Based on our review and our discussions with NAD personnel, we concluded that NAD's current MIS was inefficient and ineffective because of an unreliable data base and ineffective management reports.

Unreliable Data Base

We found that NAD's data base is unreliable because it does not include sufficient dates and status codes needed to ensure compliance with legislated timeframes and the proper allocation of resources. The MIS does not track NAD hearings to determine whether hearings took place within 45 days from the date the request was received and if hearing officers' determinations were made within 30 days from the date of the hearing. We also found that remand cases were not tracked to ensure timely resolution.

NAD's current MIS consists of a data base called "NASTRACK" for data entry. "NASTRACK" is a combination of two subsystems. One subsystem is the system used by the former FmHA's internal administrative appeals unit. It contains all information related to appeals filed through FSA. The second subsystem was created by NAD and contains all information related to appeals filed by all other agencies for which NAD has responsibility. Information is retrieved by NAD using the Statistical Analyses System (SAS).

The data base provides for three entries relating to the dates in which a hearing officer must hold a hearing and make a determination. These entries include the date the request was received, the date of the hearing, and the hearing decision date. However, information concerning the date of the hearing was unreliable. In instances where hearings are held open,[7] the date the hearing was closed is entered

[7] Public Law 103–354 requires that the hearing officer shall leave the hearing record open for a reasonable time to allow for the submission of information by the appellant or the agency to respond to new facts, information, arguments, or evidence presented.

as the hearing date. Also, even though a hearing may take more than I day, the last day of the hearing is normally entered as the date of the hearing.

In order to determine if hearings are held within 45 days of the request, the MIS should include data to reflect the first day of the hearing. This would provide reliable data for determining whether the hearing was held within 45 days of the date of request. Since hearings are not always concluded in 1 day, the MIS should also include data to reflect the date that the hearing was closed. By comparing the closed date with the date of the hearing officer's determination, NAD will have reliable data to determine whether determinations are being made within 30 days of the hearing.

The MIS does not include status codes needed to determine why timeframes were not met. For example, when a hearing is not held within 45 days as required by NAD legislation, certain factors may have caused the delay (i.e., the appellant waived the 45-day requirement, or a hearing officer was unable to schedule the hearing within the timeframes because of a heavy caseload). Similar status codes should be used for other timeframes designated by legislation, regulations, or the director's instructions. We concluded that this type of information is necessary to evaluate the division's compliance with legislative requirements and to ensure the efficient use of resources.

Additionally, we found that NAD assigns new case numbers to remanded cases. Thus, timeframes allowed for all remand cases are the same as for those required for new evidentiary hearings and determinations. We concluded that the director should establish appropriate timeframes for remand cases to ensure that the appellant is provided a timely determination, and that NAD should keep track of the remand cases to ensure that those timeframes are met. (See Finding No. 3.)

Ineffective Management Reports

NAD's MIS produces 13 standard management reports through SAS. We concluded that the standard management reports were inefficient and ineffective. In the past, RD has provided a SAS programmer to query data fields and produce custom reports. However, as of November 1, 1996, RD no longer provides this assistance to NAD. Because NAD no longer has the capability to query on specific data fields in order to produce custom reports, it must now rely solely on its standard management reports.

The "Hearing Officer Backlog Report" and the "Overdue Hearing Decision Report" are generated by NAD's National Office. However, NAD personnel told us that both reports utilize the date that the appeal request is made and are considered overdue when more than 75 days have passed. Therefore, these reports do not reflect whether the appropriate timeframes were met. Additionally, questions concerning the status of the hearings must be investigated by the individual regions. In many instances, regions must contact the appropriate hearing officer to follow up on possibly overdue hearings or determinations.

To create the reports, regional management assistants must retrieve information from each of the two subsystems within the MIS and must manually calculate the totals for overdue hearings, decisions, and caseload reports per hearing officer and per region. The management assistants must also rely heavily on individual casefiles and hearing officers as well as "NASTRACK" screens to follow up on cases for which NAD may potentially exceed timeframes or has apparently exceeded them, and to verify the overall accuracy of the reports. Management assistants also told that NAD's MIS was inefficient because only 4 of 12 reports available to the regions provided useful information in determining the status of the hearings. The reports include the

—reversed, upheld, modified report,
—overdue hearing officer's report,
—overdue decision report, and
—suspended hearing report.

NAD's standard management reports do not provide information useful in monitoring the performance of personnel such as hearing officers. For example, we noted that there were no reports to show the number of times that an individual hearing officer was reversed by a reviewing official or the backlog associated with individual hearing officers. Also, there were no reports to evaluate regional performance (i.e., summary of the number of times hearing officers within the region were reversed, or backlog by region), or reviewing officer performance.

Recommendation No. 1b (To the NAD Director)

Update the MIS in order to provide necessary information to ensure that

—NAD provides appellants timely determinations and complies with legislative timeframes, and

—management reports contain relevant information, provide a means for measuring the performance of the division at all levels, and provide tools for determining where resources are needed.

NAD Response

In its March 21, 1997, response, NAD replied:

One of the highest priorities of NAD is to upgrade its current Management Information System (MIS) in order to provide more accurate and timely data, as well as to provide a more effective monitoring tool to ensure timely hearings and determinations. NAD has requested special initiative funds in fiscal year 1998 to achieve this priority. The request for additional funds stated that the current tracking system was put in production in 1989 to track former Farmers Home Administration (FmHA) appeals and does not fulfill NAD's monitoring and reporting needs. Additionally, the current MIS limits the ability of NAD to furnish the Secretary, the Congress, and other interested parties information regarding the appeals handled by NAD. This vital initiative is being coordinated with the Department's OIRM [Office of Information Resources Management].

OIG Position

We concur with NAD's management decision for this recommendation.

Training from NAD and FSA Could be Improved

Finding No. 5

Our review disclosed that NAD's training program has not provided the support needed to ensure complete and accurate determinations. Past training was provided by judicial colleges which emphasized judicial training for administrative law judges. More recent training provided overviews of how the farm agencies operate day-to-day with some indepth instruction relating to how agency decisions are made. However, the training has not provided NAD's staff with information needed to reinforce their current hearing and review skills or to understand why and under what authorities agencies make decisions. As a result, hearing and review officers have made errors at the basic level and have inappropriately made decisions that are reserved by law or regulations to the agencies (see Finding No. 2). We also found that FSA needs to provide further training to State and county personnel to ensure that adverse decisions are clear and sufficiently supported.

We concluded that NAD training should be directed toward teaching and reinforcing basic skills related to conducting administrative hearings, rendering administrative hearing decisions, and understanding the authorities of hearing officers. The training should help ensure that hearing officers utilize only relevant criteria and evidence and limit their determinations to whether the agencies complied with applicable criteria and considered accurate and relevant evidence in making their adverse decisions. Hearing officers should be trained to avoid broad issues and ensure that determinations address whether the adverse decisions were erroneous. The training should also be directed toward the following areas. (See Finding No. 3.)

—Preponderance of evidence standard
—Burden of proof
—Equitable relief
—Remands
—Acceptance of oral testimony
—Acceptance and use of OGC legal opinions
—Use of subpoena power

Our evaluation also disclosed that NAD had not implemented a quality assurance review system. Such reviews should be used to identify individual and organizational training needs as well as identify needed policy and procedure updates, and assist in evaluating how well NAD is achieving its mission.

FSA should provide additional training to its State and county office personnel to improve the quality of the adverse decisions and documentation, especially adverse decision letters, supporting the decisions. The training should help ensure that COC's and STC's adequately document their adverse decisions (i.e., clearly show the basis for their determinations including summarizing applicable criteria and evidence) and provide sufficient information to the participants and to NAD through their adverse decision letters and any subsequent correspondence when necessary. (See Finding No. 1.)

Recommendation No. 5a (To the NAD Director)

Provide training to review and hearing staff which is directed toward teaching and reinforcing basic skills needed to conduct hearings and reviews and issue appro-

priate determinations, and which focuses on explaining the differences between the authorities of NAD and those granted to the agencies.

NAD Response

In its March 21, 1997, response, NAD replied:

NAD is providing regional training in the area of writing determinations, conducting hearings, and exercising the authorities of NAD this fiscal year. Additional training has been scheduled for fiscal year 1998 in the adjudicative process. Further, each employee of NAD is developing individual training plans in coordination with the Planning, Training, and Quality Control section of NAD. These individual plans include basic curriculum, established by the Deputy Director for Hearings and Administration, as well as advanced courses related to the employee's job responsibilities.

OIG Position

We concur with NAD's management decision for this recommendation.

Recommendation No. 5b (To the NAD Director)

Establish a quality assessment review system.

NAD Response

In its March 21, 1997, response, NAD replied:

The Planning, Training, and Quality Control (PTQC) Section of NAD was established in 1996 to address this area as well as training and the Government Performance and Results Act of 1993 (GPRA). The PTQC Section of NAD has established a quality assessment review system for hearing and review determinations. The assessment reviews will evaluate the quality of hearing determinations; identify common proficiencies and weaknesses to determine training needs; and satisfy GPRA Annual Performance Plan goals. A final report on the review will be submitted annually to the Director. The staff of the PTQC Section has randomly selected 36 cases, 12 from each region, for review in fiscal year 1997 and plans on selecting a minimum of 48 cases in fiscal year 1998. The number of cases reviewed will increase in future years.

OIG Position

We concur with NAD's management decision for this recommendation.

Recommendation No. 5c (To the FSA Administrator)

Provide additional training to State and county office personnel designed to improve the quality of their adverse decisions and assist them in understanding the documentation needed to support the adverse decisions.

FSA Response

In its March 21, 1997, response, FSA replied that it "accepts and agrees with the findings and recommendations of the audit."

OIG Position

FSA's response did not specify the actions it plans to take for this recommendation. To reach a management decision, we need to be informed of the actions to be taken and the timeframe for carrying them out.

EXHIBIT A - FLOWCHART OF THE NAD ADMINISTRATIVE APPEALS PROCESS

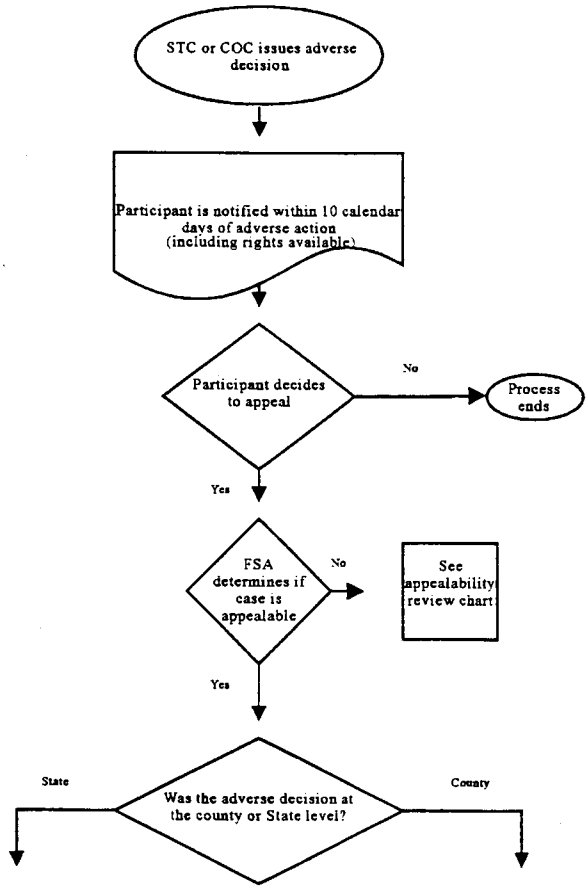
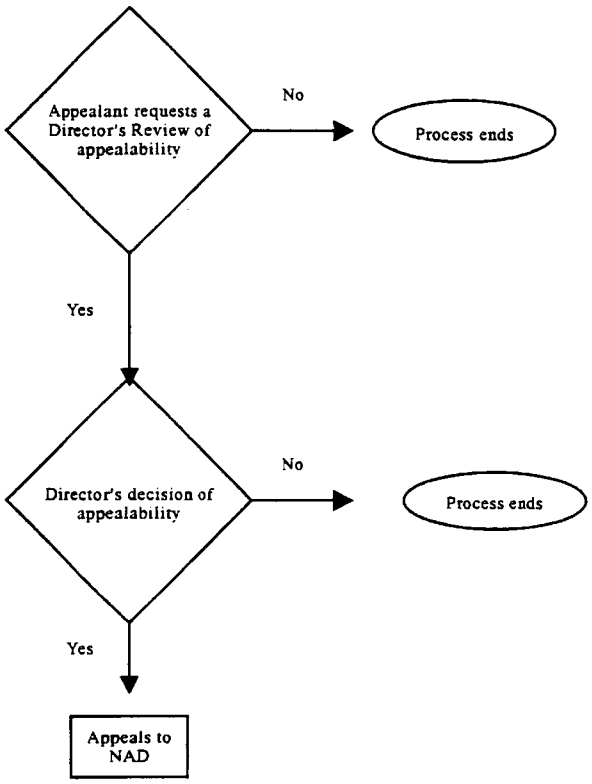


EXHIBIT A - FLOWCHART OF THE NAD ADMINISTRATIVE APPEALS PROCESS

DIRECTOR'S REVIEW OF APPEALABILITY



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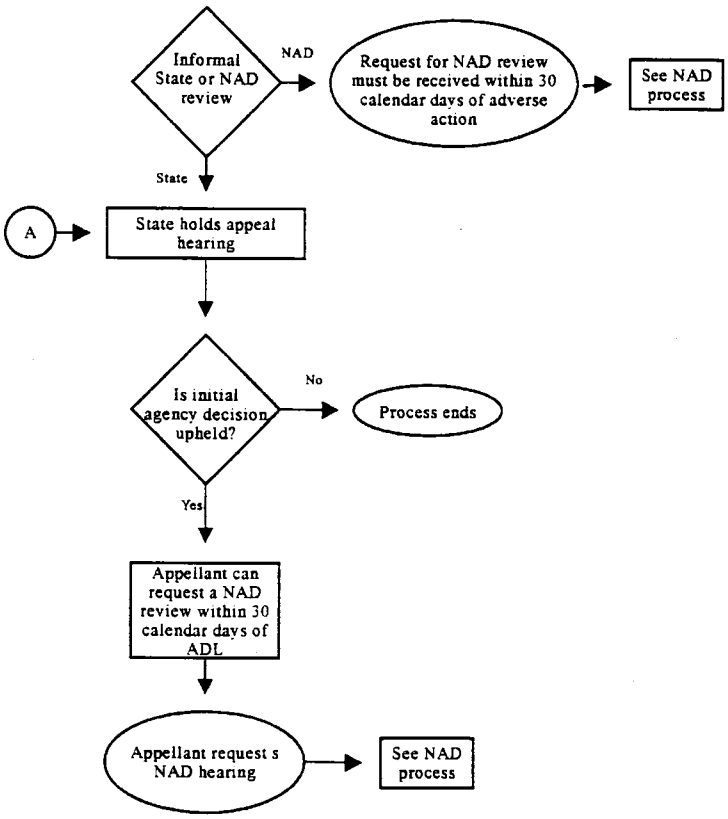

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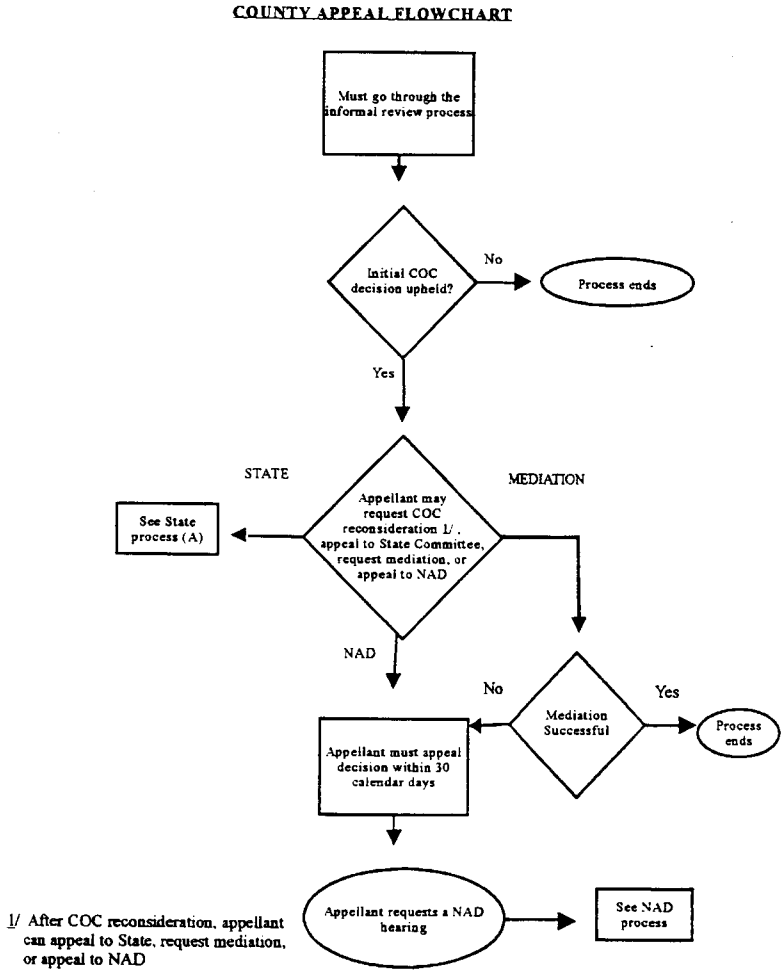
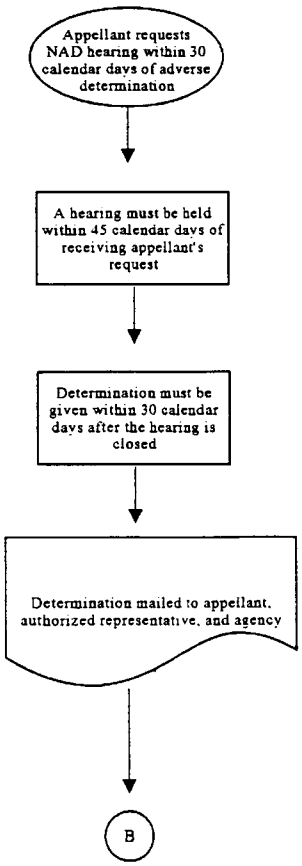


EXHIBIT A - FLOWCHART OF THE NAD ADMINISTRATIVE APPEALS PROCESS

NAD APPEAL PROCESS



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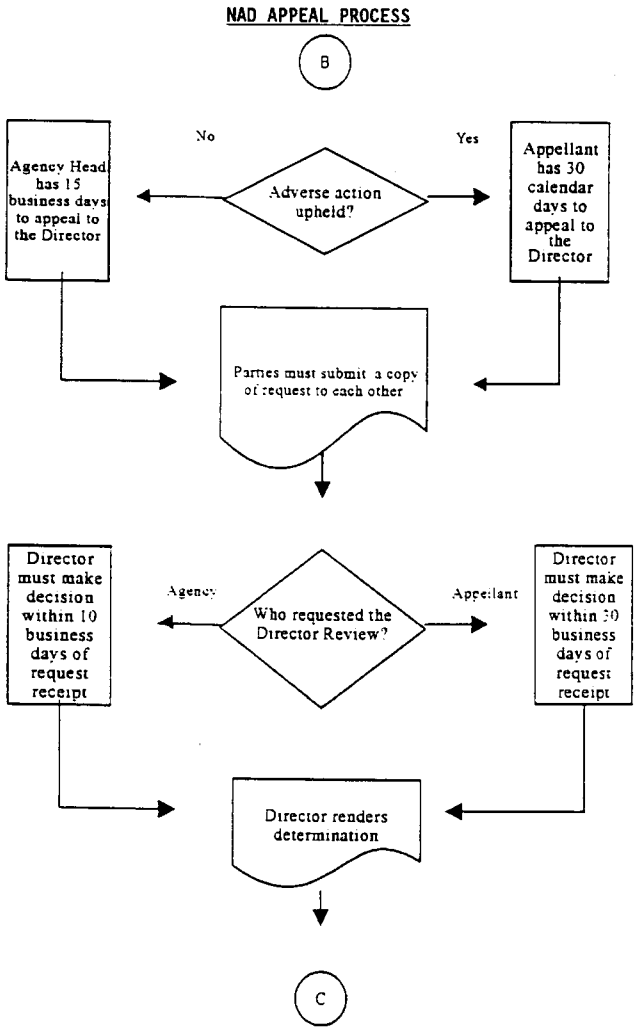

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NAD APPEAL PROCESS

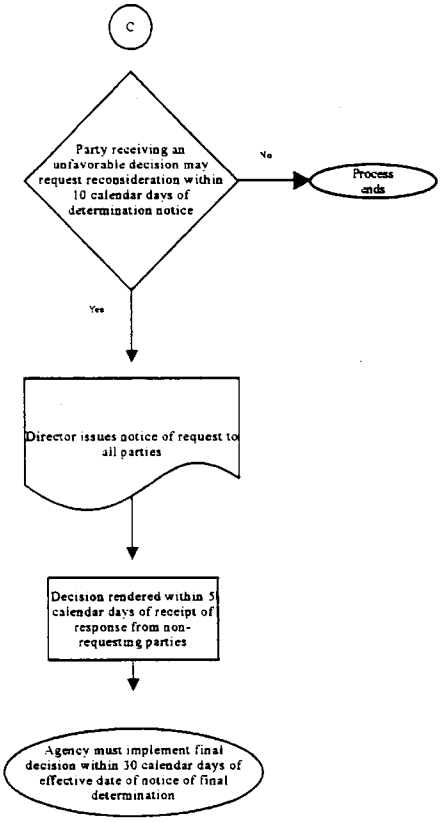


EXHIBIT B—SUMMARY STATISTICS FOR HEARING OFFICER AND DIRECTOR DETERMINATIONS

HEARING OFFICER DETERMINATIONS BY NAD REGION AND AGENCY

[October 1, 1995 through September 30, 1996]

	Agency Reversed	Agency Upheld	Modified
EAST:			
FSA	117	366	23

HEARING OFFICER DETERMINATIONS BY NAD REGION AND AGENCY—Continued

[October 1, 1995 through September 30, 1996]

	Agency Reversed	Agency Upheld	Modified
RD	116	523	17
NRCS	4	36	1
TOTAL	237	925	41
WEST:			
FSA	256	433	68
RD	87	196	6
NRCS	10	15	1
TOTAL	353	644	75
SOUTH:			
FSA	293	274	32
RD	165	371	10
NRCS	4	12	
TOTAL	462	657	42

DIRECTOR'S DETERMINATIONS APPELLANT REVIEW REQUESTS

[October 1, 1995 through September 30, 1996]

	Hearing Officer Reversed	Hearing Officer Upheld	Modified	Total
FSA	13	531	14	558
RD	3	317		320
NRCS		48		48
TOTAL	16	896	14	926

DIRECTOR'S DETERMINATIONS APPELLANT REVIEW REQUESTS

[October 1, 1995 through September 30, 1996]

	Hearing Officer Reversed	Hearing Officer Upheld	Modified	Total
FSA	101	105	8	214
RD	11	6	20	37
NRCS		1		1
TOTAL	112	112	28	252

Note: The tables presented in this exhibit were compiled from information contained in NAD's ''fiscal year 1996 Annual Report.''

EXHIBIT C—SUMMARY OF DEFICIENCIES CITED IN FINDINGS NOS. 1 AND 2

NAD LOG NUMBER	AGENCY	FINDING NO. 1 (ADVERSE DECISION LETTERS)			FINDING NO. 2 (HEARING OFFICER DETERMINATIONS)	
		NEITHER THE EVIDENCE NOR THE CRITERIA CITED	CRITERIA CITED/ EEVIDENCE NOT CITED	EVIDENCE CITED/CRITERIA NOT CITED	RELEVANT CRITERIA NOT ADDRESSED	RELEVANT EVIDENCE NOT ADDRESSED
95000494E	RD				X	X
95001719E	FSA				X	X
95001333S	FSA			X	X	X
95001677S	FSA			X	X	X
95001368S	FSA	X				
95000487W	FmHA [1]				X	X
95001166W	FSA			X		
95001121W	FSA	X			X	X
95001816V [2]	FSA					
95001168S	FSA			X	X	X
95001492S	FSA	X			X	X
95200026S	FSA			X	X	X
95001634E	FSA	X			X	X
96000613S	FSA	X				
95001143W	FSA			X	X	X
95001142W	FSA			X	X	X
95001040W	FSA		X		X	X
95001110W	FSA				X	
95001588W	FSA			X		
95001335S [3]	FSA				X	X
95001334S	FSA					
95001707S	FSA		X			
95001328S	FSA		X			
95001706S	FSA		X			
95001353S [3]	FSA		X		X	X
96000781E	FSA				X	X
96000846E	FSA				X	X
95002271E	FSA	X			X	X
96001275E	FSA	X				
96001454E [4]	FSA		X		X	X
95002249E	FSA				X	X
96000435E	FSA			X	X	X
96000870E	FSA		X		X	X
96000468E	FSA				X	X
96000914E [5]	FSA				X	X
TOTAL		7	7	9	25	24

[1] This case involves the farm operating loan program which is now administered by FSA.
[2] There was no adverse decision letter in the hearing record.
[3] The FSA representative attending the hearings improperly determined that the 90-day rule applied.
[4] This case was also recorded as NAD No. 96000756E.
[5] There was no adverse decision letter in the hearing record.

NAD DECISIONS

Question. What is the Department doing to ensure that the appeals process is not biased against producers?

Answer. The Director has issued specific guidance in a NAD Directive, which is provided for the record. Bias is not established by percentages of results, but in a failure to conform to the highest standards of integrity and objectivity in applying the law. NAD adheres to such standards.

[The information follows:]

MARCH 19, 1999.

NATIONAL APPEALS DIVISION DIRECTIVE NO. NAD–98–08

DISQUALIFICATION OR RECUSAL FROM AN APPEAL

Purpose: The purpose of this directive is to clarify National Appeals Division (NAD) policy on disqualification or recusal from an appeal case. This policy is in addition to, and not in lieu of, any requirements regarding conflict of interest or bias imposed on United States Department of Agriculture (USDA) employees by Federal statutes (including civil rights laws), particularly 18 U.S.C. 201–209, the Standards of Ethical Conduct for Employees of the Executive Branch (5 CFR 2635), and USDA policies and regulations applicable to employee conduct.

Authority: 7 U.S.C. 6992, 7 CFR part 11.

Background: The mission of NAD is to conduct impartial administrative appeal hearings and reviews. The proper adjudication of NAD appeal cases requires an unbiased adjudicating official with no personal interest in the outcome of the case, i.e., a neutral decision maker. The question of impartiality in NAD cases usually takes on one of two forms: bias and conflict of interest. For the purpose of this directive the term "Adjudicating Officer" refers to Hearing Officers, Appeals Officers, the Deputy Director for Hearings and Administration, the Deputy Director for Planning, Training and Quality Control and the Director, NAD.

Policy:

Conflict of interest

A conflict of interest in an appeal can arise in several instances. Examples include, but are not limited to, cases where the Adjudicating Official has a close or familial relationship with a party to the appeal, a financial interest in the outcome of the appeal, or any other circumstance where a gain or loss to the Adjudicating Official flows directly from the appeal determination and interferes with the ability to make an impartial determination.

As a matter of practice, the Adjudicating Official should be attentive to any conflict of interest or the appearance thereof in every case assigned. When such instances occur, Hearing Officers should notify the Assistant Director for the region that they must be recused from the appeal case. Appeals Officers will likewise notify the Supervisory Appeals Officer. When allegations of a conflict of interest are leveled at the Adjudicating Official by either party to the appeal, the Adjudicating Official will notify his/her supervisor, as appropriate and will either recuse himself/herself based on his/her own assessment of the validity of the allegations, or make note in the appeal record that the allegations are without merit. Should the Director recuse himself/herself on an appeal, the Director will assign the case to another Adjudicating Official.

Bias

The concept of bias is more subtle than conflict of interest and more complex to deal with in that it rarely arises as a result of self-assessment by the Adjudicating Official, but usually surfaces as an allegation by a party to the appeal. In NAD appeals, bias is usually alleged as: (1) a prejudgment based on prior rulings (either with the same parties or in a similar case) or attitude toward an issue, or (2) a personal bias (attitude toward a person) expressed as partiality, animosity or favoritism. Prior rulings on the same or similar case, a point of view or prejudgment about regulations, policy or law are rarely grounds for disqualification or recusal. However, personal bias, can be, if proven or admitted. The ethical responsibilities of the Adjudicating Official require recusal if personal bias will affect impartiality. When allegations of bias are made by a party to an appeal, the Adjudicating Official will either recuse himself/herself, if appropriate, or make note in the appeal record that the allegations were made but have no merit.

Responsibilities of supervisory personnel: Assistant Directors for the regions, and the Supervisory Appeals Officer should exercise good judgment in assigning or reassigning cases where there is the appearance of a conflict of interest or bias.

DAIRY OPTIONS PILOT PROGRAM

Question. Please provide this Committee with an update on the status of the Dairy Options Pilot Program.

Answer. The Dairy Options Pilot Program (DOPP) Round II, Notice of Availability was published in the Federal Register on Thursday, February 24, 2000. Producer training sessions are scheduled to begin in some States during late March and early April. All producer Round II DOPP training sessions will conclude by late September, 2000.

Major changes for Round II include the following:

—Producers choosing to participate in DOPP can submit a completed application (contract) within 2 weeks from the date of training. (In Round I, producers were required to sign a contract before they were permitted to attend the training session.)

—The DOPP producer contract will specifically allow participants to refrain from buying milk contract options for future sale if such a strategy is not in their best interest at the time. (Round I contract language required that participants buy contract options equivalent to a minimum of 100,000 pounds.)

—The time that participants have to purchase contract options has been expanded from 2 months to 4 months from the date of the training.

—The forward horizon over which participants can hedge has been expanded from 6 months (from the date contract options are purchased) to 12 months (from the date of training).

Question. During the oral questioning, you indicated that the Department planned to scale up on the DOPP. How, specifically, does the Department plan to do this?

Answer. Section 191 of the Federal Agriculture Improvement and Reform Act of 1996, limited the Secretary of Agriculture from operating a pilot options program in more than 100 counties. During Round I of the DOPP, the program was operated in 38 counties in seven States. During Round II, 61 counties in 32 States were selected. DOPP will be available in the following States and counties: Maricopa County, Arizona; Marin and Sonoma counties, California; Weld County, Colorado; Gilchrist and Okeechobee counties, Florida; Morgan and Putnam counties, Georgia; Gooding, Jerome, and Twin Falls counties, Idaho; Clinton and Washington counties, Illinois; Elkhart and Marshall counties, Indiana; Clayton, Dubuque, and Winneshiek counties, Iowa; Nemaha County, Kansas; Adair and Barren counties, Kentucky; Carroll and Frederick counties, Maryland; Franklin County, Massachusetts; Allegan, Clinton, and Sanilac counties, Michigan; Fillmore and Wabasha counties, Minnesota; Webster and Wright counties, Missouri; Gage County, Nebraska; Chaves, Lea, and Roosevelt counties, New Mexico; Madison and Wyoming counties, New York; Iredell County, North Carolina; Ashtabula, Mercer, and Wayne counties, Ohio; Adair and Mayes counties, Oklahoma; Marion and Washington counties, Oregon; Lebanon and Tioga counties, Pennsylvania; Deuel and Grant counties, South Dakota; McMinn County, Tennessee; Archer County, Texas; Cache and Utah counties, Utah; Washington County, Vermont; Franklin and Rockingham counties, Virginia; Skagit, Snohomish, and Whatcom counties, Washington; Barron and Shawano counties, Wisconsin.

FORAGE CROP INSURANCE PROGRAM

Question. Over the years, farmers have complained that insurance for forage is far too limited, that payments are not always made when they are warranted due to inadequate data collection of forage production. This has particularly been a problem for producers who have historically grown forage for on-farm use and not for sale. Please review for the Committee the status of forage insurance and steps the Department has taken to improve the forage crop insurance program.

Answer. The Risk Management Agency (RMA) currently has three basic programs for insuring forage: (1) actual production history (APH) plan for forage production, (2) a dollar plan for forage seeding, and (3) a group risk plan (GRP). We will provide for the record more details of how the programs operate, steps taken to improve them, and their current status.

[The information follows:]

The forage production APH program and the forage seeding dollar plan have been in existence for more than 20 years, but recently improved through a proposed and final rule in the Federal Register for the 2001 crop year. The APH forage production program is an individual yield based program and improvements include: allowing optional units, providing for acreage reporting dates to be based on regional differences for program flexibility, providing year round coverage for certain California counties, allowing direct marketing, and simplifying the program by eliminating the Winter Coverage Endorsement and building the winter coverage protection into the policy provisions. The forage seeding program has been improved by: adding insurance dates for California and South Dakota, providing for acreage reporting dates to be based on regional differences for program flexibility, allowing an increased replanting payment, if allowed by the Special Provisions, allowing replanting payments in certain California counties, and removing planted acreage requirements for qualifying for a replanting payment.

The GRP forage program was first piloted the 1994 crop year in Minnesota and Wisconsin. While the program remains a pilot, it has been expanded to additional

counties in 8 States. For the 1998 crop year, RMA added acreage intended for rotational grazing as insurable acreage. RMA's determination of payment yield by county and by year is based, in part, on the National Agricultural Statistic Service (NASS) county yield for harvested acres. RMA is currently evaluating methodology and overall effectiveness of the GRP forage program and consulting with other Federal agencies whose data is used for program determinations. RMA is also using a Fellow from the American Academy for the Advancement of Science (AAAS) to help identify other ways to insure forage.

In addition to the programs mentioned above, RMA continues to research options for insuring the quality of forage produced under the Forage Production Policy. In 1999, RMA began offering a Rangeland and Pasture Group Risk Plan. The program is being piloted in 12 counties in Montana, with 2 million acres insured under this policy in its first year. In 2001, RMA plans to offer an insurance product covering producers of forage seed in seven States. RMA is also researching a rangeland and pasture APH product to provide individual coverage for rangeland and pasture producers. These initiatives have included consultation with forage specialists and forage growers to determine their needs.

In 1999, there were 14,000 policies in effect for forage; total acreage insured was approximately 3,680,000 acres. States with the most acreage insured were Wisconsin and Minnesota; in other major producing areas such as Nebraska, Colorado, California and Oregon, participation in the forage insurance program is much lower.

RMA has conducted numerous listening sessions with growers of hay and forage in an attempt to determine concerns of producers. The major concern is the need for quality provisions in the current Forage Production policy. RMA is currently developing a quality provision which will be included in the forage production policy in the future.

Many producers are not interested in a risk management tool for forage production because they produce forage for on-the-farm use only. Since they don't consider this a marketable crop, they often do not keep records. Growers have also advised that in some markets, most notably in California—the nation's largest forage producing area—the ability of growers to harvest multiple cuttings per year provides them with a spread of risk sufficient to preclude interest in a risk management tool.

Question. Are there any legislative changes required to provide meaningful insurance for forage producers, particularly for those farmers who grow forage for on-farm feed?

Answer. No legislative changes are required for RMA to continue its efforts to improve the insurance options available for forage producers including those who grow forage for on-farm feed.

MILK PRICE PROTECTION

Question. In the recently announced safety net proposal, the Administration proposed a new program to provide livestock producers with price protection. Why hasn't the Administration proposed something comparable to provide milk price protection?

Answer. At this time, RMA has neither the legislative authority nor the funding to offer a milk price insurance program or livestock insurance. RMA currently has the Dairy Options Pilot program to help dairy farmers manage risk. The livestock proposal is also for a pilot-scale program. RMA would need to evaluate the performance of both types of programs before expanding them to a national scale.

Question. How could a milk price protection program be structured:

Answer. We have consulted with private insurers who are studying how best to design a milk price insurance program. They inform us that they would begin by trying to adapt the livestock price design to milk, but are unsure if it will work. At this point there are uncertainties involving the availability of price data as well as the different sales patterns—daily for milk, occasionally for cattle.

FSA COUNTY OFFICE PERSONNEL

Question. I understand the Department intends to propose legislation to convert all non-Federal FSA employees to Federal employee status in 2000.Is there a cost associated with this conversion? If so, what?

Answer. The conversion of all non-Federal county office employees to Federal status in fiscal year 2000 will move all employees under one personnel system and improve efficiency of Agency operations. It is not anticipated that the conversion will have a significant cost effect on agency operations.

Question. Have the Federal employee union representatives expressed an opinion on this proposal? If so, what?

Answer. We are unaware of any employee union comments on the specific proposal to convert non-Federal county office employees to Federal status, with their tenure.

RESOURCE CONSERVATION AND DEVELOPMENT

Question. The Resource Conservation and Development Program has been valuable for the rural communities in Wisconsin. Unfortunately, the last remaining RC&D Council in Wisconsin—Glacierland—has not yet received official designation by the Secretary. This is despite an increase in fiscal year 2000 appropriations for RC&D which Congress directed be spent to designate new councils. What is the status of the designation application of Glacierland RC&D?

Answer. There are currently 315 RC&D areas nationwide, including five in the State of Wisconsin. The Glacierland RC&D applied for designation in may, 1997. Although the fiscal year 2000 appropriation provides an increase of $265,000 for RC&D, this funding is needed to cover pay and other cost increases. Similarly, the additional funds proposed in the fiscal year 2001 Budget are requested to cover cost increases, rather than to increase the number of designated areas.

DEBT FOR NATURE

Question. With declining farm income and increased environmental pressures on agricultural lands in Wisconsin, there is a growing farmer interest in the FSA debt forgiveness provisions of the Debt for Nature program. However, I understand that existing funding for Conservation Operations may be inadequate to meet demand for this valuable program. In order to meet estimated demand for Debt for Nature without reducing existing conservation services, what level of increase in Conservation Technical Assistance would be required.

Answer. NRCS estimates that field efforts to address 31,000 contracts affecting 4.2 million acres would require over $50 million in technical assistance funding and could require up to 775 staff years of effort. This estimate is based on a 20 percent participation rate in the program by the 157,000 borrowers who have loans secured by real estate. In some states, such as Wisconsin, landowner interest is very high and preliminary efforts to deliver the program reveal that the participation rate may be greater if a concerted effort is made to market the program. In addition to technical assistance it would be important for financial assistance authority and funding to be available.

FLOOD CONTROL STRUCTURE REHABILITATION

Question. The fiscal year 2000 appropriations act included language directing the $8 million be available for technical and financial assistance for pilot rehabilitation of upstream structures in four states. Please provide the status of this effort in terms of criteria for locating pilot areas and a timetable for action.

Answer. NRCS is currently working with local communities, project sponsors and state dam safety officials in Ohio, Wisconsin, Mississippi, and New Mexico on their high priority dam rehabilitation projects. The projects underway are those that have some of highest risk to public health and safety. These projects will demonstrate the variety of alternatives that will be involved and issues that will be encountered with rehabilitation, as well as the many benefits. We are currently assisting project sponsors with planning, design and implementation. There is currently over $540 million in known dam rehabilitation needs nationwide and communities in these 4 States are already on the waiting list for assistance. NRCS has provided watershed project sponsors the opportunity to apply for Pilot Rehabilitation Project funds provided in the fiscal year 2000 Appropriation Bill. Construction should begin during this summer and continue through 2001.

Question. Has the Department established a priority national listing of endangered structures, and if so, what criteria was used and please provide a copy.

Answer. The Department has not established a priority national listing of endangered structures. Currently there is no statutory authority, other than annual appropriation language to conduct an assessment or provide assistance.

Question. If not, are there plans to do so? Explain.

Answer. Since there is no statutory authority for rehabilitation, there are no plans to develop criteria for ranking endangered structures. The Administration's budget includes $4 million in subsidy budget authority for a new $60 million loan program to assist State and local governments that wish to rehabilitate dams. None of the costs for rehabilitation activities (including any technical assistance costs such as planning, design, and engineering costs) shall be borne by the Department of Agriculture. If NRCS provided technical assistance, all costs would be required to be reimbursed by watershed sponsors.

CONSERVATION AND DAIRY

Question. There is growing concern among dairy farmers about the impact of state and federal environmental restrictions and the lack of voluntary conservation programs to assist them. With the exception of EQIP, other conservation programs have been geared primarily to cropland and crop producers. Please tell this Committee how the Department plans to meet the conservation needs of dairy farmers under existing programs as well as under the Administration's new conservation initiative.

Answer. Under the proposed conservation programs proposed as part of the Administration's Farm Safety Net, more farmers would be included in national conservation programs and more funding would be available for current USDA conservation programs. The Conservation Security Program (CSP) would be open to farmers and ranchers nationwide who voluntarily practice good stewardship on cropland, pasture and range grazing land, hayland, and other agricultural lands for the production of agricultural products. Thus, many dairy farmers would be eligible for CSP. The CSP, proposed to be funded in the amount of $600 million in both fiscal years 2001 and 2002, would provide direct annual payments to producers to financially recognize them for good land stewardship that produces the environmental benefits which we all enjoy—clean water and air, reduced soil erosion, improved wildlife habitat, and sustainable soil. Payment levels would be based on the comprehensiveness of producers' conservation efforts. The $125 million increase in the Environmental Quality Incentives Program would mean that 50 percent more farmers and ranchers would receive cost share to implement conservation practices. Of this increase, 50 percent must be targeted for livestock production. The announced increases in other programs would be available to eligible dairy farmers as well, including the Wetland Reserve Program to enroll 250,000 acres, the Wildlife Habitat Incentives Program to $50 million per year, the Farmland Protection Program to $65 million per year, the Conservation Reserve Program to 40 million cumulative acres, and the "continuous sign-ups" bonuses under the Conservation Reserve Program to $125 million in fiscal years 2001 and 2002. $100 million in continuous signup bonuses will be provided in fiscal year 2000.

In addition to the technical and financial assistance that would be provided through the Conservation Initiative, a total of nearly $56 million in technical assistance will be specifically directed to animal feeding operation (AFO) owners this fiscal year through the Conservation Technical Assistance activity and will increase to $88 million next fiscal year.

Question. Additionally, there is concern that NRCS has insufficient resources to help livestock producers develop nutrient management plans under the time frame proposed under the Unified Strategy for Animal Feeding Operations. In order to help livestock and dairy producers meet the deadlines of the strategy, how much additional staffing would be required and is that reflected in the Administration's fiscal year 2001 budget proposal?

Answer. NRCS estimates that approximately 300,000 animal feeding operation (AFO) owners and operators will seek NRCS comprehensive nutrient management planning technical and financial assistance. Preliminary information derived from the NRCS Workload Analysis System indicates that it takes, on average, 235 hours of technical assistance to plan, design, and provide appropriate oversight, according to NRCS technical standards, the components related to manure management for a typical AFO. This average is currently under review to adjust for expected efficiencies. NRCS anticipates that partners will contribute about 14 percent annually, or about 335 FTEs per year—their expected level for fiscal year 2000. Assuming that the remainder is done by NRCS and that CNMP planning is completed in 2009, and that CNMP implementation assistance is needed through 2012, preliminary estimates indicate that NRCS will need approximately 2,935 FTEs per year over the next 10 years. Fiscal year 2001 budget levels propose approximately 800 FTEs for AFO planning and implementation assistance.

CONSERVATION TECHNICAL ASSISTANCE

Question. The budget request includes an increase in the Conservation Operations account. We continue to hear concerns from conservation districts and from other stakeholders that the USDA county-based delivery network is under increasing strain due to declining staff and increasing workload. Some have suggested that the increase in the budget may not be sufficient to meet current demand for conservation assistance let alone the new conservation initiative. In any case, if the $1.3 billion in new conservation programs included in the Farm Safety Net Initiative is enacted, I expect that problem will be exacerbated. Will your requested budget levels

for Conservation Operations be sufficient to carry out the conservation programs currently authorized and those included in the new initiative?

Answer. The requested funding levels for the Conservation Technical Assistance program and the CCC funded mandatory conservation programs in the Farm Safety Net proposal provide sufficient technical assistance to implement these expanded programs. Specifically, within Conservation Operations, the President's Budget proposes an $86 million increase and the farm safety net proposal includes language to provide an additional $75 million in fiscal year 2001 for technical assistance related to certain conservation programs including the Conservation Reserve Program.

COUNTY-BASED STAFFING LEVELS

Question. Concern about inadequate staffing at USDA Service Centers has not been limited to conservation. We've seen, in particular, problems with the delivery of emergency assistance because of inadequate staffing levels. Would you also comment on the other county-based agencies in regard to their staffing needs?

Answer. Staffing levels in all three of the county-base agencies have declined below the levels projected in the Department's streamlining plan and reflect levels that can be supported given current budgets and other demands, such as the need to maintain information technology (IT) systems. Recent budgets for these agencies have been developed on the basis that funding would be provided for implementation of a Common Computing Environment (CCE) that would provide a single, modern system to serve the needs of the agencies and their customers more efficiently than the patchwork of the existing systems. Actual appropriations for the CCE have fallen far short of requested and needed levels, meaning that agency staffs do not have the benefit of modern technology and agencies must continue to maintain aging systems. Further, in the case of Rural Development, the fiscal year 2000 appropriation or salaries and expenses was $8 million below the request.

Question. If there is additional emergency assistance provided in fiscal year 2001, will the Administration's budget proposal for county staffing be sufficient to deliver that assistance in a timely manner?

Answer. The FSA budget proposal does not include any assumption of emergency assistance in fiscal year 2001, other than a small amount of carryover activity for programs legislated in fiscal year 2000. If additional emergency assistance legislation is enacted, we will work with OMB and the Congress to address requirements.

CONSERVATION RESERVE PROGRAM

Question. In the fiscal year 2000 Appropriations Act, three separate general provisions were included that placed limitations or required changes to the Conservation Reserve Program. These are found in sections 763, 764, and 765. Please describe the effects of these provisions on the implementation of the CRP in fiscal year 2000 and include information regarding how these provisions affected farmer participation and the conservation goals of the program.

Answer. The effects of Sections 763, 764, and 765 on the implementation of the CRP in fiscal year 2000, along with other related information will be provided for the record.

[The information follows:]

Section 763 rescinds Section 1232(a)(11) of the Food Security Act of 1985, as amended (1985 Act), commonly referred to as Conservation Reserve Program Highly Erodible Land (CRP HEL). Because this section amended the 1985 Act, no further action is necessary. The provisions of section 763 may increase farmer participation in the program and are consistent with the goals of the program to reduce soil erosion, promote water quality, and enhance wildlife habitat. The Farm Service Agency amended 7 CFR part 1410 withdrawing CRP HEL as a producer obligation and issued instructions to the field implementing this section.

Section 764 permits land to be enrolled with minimal environmental value at much greater cost by prohibiting implementation of FSA's Notice CRP–338 which was issued with NRCS concurrence regarding contour grass strips. Section 764 permits enrollment of these existing strips installed according to NRCS standards. Enrollment of this land with little erosion improvement would cost an estimated $25 per ton compared to the historical program average for cost-share practices of $.62 per ton. Producers utilizing this provision would be required to refund the federal cost of any remaining value of the federal cost of the original installation. The provisions of section 764 will increase farmer participation in the program but appear to be inconsistent with the goals of the program to reduce soil erosion.

Instructions implementing section 764 are in development for issuance to field offices.

Section 765 provided that none of the funds made available under the Act could be used to implement Notice CRP–327 or any related administrative action, but further clarified that the section does not apply to any lands for which there is not full compliance with the conservation practices required under terms of the CRP contract. Notice CRP–327 prohibited commercial shooting preserves on CRP acreage.

The Farm Service Agency worked with industry representatives in fiscal year 2000 to develop procedures to implement the provisions of section 765. Although fee hunting has been allowed on CRP acreage since the program's inception, commercial shooting preserves on which the cover is manipulated are not compatible with the authorizing statute, which prohibits making commercial use of the forage on CRP acreage except during droughts or other emergencies. The provisions of section 765 have had no known impact on farmer participation in the program and although the provision includes language requiring compliance with the CRP contract, this is difficult.

DISCONTINUATION OF SECTIONS 764 AND 765

Question. If the Department does not support continuation of these changes in fiscal year 2001, please specify with justifications.

Answer. The Department does not support the continuation of Section 764 because:

—Contour Grass Strips were developed to address sheet and rill erosion as rainwater washes across a field and many farmers installed these strips according to NRCS standards which did not require a grass cover.

—Enrollment of land with little erosion improvement would cost an estimated $25 per ton compared to the historical program average for cost-share practices of $.62 per ton.

—The Department also does not believe continuation of Section 765 is necessary. FSA will continue to work with landowners and hunting interests to maintain the purposes of CRP while permitting fair hunting opportunities.

FUNDING FOR ROUND II EC/EZ

Question. In fiscal year 2000, specific set-asides were provided under rural development programs for EC's and EZ's. In addition, funding was also provided directly to benefit Round II EC/EZ's. Please provide information relating to the distribution of funds under these set-asides.

Answer. The $15 million in discretionary grants is distributed to the second round empowerment zones and enterprise communities as follows: $2 million each to the five empowerment zones and $250,000 each to the 20 enterprise communities. These funds are used in a variety of ways, but for the most part, provide a financial base that allows the communities to develop long-term investment strategies, and provide a source of funds that are used to attract other investment capital, including the Rural Development funds that are set-aside for use by the empowerment zones and enterprise communities.

RUS FFB ACTIVITY

Question. The fiscal year 2000 Appropriations Act provided a program level of $1.7 billion for FFB electric loans. The budget request for fiscal year 2001 reduces this program level almost in half even though there is very little budget authority exposure. What is the reason for this reduction?

Answer. The fiscal year 2001 budget request for RUS guarantee funding totals $1.2 billion. This represents a $500 million reduction when compared with the $1.7 billion that Congress provided in the fiscal year 2000 Appropriations Act.

The Agency believes the additional $500 million that Congress provided in the fiscal year 2000 Appropriations Act will help to reduce the large backlog of loan applications the Agency has on hand. In light of this, we believe that the $1.2 million is adequate to meet the electric borrowers' capital needs that are anticipated during fiscal year 2001.

Question. Why is demand not adequate given the need expressed by the rural electric community for expanded loan programs?

Answer. There has been extensive need expressed by the rural electric community. In a effort to meet the capital needs of the electric borrowers while minimizing the budgetary impact, this Administration proposed new lending authorities in the fiscal year 1999 and fiscal year 2000 budgets. We now believe we can adequately address the demand through the FFB program.

Question. Do you think the proposed $400 million program level for Guaranteed CFC/CoBank loans will meet the demand of borrowers as a satisfactory alternative to reductions in Direct 5 percent and FFB loan levels?

Answer. We are hopeful that borrowers will utilize the CFC/CoBank alternative, if they are unwilling to utilize an FFB funded guarantee program. The CFC/CoBank option is not intended to serve as an alternative to the Direct (5 percent) hardship loan program. We believe the $50 million request for hardship loans in fiscal year 2001 will be adequate to meet the anticipated need. The flow of hardship loan applications has slowed recently.

NATIVE AMERICAN PROGRAMS

Question. The fiscal year 2000 Appropriations Act provided a specific set-aside for water and wastewater programs for Native Americans. Please provide the status on this initiative.

Answer. As provided in the fiscal year 2000 Appropriations Act, the Rural Utilities Service has allotted $12 million for Native Americans. That amount is being retained in the National Office reserve. State Offices may request funds from the National Office reserve. The Rural Utilities Service has limited individual grants to $1 million. As of March 1, 2000, $2,555,500 has been allocated for 7 projects. Based on inquiries received, it appears that all of the funds will be used.

WIC VENDOR ACCESSIBILITY

Question. I am concerned about the way food assistance is, in some instances, distributed to those in need. For example, I understand USDA is considering a rule change for the WIC program that might limit the availability of WIC-participating retail outlets. What is the rationale for this limitation and what impact will it have on the ability of some WIC-eligible persons to participate in the program?

Answer. USDA policy is that WIC retailers should be accessible to WIC recipients and that they should carry and have available all of the WIC foods, taking into account cultural preferences. There is no effort to reduce the number of retailers. Stakeholders are cognizant that there is a cost to the States to adequately manage and monitor retailers. States seek to maintain an appropriate number—balancing recipient access and the State's ability to adequately monitor the program to prevent abuses. We anticipate no particular change affecting rural communities. The changes to the rules are to ensure that only qualified retailers, accessible to recipients, are authorized.

PUERTO RICO'S EBT PROGRAM AND PROGRAM ABUSE

Question. Another distribution problem, unfortunately, is tied to program abuse or, in some cases, rules that allow people to circumvent the intent of nutrition programs. For example, I understand that an EBT pilot has been implemented in Puerto Rico that has few if any restrictions on how nutrition assistance is distributed and potentially could impair the program's ability to get the intended benefits to the most vulnerable participants such as children. Could you describe what the Department is doing to curtail program abuse, and can you speak to the situation in Puerto Rico and what you are doing to make sure benefits are properly distributed?

Answer. First, with respect to Puerto Rico's program—based on a congressional mandate, Puerto Rico began issuing cash nutrition assistance benefits in lieu of food stamps in the early 1980's. Several studies of this benefit delivery system established that it did not significantly affect recipients' expenditures on food. In 1999, when Puerto Rico began to pilot EBT, no new limitations were placed on the nutrition assistance funds. However, I am told that Puerto Rico will look into the possibility of limiting all or part of its EBT benefits to food purchases sometime in 2001.

With respect to efforts to curtail program abuses via EBT, the program has been having growing success. But EBT is not a panacea that can address all program waste, fraud and abuse. And, for a cash program like Puerto Rico has been operating, much of the anti-fraud advantages of EBT are moot. The cash system does not have "ineligible items" and trafficking.

In the continental U.S., however, the Food and Nutrition Service aggressively tackles fraud via the EBT system.

I will ask the Food and Nutrition Service for additional detail on both of these topics.

[The information follows:]

FNS aggressively tackles trafficking food stamp benefits for cash to ensure benefits are used properly and not diverted from their intended purpose. FNS actions to detect and punish store traffickers include:

The Anti-Fraud Locator Using EBT Retailer Transactions (ALERT) system helped the FNS Compliance Branch target its investigations of authorized stores. In fiscal year 1999, the Compliance Branch completed 517 retailer investigations which involved the trafficking of food stamp benefits for cash. Due to serious violations of program benefits, including trafficking and selling ineligible items such as alcohol or tobacco, 1,365 stores were disqualified from being able to accept food stamps or sanctioned with Civil Money Penalties in fiscal year 1999.

To increase States' ability to finance activities to disqualify recipient traffickers, the Food Stamp Program has issued a proposed rulemaking which would allow the States to establish claims for the misused benefits and to retain 35 percent of collected amounts. This regulation is expected to be published in final this year.

Puerto Rico began issuing cash nutrition assistance program benefits in July 1982. Studies of this benefit delivery system in 1983 and 1985 established that issuing benefits in this form did not significantly affect recipients' expenditures on food.

Public Law 99–198 of December 23, 1985 allowed the Commonwealth to continue using its cash program which has remained in operation since then. A pilot EBT program was implemented in two local offices in Puerto Rico in November 1999. This EBT project is scheduled to be expanded to the entire Commonwealth within a year. Puerto Rico will look into the possibility of limiting all or part of its EBT benefits to food purchases sometime in 2001.

BREAKFAST PILOT

Question. Last year Congress provided USDA with new funding of $7 million to carry out a pilot project to research the connection between consumption of a nutritious breakfast and academic performance. Please provide the Committee with an update on the status of the School Breakfast Pilot.

Answer. USDA is continuing preparations to commence the demonstration of universal free school breakfast in School Year 2000–2001. A rigorous study design has been developed with the assistance of a contractor and a panel of national experts. A number of school districts, across the nation have also expressed interest in this, and selection of an evaluation contractor is underway.

[The information follows:]

A Federal Register notice announcing the application process for school food authorities (SFAs) who wish to participate was published in early December, 1999.

School districts throughout the country have expressed interest in participating in the pilot project demonstration. A total of 383 school districts from 43 States submitted applications. Selection of the six school districts to participate in the pilot projects will occur in early Spring. These districts will be selected to be geographically dispersed, with a blend of urban and rural areas, and consideration given to socioeconomic conditions.

In addition, the process of selecting an evaluation contractor to collect and analyze data and produce a final report is underway. The request for proposals (RFP) for the evaluation of the pilot projects were mailed to over 60 potential offerors in February, 2000. We expect to make a final selection of the evaluation contractor by early Summer.

SCHOOL BREAKFAST PARTICIPATION

Question. Several years ago, Congress eliminated funding for school breakfast start up funds. However, in some states, including Wisconsin, school participation in breakfast lags well behind participation in the National School Lunch program. What steps is USDA taking to improve participation in school breakfast?

Answer. In recent years, we have made a concerted effort to enhance the availability of the School Breakfast Program. These efforts have borne fruit. The number of schools participating in the program and the number of children receiving breakfasts have more than doubled.

A number of factors undoubtedly contributed to this growth: the start-up grants may have encouraged schools to participate because the cost of special equipment was defrayed; also, Congress added 6 cents on top of the basic reimbursement. And, just as importantly, schools and communities recognized the value of school breakfasts for both health and learning. Currently, about 7 million children participate daily at about 70 thousand schools around the country.

Nevertheless, we are aware that participation in the breakfast program lags far behind the numbers for the National School Lunch Program, and we are working with our partners in the U. S. Department of Education to help school administrators understand the contribution that school breakfasts can make to academic achievement and to deal with local issues such as bus schedules and to try to have

schools provide children with an environment conducive to eating school meals and allowing them enough time to do so. We must stress, however, that in some ways the most important factor is parental and community involvement. If people understand that breakfast is a vital part of the school day, they will be receptive to making the breakfast program available in their schools and encouraging their children to eat the breakfasts that are available to them.

SCHOOL BREAKFAST REIMBURSEMENT

Question. I am concerned by anecdotal reports that the reimbursement schools receive for school breakfast, even for free meals, does not cover the costs of providing the meals. Has USDA examined this concern? If so, what has it concluded?

Answer. The Food and Nutrition Service completed a study on school lunch and breakfast costs in the past few years. The study suggested that the revenue stream to schools, including Federal and child payments, exceeded the cost of meal production. Funding for breakfast program schools generally were able to deliver meals within the maximum reimbursement rates provided. The majority of breakfasts are reimbursed at the "severe need" free meal reimbursement rate of $1.30, with many others supported at the regular free rate, $0.21 less. Let me provide some additional information from the study.

[The information follows:]

The Department has conducted a study, the *School Lunch and Breakfast Cost Study,* concerning food costs and school revenues. The study, on a statistically representative sample of schools which participate in the National School Lunch and School Breakfast Programs, examined food preparation and other costs (e.g., utilities) which schools incur in operating these programs, and compared these costs with the total revenues the schools receive from USDA reimbursements, student payments for reduced price and paid meals, and other program revenue sources.

The study found that, overall, the revenues from all sources obtained from reimbursable lunches exceed the cost of producing these meals, and that " SFAs appear to subsidize breakfasts and non-reimbursable meals with surplus revenues derived from reimbursable lunches." In other words, food service managers treat their nonprofit food service accounts as an aggregate; they balance total revenues for all the programs they operate, but not for each program separately. Because nearly all schools that participate in the breakfast program also participate in the lunch program, most school food service accounts operate on a break-even basis.

Schools with a high percentage of low-income students are also eligible to receive additional reimbursement for breakfasts to free and reduced price eligible students if their costs of production for these meals exceed the regular reimbursement rates, less any payments received from students for reduced price breakfasts. Schools may be reimbursed for their full production costs for these breakfasts up to a maximum rate in school year 1999–2000 of $1.30 for a "severe need" free meal, and $1.09 for a free breakfast. Reduced price meals are reimbursed at $0.21 less, and paid meals are reimbursed at $0.21 in all schools. In fiscal year 1999, "severe need" breakfasts accounted for 76 percent of all free and reduced price breakfasts, and 65 percent of all program breakfasts served nationwide.

The Department is required by law to establish uniform reimbursement rates and procedures for school food programs. These rates may not exceed costs in a some very high cost areas.

However, the available information suggests that reimbursement levels do not hinder schools' participation in the breakfast program. Approximately 73 percent of schools which participate in the school lunch program also participate in the breakfast program.

The Department's *School Nutrition Dietary Assessment* study found that those which do not participate have decided not to do so based on perceived lack of need for the program, scheduling and busing issues, or other issues not related to the level of program reimbursements. Therefore, it appears likely that the level of reimbursement for breakfasts is adequate.

TEMPORARY INCREASE IN BREAKFAST REIMBURSEMENT RATE

Question. Would a temporary increase in the per meal reimbursement for school breakfast encourage additional school participation?

Answer. It is possible that some schools might start up a program if the initial reimbursement were higher. Although, with 73 percent of school lunch schools in the breakfast program, and the size of the reimbursement rate not really figuring into the decision of the other schools not to participate, we believe the number of new schools would not be large. While the costs could be kept down by limiting such a proposal only to new schools, since the schools would know that the higher rates

are temporary, we think they will be reluctant to make the investment to begin and continue to operate the breakfast program.

WIC FARMERS MARKET FUNDING DELAYS

Question. The fiscal year 2000 Appropriation Act provides for $10 million to be made available for the WIC Farmers Market Nutrition Program within 45 days of enactment and an additional $5 million to be made available upon a determination that caseload will be maintained. Since for planning purposes it is important for farmers market groups to know well in advance the level of funding available for the program, a long delay in the availability of the contingent $5 million could have been problematic. Have there been any problems regarding the availability of total funding for the WIC Farmers Market program due to the time of the release of funds?

Answer. Yes, some States have complained that delays have occurred in program implementation due to the uncertainty created by the contingency provision. We would much prefer that the entire appropriation be made available at the start of the year.

IMMEDIATE AVAILABILITY OF WIC FARMERS MARKET FUNDING

Question. If the WIC Farmers Market Program funding is not moved to the Commodity Assistance Program (as suggested in the budget request) but instead is retained in the WIC account, would it be advisable to include language that would immediately make available the full amount (whether the level be $15 or $20 million) even though a contingent amount would be based on the availability of carryover funds?

Answer. Yes, we would prefer that the full amount be made available at the beginning of the year.

CHILD AND ADULT CARE FOOD PROGRAM POOLING

Question. In Senate Report 106–80, the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill, 2000, I asked for language to be inserted that said:

"The Committee urges the Department to provide technical assistance and guidance to those states not maximizing the number of children served under the Child and Adult Care Food Program in their jurisdiction. These states should be encouraged to follow the example of those states that pool a limited amount of Title XX with Child Care Development Block Grant (CCDBG) funds to meet the technical requirement of the current law."

I also had similar language included in the Senate Report on the Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriations. It said:

"The Committee recognizes that some states have successfully pooled resources from the Social Services Block Grant (SSBG) to maximize the number of children served under the Child and Adult Care Food Program. The Committee believes that the Department could provide technical assistance and guidance to other states so that they may use SSBG resources to serve more children in the CACFP."

What has the Department done to carry out the directive in Senate Report 106–80 described above?

Answer. I know that we have done our best to carry out the intent of this language. By encouraging States to pool funding streams with Title XX, they can increase the number of proprietary child care centers with 25 percent or more low income children that can participate in CACFP. Expanding the supply and quality of child care is a national objective, so this is very important to us. Allow me to submit some additional information as to how we addressed this.

[The information follows:]

The issue here is the limitation on proprietary child care programs that allows them to participate in CACFP only if 25 percent or more of their children receive support from Title XX, a Federal social services block grant program that assists low income children and other low income persons. Over the years, States have found it necessary to use more and more of their Title XX funds for purposes other than child care, often using other funds to help the low income households with their child care costs. This has had the unintended consequence of disqualifying proprietary child care providers serving the same low income children, simply because some non-Title XX support for low income children is being used. The law, however, permits non-Title XX money to function like Title XX money, if it is put into the same account as some Title XX money. Thus, with a portion of funding coming from Title XX and the rest coming from other sources, all of the funds can function like

Title XX funds for the purpose of measuring the extent of federal support for low income children that a proprietary child care center may be receiving. If they have 25 percent or more supported by this pooled Title XX money, they may qualify for CACFP.

Over the past several years, the Department has provided guidance and technical assistance to State agencies relative to the pooling of Title XX funding. The most recent formal guidance was issued to all Child and Adult Care Food Program State administering agencies on July 6, 1999. That memorandum informed State agencies of the Congressional interest in and support for pooling of Title XX funding; provided guidance on how pooling can be accomplished; and offered technical assistance to States in establishing a pooling mechanism.

In the near future, the Department will be issuing a second memorandum to State agencies. This memorandum will provide information on the Department's recent efforts in this area, including the technical assistance that has been provided to four States, three of which are now using pooling. It will also contain a clarification to the earlier memorandum that may facilitate other States' use of this process.

COORDINATION WITH HHS RE NUTRITION EDUCATION

Question. What is the Department doing to coordinate with the Department of Health and Human Services in these efforts?

Answer. We have worked with the Department of Health and Human Services, the States and others in this effort. Allow me to have the Food and Nutrition Service provide some additional detail.

[The information follows:]

We have worked with the Department of Health and Human Services on this issue in the past in order to fully understand the structure of Title XX funding to the States. We have also worked with Congressional staff, members of the National Child Care Council (a largely proprietary child care organization) and State Title XX and Child Nutrition agencies. As a result of these efforts some States have already begun pooling some portion of their Title XX funds, and other States, including California, are moving toward pooling. The Department issued a memorandum in 1999 encouraging States to consider this approach, and we will be issuing a follow-up memo on this topic in the near future.

AFTER-SCHOOL CENTERS

Question. In Senate Report 106–80, the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill, 2000, I asked for language to be inserted that said:

"The Committee urges the Secretary to develop a better strategy to encourage participation in after-school centers by adolescents and older children through programs available under the authorities of the Child Nutrition Act. The Committee is concerned that members of the qualifying age group who lack proper after-school supervision will be more prone to participation in undesirable activities. The use of nutritional programs should be considered an appropriate tool to attract adolescents to a more risk-free environment which should help improve academic performance and reduce the incidence of juvenile crime. In addition, the Secretary is directed to provide information to the Committee relating to the effectiveness of such a program and provide views on the advisability of expanding the availability of free or reduced meals under this authority to children over the age of 12."

Question. What progress has the Department made in developing the strategy asked for in this language?

Answer. Improved child care accessibility and quality is a national priority. We have developed and implemented a strategy to encourage the use of this new after school snack program authority. For example, USDA entered into a partnership with the U.S. Department of Education (21st Century Community Learning Centers), as well as the Department of Justice and its numerous programs designed to help "at risk" youth. USDA has also done promotional work with various organizations, particularly the American School Food Service Association, the National School Age Child Care Alliance, and the National Head Start Conference and more. We have even helped develop a web site to provide one-stop-shopping of Federal resources for local after school programs.

Please allow me to have FNS submit some additional detail on these efforts.

[The information follows:]

The enactment of the William J. Goodling Child Nutrition Reauthorization Act of 1998, Public Law 105–336, significantly expanded the availability of after school snack programs. It made snack reimbursements available to every child through age 18 in every public and nonprofit private school of high school grade and under in

the Nation. Previously eligibility was limited to a small number of schools, and to participants only through the age of 12. It also made snacks available to public and nonprofit private organizations that provide after school programs for children through age 18 in areas in which at least half of the children are eligible for free and reduced price meals. Such programs could operate for participants only through age 12 prior to the Act.

Since the enactment of Public Law 105–336, the Department has undertaken a number of activities to encourage participation in the after school snack programs. The Department has: entered into a partnership with the U.S. Department of Education (21st Century Community Learning Centers), as well as the Department of Justice and its numerous programs designed to help "at risk" youth; done promotional work with a number of organizations including the American School Food Service Association, the National School Age Child Care Alliance, and the National Head Start Conference; conducted "Roll Out" sessions in the seven Food and Nutrition Service regions; joined other Federal agencies involved in the Federal Support to Communities Initiative which has developed a web site to provide one-stop-shopping of Federal resources for local after school programs; begun participating in "Federal Fairs" at various sites throughout the Nation at which agencies will promote their after school programs; and developed and distributed an after school snack "success stories" booklet to State agencies. We can assure the Committee that the Department will continue its efforts to make the availability of after school snack programs known to those who might benefit from them.

The Department shares the Committee's belief that after school programs are an effective way of providing supervision to a vulnerable population and that the availability of nutrition benefits can be helpful in drawing children to these programs. For that reason, making these program available to school children through the age of 18 in non-school programs, rather than only in school settings, is something the Department would support in principle. However, given the fact that the after school snack programs established under Public Law 105–336 are relatively new and that information on them is limited, we believe that it is premature at this time to provide the Congress with an assessment of their effectiveness. This is something that could be done after two or three years of program operation.

EXPANDING AFTER SCHOOL MEALS TO CHILDREN OVER 12

Question. Also, has the Secretary developed an opinion yet on advisability of expanding the availability of free or reduced meals in after-school programs to children over the age of 12?

Answer. The Department has been working internally with its regulations to provide programs with a more "seamless" structure, with the idea of making it easier for schools to use school meals programs for more of the student's nutritional needs. Because after school programs appear to be an effective way of providing supervision to a vulnerable population and that the availability of nutrition benefits can be helpful in drawing children to these programs, we certainly support in principle, the extension of after school snacks to all school children through the age of 18 in all school and non-school settings when the programs are primarily organized to provide care for the children. This change would put the benefits available under the Child and Adult Care Food Program (CACFP) on par with those in the National School Lunch Program.

This expanded-eligibility, more seamless program structure would be well received by the school and child care community. There would be some additional cost that would need to be considered, which is why I can only say we support this in principle. But this additional flexibility in the Child and Adult Care Food Program would provide assistance to non-school based community programs targeted to at risk teenagers and this might reduce costly problems elsewhere, creating the budgetary offsets that would be needed to make this change cost neutral if not a savings on a Government-wide basis.

FOOD GLEANING

Question. For several years, the Secretary has encouraged food gleaning. Please provide an update on USDA's efforts to encourage food gleaning activities from both within the public and private sector.

Answer. The Department has encouraged, energized, and provided technical assistance to private, non-profit, and corporate food recovery and gleaning efforts. Such efforts have been increased and incorporated into the broader Community Food Security Initiative. The outcome is a substantial increase in the amount of excess food collected and distributed to the hungry. However, the nonprofit groups are not able to make the necessary infrastructure expansions on their own to dramati-

cally increase food recovery and gleaning efforts. In fiscal year 2001, the Department is seeking about $5.3 million to assist faith-based organizations and other nonprofit groups in engaging in a wide range of food security, gleaning, and anti-hunger activities. [The information follows:]

USDA has taken the following steps to bolster gleaning activities:

Created or aided grass-roots food recovery projects in over 40 states in conjunction with farmers and ranchers, where USDA's Farm Service Agency has facilitated the donation of over 6 million pounds of excess food.

—Worked with the Department of Transportation to provide support to Second Harvest and other nonprofit groups to transport food that is recovered and gleaned. The project has brought together a consortium of nonprofit groups and industry representatives in assessing needs and developing pilot projects to assist public, private, and non-profit entities in distributing additional food.

—Worked with the nonprofit group World Hunger Year to establish "1–800–GLEAN–IT," a toll-free hotline to provide an easy-to-reach source of information on how to get involved in a local gleaning or food recovery program.

—Distributed over 20,000 copies of a Citizens' Guide to Food Recovery and Gleaning, an easy-to-use "how to manual" on how to start or expand food recovery efforts. Changed USDA crop insurance regulations to allow producers receiving crop insurance to donate any product that is still wholesome from fields that are partially damaged.

—Worked with the National Restaurant Association to produce a guide for its members on how to safely donate excess food.

—Awarded 12 school districts funds to develop "best practices" to increase the donations of excess food from school meals and to develop innovative ways to engage students in fighting hunger through community service.

—Utilized a USDA report which correlated the location of farmers' markets to the location of food banks and other food recovery groups to begin actively working to increase donations from farmers' markets to food banks and other recovery groups throughout the country.

—In collaboration with the Department of Defense, and the General Services Administration, USDA has donated more than $8 million worth of excess canned food.

COOPERATOR PROGRAM

Question. Beginning with fiscal year 2000, funding for the Foreign Market Development (Cooperator) Program is mandatory. A letter from USDA was included in the Congressional Record during Senate consideration of the fiscal year 2000 Agriculture Appropriations Act which indicated that the funding level for the Cooperator Program would remain the same as in the previous year. I understand that OMB concurred in this commitment. What was the actual program level of the Cooperator Program in fiscal year 1999, including any carryover funding?

Answer. For fiscal 1999, the FAS appropriation provided $27.5 million in new funding for the Cooperator Program. Drawing upon available carry-over balances in addition to the new funding, FAS was able to approve marketing plans of nearly $34.0 million in 1999.

Question. Does the Department intend to maintain, at least, the total fiscal year 1999 level in fiscal year 2000 and fiscal year 2001? If not, please explain.

Answer. Yes, the President's Budget provides $27.5 million, funded from CCC, for the Cooperator Program in both 2000 and 2001. These funds, coupled with carryover balances, are sufficient to continue marketing plans at the fiscal 1999 level.

DAIRY EXPORT INCENTIVE PROGRAM

Question. International markets in dairy trade are becoming increasingly important to our Nation's dairy farmers. But because world dairy markets are so badly distorted, U.S. milk producers have relied on the Dairy Export Incentive Program to help them compete in world markets. I am concerned, however, about the future of this program in fiscal year 2001, given our WTO obligations to reduce both the volume of DEIP exports as well as the value of product exported. This is particularly a concern given the low milk prices predicted for the duration of this year and surplus production of milk powder. Please tell this Committee what will be the impact of our trade agreement obligations on both the opportunities of U.S. dairy farmers in world markets and the price depressing effect of excess product in this country.

Answer. Beginning July 1, 2000, the United States will be in the final year of phasing in Uruguay Round commitments limiting the volume of subsidized exports. Limitation commitments applicable to the total value of export subsidy bonus awards, will take effect with the beginning of fiscal 2001.

The DEIP was originally intended to be a trade policy tool to counteract the export subsidies and other unfair policies of competing exporters, especially the European Union. It was not designed as either a price support program or a surplus disposal program for dairy products, although it clearly has provided benefits in terms of helping support prices and moving dairy products onto world markets.

Beginning with the 1996 Farm Bill, more emphasis has been placed on the market development aspects of the DEIP to help lay the groundwork for expanded U.S. commercial dairy product exports in anticipation of ongoing reforms in domestic and international dairy policies. While difficult to quantify, the DEIP has encouraged greater interest by the U.S. dairy industry in international markets. Today, more than 90 percent of U.S. cheese exports are unsubsidized, and exports of other unsubsidized dairy products such as ice cream, yogurt, whey products and many dairy based food ingredients have experienced steady growth despite ongoing economic difficulties in Asia, Russia, South America, and elsewhere. Although the domestic market will continue to be of greatest importance to U.S. dairy producers, we see growing opportunities for exports to the benefit of the entire U.S. dairy sector.

Question. What does USDA plan to do to mitigate the impacts of significant reductions in subsidized exports?

Answer. First, it is important to note that the Department will continue to help facilitate commercial exports with the program. DEIP will continue, although at a reduced level as noted in your question.

In addition, we will have to work with the U.S. dairy industry in other export related activities, such as foreign market development activities. For example, to help expand commercial dairy product exports, the Foreign Agricultural Service has awarded nearly $2.5 million this year to the U.S. Dairy Export Council for a variety of foreign market development purposes. At a time of tightened budgets for foreign market development, the amount dedicated to promoting U.S. dairy product exports has more than doubled since 1995. We believe this is money well spent, having contributed to expanding non-subsidized dairy product exports, and opportunities can only improve as Asian economies recover, China enters the WTO, and the world economy in general accelerates.

Question. In the event that WTO rules impair the effectiveness of the DEIP program, what opportunities are there to include dairy products in some form of humanitarian assistance?

Answer. Food aid and humanitarian assistance provides additional outlets for surplus nonfat dry milk. Already we have programmed 25,000 tons of surplus milk powder for donation under the authority of section 416(b). We will continue to look for additional opportunities to provide dairy products as part of U.S. humanitarian assistance efforts.

Question. Please provide data on expected volume of subsidized dairy products, and the value of the subsidies for both the U.S. and European Union when the WTO obligations are completed next year.

Answer. That information will be provided for the record.

[The information follows:]

	United States		European Union	
	(Dollars)	(MT)	(ECU)	(MT)
Butter and butter oil	30,497,220	21,097	947,800,000	399,300
Skim milk powder	82,463,935	68,201	275,800,000	272,500
Cheese	3,635,638	3,030	341,700,000	321,300
Other milk products	20,974	34	697,700,000	958,100

Exchange rate US $1 = 1.03 ECU as of February 29, 2000.

AID TO RUSSIA

Question. While food aid to Russia serves both humanitarian objectives and as an outlet for U.S. production, concerns remain about the food distribution process in that country. Please provide information regarding safeguards in place to ensure proper distribution of food to the Russian people and note any problems that have or are occurring.

Answer. USDA took many steps to minimize any irregularities within this very large program. The agreements with the Government of Russia included several clauses on monitoring and the proper uses of commodities and proceeds from the sale of commodities. A critical part was the creation of a bilateral working group that discussed issues and developed solutions to any irregularities.

USDA and the U.S. Embassy in Moscow assigned several monitors to travel throughout Russia to observe commodity arrivals and speak with recipients of the commodities to ensure that commodities were actually received. The monitors, the working group, and the Government of Russia prepared shipment, arrival, and distribution reports that provided a path from the arrival of the commodity in Russia to the recipient. No major irregularities in distribution were observed. Any discrepancies were discussed and resolved within the bilateral working group.

A few issues arose relating to the quality of commodities, but the bilateral working group and the U.S. industry worked with the Russian Government and customs officials to work out these difficulties. Finally, private voluntary organizations were instrumental in delivering commodities to the most needy individuals and institutions. Organizational controls and reporting requirements helped to ensure proper distribution by these groups.

WORLD HUNGER

Question. Several years ago, you used authorities of the section 416(b) program to make surplus U.S. commodities available for donation to overcome world hunger. Of course, the Public Law 480 programs, like Title II, have long proven to be of vital importance to help combat world hunger. These programs also have the added benefit of providing an outlet for U.S. production, which will become increasingly important as the U.S. complies with its WTO obligations. However, the budget request for 2001 shows a major reduction in all Public Law 480 program levels, including a significant reduction in the Title II account. In addition, the budget indicates that section 416(b) donations during 2000 will return to more traditional (which means lower) levels. I find this combination of facts troubling. Can you describe your understanding of world food needs now and in the foreseeable future and, how closely are you working with USAID to ensure that those needs are met?

Answer. Current and foreseeable food needs are considerable. The Economic Research Service produces an annual Food Security Assessment which reviews the world food situation and identifies food aid needs around the world. This is the basis on which decisions on foreign food aid programming can be made.

The Foreign Agricultural Service and USAID meet several times each month to coordinate the U.S. government's food aid programs. USDA, USAID, the State Department, and OMB are members of the Food Assistance Policy Council, chaired by USDA, that establishes policy for U.S. food aid activities and reviews food aid allocations. In recent months, the FAPC has met frequently to review food aid concerns around the world, and to ensure that critical food aid needs are met on a timely basis.

INTERNATIONAL TRADE SANCTIONS

Question. Last year, considerable debate occurred in Congress on the subject of trade sanctions and their effect on the U.S. agricultural sector. What is the current status of international trade sanctions that affect U.S. agriculture?

Answer. On April 28, 1999, President Clinton announced the administration would exempt commercial sales of food, medicine and medical equipment from future unilateral economic sanctions regimes where it had the authority to do so, and would apply that policy immediately, with appropriate safeguards, to currently embargoed countries. The Treasury Department's Office of Foreign Assets Control issued regulations last July to amend the current sanctions regimes for Iran, Libya, and Sudan to implement the new policy. This significant step by the Administration to rationalize U.S. sanctions policy has already resulted in food sales to Iran and Libya.

The Administration also has taken steps during the past year with respect to sanctions imposed on certain individual countries. A summary of those actions will be submitted for the record.

[The information follows:]

Recent administration actions on sanctions

North Korea.—On September 17, 1999, the President announced some easing of sanctions against the Democratic People's Republic of Korea (North Korea) under the Trading with the Enemy Act, Defense Production Act, and the Export Administration Regulations. The easing of sanctions will allow most consumer and other non-sensitive goods to be available for export to North Korea and will allow importation of most North Korea-origin goods to the U.S., including raw materials. Investment in North Korea sectors such as agriculture, mining, petroleum, timber, cement, transport, infrastructure, travel/tourism will be permitted. To support the goods trade, most commercial and personal funds transfer will be allowed between

U.S. and North Korean persons and transport restrictions will be relaxed to allow commercial air and sea transport between the U.S. and North Korea for passengers and cargo, subject to normal regulatory requirements.

India and Pakistan.—On October 27, 1999,the President used new authority granted by Congress in the Defense Appropriations Act to continue waivers on all economic sanctions, including USDA agricultural credit guarantees that apply to India under the Glenn Amendment. In the case of Pakistan, however, the President chose to waive only sanctions related to USDA agricultural credits and U.S. commercial bank lending.

Cuba.—On January 5, 1999, the President announced that the United States Government would authorize case-by-case licensing of food and agricultural exports to independent, non-governmental entities in Cuba.

INTERNATIONAL TRADE SANCTIONS

Question. Do you foresee any changes in the status of these or other countries in the coming year in the absence of Congressional action?

Answer. The Administration recognizes the need to rationalize sanctions policy. The Administration's steps with regard to food, medicine and medical equipment are appropriate first steps, and the Congress has taken a similar step in proposing sanctions reform. It is necessary that both branches of government work together if U.S. sanctions policy is to be rationalized. The Administration has worked and will continue to work with interested parties in Congress towards achieving meaningful sanctions reform.

We continue to believe that comprehensive sanctions reform legislation must include meaningful waiver provisions for the President, symmetrical disciplines imposed on the executive and legislative branches with respect to the process by which new sanctions can be imposed, a determination that the expected gains to the United States outweigh the expected costs to other national interests, and a preference for multilateral rather than unilateral sanctions.

Question. Please quantify, if possible, the economic shifts that might occur to the U.S. agricultural sector if these sanctions were lifted or substantially modified.

Answer. According to a recent USDA analysis, the removal of unilateral sanctions on six countries—Cuba, Iran, Iraq, North Korea, Libya and Sudan—could have increased annual shipments of U.S. agricultural products by 0.9 to 1.5 million tons annually.

While the losses are only a small percentage of total U.S. agricultural exports, American producers and exporters would like an opportunity to compete in those markets. For sanctions to be effective, they must have broad multilateral support. Our ability to deny key economic benefits unilaterally to any country is sharply limited because many nations can supply the same kinds of food and agricultural commodities.

Question. What is the current Administration position on the subject of international trade sanctions as they relate to agriculture?

Answer. The current Administration position on international trade sanctions as they relate to agriculture is based on two basic principles. The first is a humanitarian principle that basics, such as food and medicine, should not be used as a tool of foreign policy. The second is an economic principle that our sanctions policy should not impose undue burdens on our farmers.

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

FARM SAFETY NET

Question. You recently made the following statements * * *

"As you all know, many in the farm sector have not shared in the overall national prosperity * * * That's why the USDA budget includes a new safety net proposal worth $11.5 billion over the next two years. I believe that this plan represents a shift in farm policy philosophy, one that I hope will guide lawmakers as they begin to think about the 2002 farm bill."—*Press Release, February 7, 2000*

The farm financial picture would be much different had Congress not passed emergency aid legislation in 1998 and 1999. Without the added government payments, net cash income would have likely fallen below $50 billion in 1999, the lowest level since the farm financial crisis of the mid-1980s. Rising crop surpluses, continued low prices and declining incomes will contribute to increasing farm financial stress in 2000, indicating a need for further Federal assistance. However, added assistance should not be made in the form of emergency legislation with the bulk of the payments in the form of Agricultural Market Transition Act (AMTA) payments.

That approach, taken the past two years, is not in the best interests of farmers and taxpayers, as the assistance is ad hoc and ineffectively targeted.—*News Release, February 2, 2000*

I assume you stand by these remarks.

Now, the Chairman of the Ag Committee has likened the emergency aid legislation in 1998 and 1999 to "ad hoc counter-cyclical" farm support, and thus feels there is no need to change farm legislation. Do you believe that the banks that finance the planting of crops in Rural America share the Chairman's view and are happy with cash-flowing farms based on the whims of whether or not Congress will pass yet a third emergency aid package?

Answer. No, I believe bankers would be happier knowing with certainty that their customers will be safeguarded with a counter-cyclical payment. Producer payments based on ad hoc emergency assistance are generally unknown at the time loan applications are reviewed and therefore, add more risk to the banker's portfolio.

Question. Given the counter-cyclical proposal made by the Administration, would the Administration be willing to support a move in Congress to change or amend the current farm program, popularly known as "Freedom to Farm," provided any change in the support structure was counter-cyclical and targeted in nature?

Answer. Yes, the Administration's safety-net proposal is intended to be an amendment to the Federal Agriculture Improvement and Reform Act of 1996 (FAIR Act) and operates during the remaining life of the FAIR Act. However, the Administration has proposed that its Supplementary Income Assistance Program (SIAP), the key income support provision in the safety net package, be provided in addition to existing FAIR Act income and price support provisions. The Administration's proposal is counter-cyclical: producers of an eligible crop would receive a payment sufficient to bring the gross income for the entire U.S. production of the crop up to 92 percent of the average gross income of the crop during the preceding five crop years. If income equals or exceeds 92 percent of the five-year average, then no payment would be made. The proposal is targeted in two ways: first, the payments would only go to producers whose crops are suffering an income shortfall and, second, SIAP payments would be limited. The sum of the fixed FAIR Act payments plus the SIAP payments could not exceed $30,000 per producer. The Administration would consider alternative specifications of a supplementary income assistance program provided that the program is counter-cyclical and targeted.

ADMINISTRATIVE FUNDING LEVELS

Question. The reorganization of USDA was to coincide with the government becoming less involved in the business of farming. The various agencies serving farmers were straight-lined, as far as staff personal levels were concerned, and budgets for administration were scrutinized and kept at bare bone levels.

We now know that "the government" did not disengage from agriculture. In fact, due to the various emergency disaster packages which were necessary to implement due to the ongoing farm crisis, USDA is now involved in administrating programs for farmers at record levels. This has caused a backlog of work in local county Farm Service Agency offices.

Furthermore, the Risk Management Agency has been reforming crop insurance to make it more affordable while at the same time, offering a higher level of coverage. In 1993, one basic crop insurance policy was available. Now, there are a number of policies available, with more coming on line each year. However, these new products are being offered with basically the same number of staff.

Computer technology notwithstanding, the proper administration of this growing array of programs and services being provided will need to be addressed. Do you anticipate that the level of funding proposed for FSA and the RMA in this budget is sufficient to administer these programs?

Answer. The FSA staffing levels proposed in the budget reflect a decrease of temporaries due to a current assumption that there will be no new programs of economic or disaster assistance legislated for fiscal year 2001. There is also no new FSA staffing proposed for the proposed Safety Net Initiative. Pending legislation to reform the crop insurance program may require a significant increase in RMA administrative resources, including increases in staffing and funding for computer support. As events unfold for 2001, we will need to work with OMB and the Congress to address staffing needs when specific workload impacts can be determined.

RURAL EMPOWERMENT ZONES AND ENTERPRISE COMMUNITIES

Question. This year's budget proposes to provide mandatory funding for $15 million in grants annually for Round II Rural Empowerment Zones and Enterprise Communities (EZ/EC). This approach, however, has been tried unsuccessfully in the

past. Last fall, the conferees of the VA–HUD Appropriations Conference Committee Struggled to find discretionary funds to make sure that our commitment to rural EZ/ECs was not abandoned after it was apparent that the plan to provide grants through mandatory funding had failed. Please provide for the record a statement outlining what the Administration will do differently this year to actually move legislation forward that would grant mandatory funding for EZ/EC.

Answer. The Administration will be working with the House Committee on Ways and Means and the Senate Finance Committee on securing the final eight years of mandatory funding through the Social Services Block Grants administered by the Department of Health and Human Services. This also was the funding source for the first round of Empowerment Zones/Enterprise Communities. It is our understanding that a bill containing the funding will be considered by the Oversight Subcommittee of the Ways and Means Committee in the very near future.

Question. What assurance can you give the Members of this subcomittee that we won't have to struggle to find discretionary funds for this purpose?

Answer. We will make every effort to secure mandatory funding for the final eight years as was outlined in the Administration's original proposal.

REGULAR MULTILATERAL FOOD AID PROGRAM

Question. USDA's own Economic Research Service estimates that global food aid requirements in 2000 are expected to be at least 14 million metric tons, not including emergency needs. However, the Administration's request for global food aid (Public Law 480 Title II) for fiscal year 2001 is less than that estimated to be distributed in the current year. Why in the face of growing global food aid needs has the Administration requested a smaller allocation for Title II in fiscal year 2001 ($837,000,000) than it estimates spending in the current year ($967,000,000)?

Answer. The Public Law 480 Title II program level for 2000 is higher than it has been in recent years due to special circumstances. An unusually large amount of funds—$123 million—carried over from 1999 to 2000, and these have been made available for programming this year.

The President's budget requests $837 million for Title II in 2001, which is an increase of $37 million above the level of funding appropriated for 2000. We believe the funding requested should be adequate to help meet global food needs in 2001. This level of Title II programming will, of course, be supplemented by food aid commodities made available through other programs and authorities.

SURPLUS COMMODITY PROGRAM

Question. Last year, USDA purchased more than eight million metric tons of wheat and other grains from hurting U.S. farmers and donated it to needy countries under CCC authority. Last October, USDA announced that only three million tons of surplus commodities would be purchased in the current fiscal year. Thus far, however, only a little over 800,000 tons has been purchased by USDA—more than a third of the way through the current fiscal year. At a time when U.S. agricultural production and carryover stocks are at record high levels, and farm-gate prices are at historic lows, why hasn't USDA used its authority under the CCC Charter Act and section 416(b) to help offset the crisis in farm country by purchasing surplus commodities for countries in need?

Answer. USDA is using its authorities to help improve our export performance and support farm prices and income. In the case of foreign food assistance, this year, we expect to provide nearly 4 million tons of commodity donations to food deficit countries under the authority of section 416(b) of the Agricultural Act of 1949. When coupled with assistance we will be providing under other USDA program authorities, total USDA food aid programming should reach nearly 6 million tons. This amount will be supplemented by donations made under the Public Law 480 Title II program, which is administered by AID and, thus, total U.S. food assistance could total as much as 9 million metric tons this year.

QUESTIONS SUBMITTED BY SENATOR RICHARD L. DURBIN

ANTITRUST IN THE LIVESTOCK INDUSTRY

Question. The Office of the General Counsel (OGC) is budgeted at $32.1 million and 350 staff years in 2000; to $36 million and 370 staff years in 2001, increases of 12 and 6 percent respectively. Will these additional resources include a focus on antitrust in the livestock industry?

Answer. The proposed budget for fiscal year 2001 reflects OGC's heightened emphasis on concentration issues, food safety, natural resources and civil rights. As

part of its emphasis on concentration issues, OGC will provide substantial legal services to the Grain Inspection, Packers and Stockyards Administration in the enforcement of Packers and Stockyards Act provisions that support fair trade practices and competition in the livestock industry.

Question. How may lawyers will work on antitrust and competitiveness issues in the livestock industry?

Answer. Because of budget constraints in fiscal 2000, OGC has been unable to fill attorney positions vacated by attrition, Currently, there are 3.5 FTEs in attorney positions that work on competitiveness issues in the livestock industry. If OGC receives its requested appropriation for fiscal 2001, we would expect to add attorney positions such that there would be at least 5 FTEs working on concentration and competitiveness issues in the livestock industry.

LIVESTOCK PILOT PROGRAM

Question. Will Illinois counties be included in any pilot programs in risk management to be instituted for livestock producers?

Answer. When authorized, RMA will follow a very deliberate process to determine the scope and area of availability of pilot programs that are initiated. Factors involved in that process include producer interest, economic value for the area (State and counties), data availability, and resource availability and the feasibility of the pilot plan of insurance to meet the specific needs of the producers in an area. Although Illinois counties may be included in such a pilot program, it is impossible to determine which counties will be included in a pilot at this time.

EXPORT ENHANCEMENT PROGRAM

Question. EEP funding for fiscal year 2001 in your budget is set at $478 million. Less than $3 million has been used under EEP annually since 1997. EEP programming is currently limited because of world supply and demand conditions. Given this situation, shouldn't we consider a legislative change so that we can use these resources for other activities, including food aid and market development?

Answer. Yes, the Department shares your view. In conjunction with the budget, the Administration again this year will submit legislation to authorize the Secretary of Agriculture to reallocate unobligated EEP funds to support other export program activities, such as market development and food assistance. We understand that legislation similar to the Administration's proposal has already been introduced in the Senate.

U.S. ACTION PLAN ON FOOD SECURITY

Question. As you know, I included language in last year's appropriations bill calling upon the Administration to specifically request funding in fiscal year 2001 to implement the U.S. Action Plan on Food Security. What we see instead is a 17 percent drop in Public Law 480 funding (from $1.23 billion to $1.02 billion), and no specific program funding for the Action Plan. Can you explain the Administration's lack of commitment to this important issue?

Answer. USDA is committed to promoting both global and domestic food security. International food aid is one part of our work to implement the U.S. Action Plan on Food Security. The decrease in the proposed 2001 Public Law 480 program level occurs because of large carryover funding balances in the Public Law 480 programs which carried over from 1999 into 2000. Public Law 480 Title I carryover funds were relatively large because the large scale of section 416(b) foreign donations in 1999 reduced the demand for Title I assistance. Also, a portion of the emergency Public Law 480 Title II funds provided in 1999 were carried over to 2000.

USDA is working closely with other agencies to develop a detailed implementation plan to determine how we can best contribute to meeting our goal of halving malnutrition on a global basis by 2015. We hope to have a unified plan for the U.S. Government by late spring. This will provide a guide for future budget requests to implement the action plan.

The Economic Research Service (ERS) has produced an important study of why countries are at risk for food insecurity and examines ways we can help. ERS classified its global research, statistics and outreach as a high priority area and has budgeted for research collaboration with appropriate institutions in developing countries on issues critical to both the U.S. and foreign governments to implement the Action Plan on Food Security. Emphasis will be placed on developing better science, more efficient technology transfer mechanisms, better information for market and policy decisions, and creating a safer and more secure world food supply.

SECTION 416(B) DONATIONS

Question. Similar to the decline in Public Law 480 funding, section 416(b) seems to be in decline. Yet, the most recent Food Security Assessment indicates an increase in the current status quo food gap over the previous year's report—from almost 11 million tons to 12.7 million tons. How can we be giving less to programs like the World Food Program when the need is greater than ever?

Answer. We are continuing to make available large quantities of commodities to the World Food Program (WFP) during fiscal year 2000. At present, we estimate we will program a total of four million tons under section 416(b) authority this year, of which approximately one million tons will be through the WFP. This is in addition to the donations provided to WFP under the Public Law 480 Title II program.

Question. With regard to section 416(b), we are four months into fiscal year 2000 and I'm concerned that a section 416(b) soybean program has not been initiated and very little wheat has been produced for donations. For soybeans, I understand that private voluntary organizations, such as CARE, Catholic Relief Services, and Africare, developed section 416(b) proposals with the assistance of U.S. soybean producers. In sub-Saharan Africa, where 70 percent of the population lives in poverty, these programs would improve HIV/AIDS prevention, construct community-managed irrigation, provide literacy training, and introduce improved agricultural practices. Why have the fiscal year 2000 section 416(b) soybean and wheat programs been delayed?

Answer. Concerns regarding the overall U.S. budget situation this year required some time to assess. The final calculations of the non-Social Security budget surplus were not complete until mid-January. This was a key piece of information for the Administration as it considered additional budget allocations, including those to the agriculture sector. With the release of the President's budget on February 7, the Administration was able to move ahead with an announcement on section 416(b) programming.

While assessing the overall budget situation, USDA staff compiled production and trade data on a number of countries experiencing food import needs, but lacking large financial resources. Developing such information takes some time both for USDA to compile and for other agencies to review. All of this activity was on-going to provide sufficient information to make country/commodity decisions once the overall budget situation was clear.

Question. When can we expect to see them initiated?

Answer. USDA intends to program close to 4 million metric tons of commodities to nearly 50 countries in 2000. We are actively working with foreign governments and private voluntary organizations. A number of agreements have already been signed, including agreements for Bosnia, Ethiopia, Jordan, Indonesia, and the World Food Program.

FOOD AID TO AFRICA

Question. I traveled to Africa in January and had an opportunity to see U.S. food aid programs in action. I was impressed and heartened by direct feeding programs as well as programs that sell U.S. food products at low cost to finance development projects. But I was overwhelmed by the impact of AIDS on Africa—particularly by the millions of children being left orphaned by the epidemic and the devastating impact on African countries' economies. I believe U.S. food aid could be used to target communities heavily affected by AIDS. I introduced a bill to target $50 million of U.S. food aid for nutritional assistance for people living with AIDS, for families and children affected by AIDS, and for development projects for communities heavily impacted by AIDS. I would like to get your view on the potential for U.S. food aid being used to help those children, families, and communities affected by AIDS in Africa and elsewhere in the world.

Answer. In addition to food donated through the World Food Program to needy people in Africa, USDA works with private voluntary organizations (PVOs) to target African and other countries with humanitarian and development programs. USDA anticipates working closely with PVOs to target programs that can be of assistance to AIDS-affected communities. We will review proposals for the most affected countries and seek to take advantage of programming opportunities.

FACILITY MODERNIZATION

Question. Six USDA/ARS facilities were included in the budget. The Peoria Lab was not. Although it was not specifically listed, a need still exists for modernization efforts. What is the Department/Agency doing to help expedite the modernization of the Peoria ARS Lab?

Answer. Modernization has been ongoing at the Peoria Lab since 1993. The scope of the modernization includes renovation of the North Wing (Pilot Plant), Chemical Wing, South Wing (Biological Wing), Administration Wing, and upgrade site utilities and infrastructure improvements.

The site utilities and infrastructure improvements are complete. The North Wing Modernization is being accomplished in three phases. Design for all phases is complete. Construction of the first phase was completed in fiscal year 1999. Construction of the second phase is scheduled to be completed in the third quarter of fiscal year 2000. The last phase of construction will be awarded late in the third quarter or early in the fourth quarter of fiscal year 2000 and is expected to be completed in the second quarter of fiscal year 2002.

The Chemical Wing modernization will also be accomplished in three phases. Design of all phases will be awarded in March 2000 and is expected to be completed in fiscal year 2001.

Question. Will the Agency undertake rehabilitation work in fiscal year 2001?

Answer. Modernization funds are not being requested in fiscal year 2001 for the National Center for Agricultural Utilization Research (NCAUR) due to more critical funding requirements in other ARS buildings and facilities projects and since completion of the design project for the Chemical Wing modernization is not expected until the latter part of fiscal year 2001.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

WATER AND WASTEWATER GRANTS PROGRAM

Question. How do you justify a reduction in the water and wastewater grants program when basic needs like those in West Virginia will go unmet?

Answer. It is recognized that the amount included in the fiscal year 2001 budget for Water and Waste Disposal grants is slightly lower than the current fiscal year 2000 estimate. However, there are competing needs for funding, and additional funding for Water and Waste Disposal programs would likely come at the expense of other programs.

West Virginia's initial allocation of Water and Waste Disposal grants has averaged about $8.5 million the past few years. Since the need for this assistance is greater in West Virginia, additional funding has also been provided from the national reserve. In fiscal year 1998, actual obligations totaled $12.9 million, and in fiscal year 1999, obligations totaled $14.3 million, increases on 61 percent and 55 percent respectively over the initial allocation. In addition, for Water and Waste Disposal loans, the state allocation for West Virginia has averaged $13 million, and actual obligations have averaged about $19.5 million in each of the last two years.

NEW SPENDING FOR RURAL AMERICA

Question. Don't you think that $11.5 billion in new spending for rural America should be distributed in a way that benefits all of rural America.

Answer. I do think the $11.5 billion in funding for Rural Development should be distributed in a manner that provides benefits to all residents of rural America. The Rural Development agencies allocate most of the funds based on each state's proportion of rural population, rural poverty, and other factors that differ somewhat depending on the individual program and its purpose. The intent being to ensure equal treatment, but to also ensure that the funds are used in a manner that assists those most in need.

PROGRESS ON WATER AND WASTEWATER SYSTEMS DEVELOPMENT

Question. Would you provide me information about the progress of developing water and wastewater systems in West Virginia?

Answer. West Virginia has a very active Water and Waste Disposal program. Since October 1, 1996, the State has obligated 68 loans for over $56 million and 89 grants for $56 million. The State's initial allocation levels for loans and grants have totaled a little over $20 million; the additional amounts have come from National Office reserves. In spite of these expenditures, however, there are still significant needs.

Question. To what extent is West Virginia catching up to other states in meeting these basic needs and how much of a need still exists?

Answer. There are still significant unmet needs in West Virginia. The State currently has applications for 35 loans and 18 grants totaling over $77 million, which is well over three times its allocation level from recent years. Due to the many variables involved, RUS does not monitor States' progress against that of other States.

While RUS has not compiled comprehensive listings of water and wastewater needs, the WV Infrastructure and Jobs Development Council conducted an assessment that indicated needs totaling over $2.7 billion in West Virginia. Our State staff advises that the vast majority of the entities and projects would be eligible for RUS assistance.

EMERGENCY LIVESTOCK ASSISTANCE AND PASTURE LAND REVEGETATION

Question. I want to thank Secretary Glickman for the attention that he has given to reducing the impact of the drought of 1999 on West Virginia farmers. Last August, as we stood together under a cloudless sky in the crispy brown cornfields of West Virginia, and Secretary Glickman declared all fifty-five West Virginia counties disaster areas, thereby allowing special circumstance USDA assistance to be provided to farmers in my state. West Virginia farmers, and I, are grateful for his ongoing attention to the needs of small family farmers in smaller agriculture states. Cooperative efforts between the U.S. Department of Agriculture and the West Virginia Department of Agriculture have helped speed available assistance to distressed farmers. However, I am concerned about delays in distributing emergency funds to provide assistance to livestock producers for losses due to drought or other natural disasters, and for the cost of restoring pasture lands damaged by the drought. I am concerned that the difficulties in providing this assistance may be a direct result of a shortage in appropriated funding for these programs. Could the Secretary explain what is causing delays in administering emergency assistance programs, specifically the livestock assistance program and the pasture land revegetation program?

Answer. Sign-up for the Livestock Assistance Program began November 1, 1999, a few weeks after the fiscal year 2000 Appropriation bill was signed by the President. Sign-up ended in mid-February, which allowed time for producers to enroll in the program and our county offices to complete the application process. We expect to process and issue payments soon, possible in March.

The Pasture Recovery Program was created by the Administration in response to the extreme drought that plagued much of the eastern half of the United States. It took time to develop because the program is new. We expect to begin sign-up shortly.

Question. How can Congress be of assistance in these matters?

Answer. Short-term ad hoc programs cause us to react to emergencies, and by their very nature, these programs often come too late and offer too little. I would like to work with the Congress to establish long-term solutions that would reduce or eliminate the need for ad hoc programs. The President's budget purposes an improved approach to providing assistance to farmers in times of distress including supplementary countercyclical income assistance targeted to producers faced with reduced revenues, improved risk management programs, and new programs combining income and environmental benefits. While some of our initiatives can be done administratively, most will require legislation. Producers and their bankers will be better served if we can get these programs in place early so they can rely on them in their planning and make better informed farming decisions.

MILK MARKETING ORDERS

Question. How has the implementation of the Option 1A for pricing fluid milk impacted West Virginia dairy farmers, and dairy farmers in other regions of America?

Answer. To date, the implementation of Federal milk order reform has benefitted all West Virginia producers delivering to Federal milk markets. It is important to recognize that the Federal milk order program is not a price support program, and that the changes made as a result of consolidation and reform were to improve the marketing of milk. I have asked the Agricultural Marketing Service to provide more information on the impact of consolidation and reform on West Virginia.

[The information follows:]

The most recent information indicates that about 96 percent of West Virginia's Grade A milk is marketed under four of the newly consolidated Federal milk marketing orders—Northeast, Appalachian, Mideast, and Southeast. Prior to consolidation the Federal order markets shipped to were: Middle Atlantic, Carolina, Louisville-Lexington-Evansville, Ohio Valley, Eastern Ohio-Western Pennsylvania, and Southeast. We believe the rest of West Virginia milk was marketed in areas of Virginia or Pennsylvania where milk marketing is regulated by State orders.

The implementation of Option 1A Class I differentials is only a small part of the overall impact of Federal milk order reform on farm milk prices. Changes in Class I differentials in the markets where West Virginia farmers deliver milk ranged from −$0.09 to +$0.09 per hundredweight. The effect of these changes in Class I dif-

ferentials on producer blend prices are projected to range from −$0.04 to +$0.07 per hundredweight.

The consolidation of markets also had some impact on producer blend prices depending upon whether consolidation of the orders increased or decreased the proportion of milk used in Class I products. For the markets served by West Virginia dairy farmers, Class I utilization changed only slightly, ranging from up 0.1 percent to down 2.7 percentage points. The impacts of market consolidation on West Virginia producer blend prices range from almost nothing to about −$0.05 per hundredweight.

The most important factor affecting producer milk prices was the implementation of a Class I mover based on the higher value of the Class III or Class IV price formulas. The adoption of the new Class I price mover increased the Class I price for January 2000 by $1.11 per hundredweight, and for February 2000 by $1.08 compared to what it would have been under the old system. The resulting higher Class I prices during these two months increased producer blend prices about $0.55 to $0.80 per hundredweight, depending on point of delivery. Although we expect these price impacts from the new Class I price mover to moderate later in the year as milk supplies and demand come more into balance, they have been beneficial to dairy farmers during this period of low farm milk prices.

In conjunction with the milk order consolidation and reform process, USDA analyzed the impacts of a number of proposals and published the analyses in a Final Regulatory Impact Analysis. The following table summarizes the expected average impacts on all-milk prices to dairy farmers delivering to Federal order markets over the six-year analytical period. The all-milk price is a weighted average price determined by multiplying the change in the minimum price for milk in each class (Class I, II, III, and IV) by the amount of milk used in each class. The average all-milk price for all Federal order markets was forecast to be $.03 per hundredweight higher under Federal order reform and Option 1A Class I location differentials. In 17 former Federal order markets, the all-milk price was projected to decline, while in 15 former markets, the all-milk price was projected to increase.

CHANGE FROM BASELINE IN ALL-MILK PRICES

[Dollars/cwt]

FMMO Region	USDA Baseline 6-Year Average	Modified 1A Change
Northeast:		
New England	$15.54	$.05
NY-NJ	15.00	.34
Middle Atlantic	15.53	−.13
Appalachian:		
Carolina	17.08	.16
Tennessee Valley	16.78	.09
Louis-Lex-Evansville	16.14	−.05
Southeast	16.57	.07
Florida:		
Upper Florida	19.06	−.18
Tampa Bay	18.88	.31
SE Florida	19.94	.....
Mid East:		
MI. Upper Pen.	15.91	−.03
So. Michigan	15.01	.13
E. OH.-W. PA	15.32	.17
Ohio Valley	15.74	.03
Indiana	16.04	−.05
Upper Midwest:		
Chicago Regional	14.44	.02
Upper Midwest	14.27	−.03
Central:		
Iowa	14.70	.17
NB.-W. Iowa	15.04	−.02
E. So. Dakota	15.31	−.19
Central Illinois	16.49	−.57

CHANGE FROM BASELINE IN ALL-MILK PRICES—Continued

[Dollars/cwt]

FMMO Region	USDA Baseline 6-Year Average	Modified 1A Change
So. Ill-E. Missouri	15.71	−.20
S.W. Plains	15.39	.13
E. Colorado	14.84	.32
W. Colorado	15.39	−.66
Greater Kansas City	16.45	−.66
Southwest:		
Texas	15.66	N.08
NM-W. Texas	14.47	.22
Western:		
S.W.Idaho-E. OR	13.80	.19
Great Basin	14.51	−.15
AZ-Las Vegas	14.70	−.04
Pacific N.W.	14.43	.01
All Fed. Orders	15.23	.03

Question. How has the implementation of Option 1A impacted the price of milk for consumers?

Answer. Implementation of the Option 1A is expected to have a minor impact on the price of milk for consumers. I have asked the Agricultural Marketing Service to provide additional information for the record.

[The information follows:]

A $0.12 increase in the Class I price translates into about a $0.01 increase in a gallon of milk. Option 1A increased the average Class I price differential for all markets about $0.04 per hundredweight or less than $0.01 per gallon. The change in the Class I mover raised Class I prices on average about $1.10 per hundredweight for the first two months of 2000. Therefore, the average price of a gallon of milk in January and February in all Federal order markets may have been between $0.09 to $0.10 per gallon higher than it would have been under the old system. This is the short-term impact of Federal order reform. USDA's Regulatory Impact Analysis indicates that Federal milk order reform with Option 1A Class I differentials would increase the retail price of a gallon of milk, on average, across all markets about $0.01 for the period 2000 through 2005. For the part of West Virginia that is in the Mideast market, no real change is expected on average for the analytical period.

Question. What can we do to improve the income of dairy farmers?

Answer. There are a number of things that can be done to improve dairy farm income, and almost as important, to reduce the risk of volatile farm milk prices to dairy farmers. I have asked the Agricultural Marketing Service to provide more information on the actions taken by USDA to improve the income of dairy farmers.

[The information follows:]

A 2-year extension of the dairy price support program that is due to expire on December 31, 2000 would help protect farm income. The dairy price support program has been a critical safety net during the past several years, purchasing 121 million pounds of nonfat dry milk in fiscal year 1998, 172 million pounds in fiscal year 1999, and 171 million pounds so far this fiscal year. Absent this program, farm milk prices would be even more depressed. The President's budget request for 2001 proposes extension of the price support program through 2002, at which time the current farm bill expires.

USDA has committed to use the Dairy Export Incentive Program (DEIP) to the maximum extent allowed by international agreements. The assistance that is provided by DEIP expands the market for U.S. dairy products and helps build future markets abroad for dairy products.

For several years, USDA has been using the Dairy Options Pilot Program to educate and assist dairy farmers in managing risk through use of the futures and options market. The second phase of the program was announced on March 7, 2000, and will provide training in the use of futures and options and subsidize the cost of options contracts to dairy farmers in 61 counties in 32 States.

On March 1, 2000, USDA announced a proposed Dairy Forward Contracting Program as authorized by the Agricultural Appropriations Act of 2000. This program

will give proprietary handlers who market milk under Federal milk orders more flexibility in offering forward price contracts to dairy producers. Forward price contracts provide another tool for producers to reduce price risk. Cooperatives already offer forward contracts to their members' producers. USDA, in designing this pilot program, has created certain safeguards for dairy farmers as they learn to use this new method of pricing. Implementation of the program is tentatively scheduled for May 1, 2000.

On the cost side, USDA's Cooperative State Research, Education and Extension Service in conjunction with the land grant university system continues to provide educational materials to dairy farmers. Though expanded internet services, dairy farmers now have access to the the latest information on production methods, new technology, and current dairy and feed market information that can be used to increase efficiency. Also, information is available on the Sustainable Agriculture Research and Educational Agriculture program, organic farming and other value-added production and marketing information that enables farmers to receive more of the consumer's dollar.

Milk prices are currently at levels unseen in more than two decades. The recent collapse in milk prices will result in severe economic hardship for the Nation's dairy producers. To assist dairy producers through this economic emergency, the Administration is working with Congress to develop an emergency aid package for agriculture that will include assistance to dairy producers.

AQUACULTURE

Question. Could you please provide a status report regarding construction of the National Center for Cool and Cold Water Aquaculture, including milestones that will occur during construction of the center and timetables for the completion and maintenance of this project?

Answer. The National Center for Cool and Cold Water Aquaculture is about 35 percent complete. Site grading and subgrade piping and electorial work are 95 percent complete. Structural steel and roof decking for the Lab/Office building and the Tank/Aquaria building is scheduled to be completed by May 2000. The final inspection of the main building is scheduled to start August 2000. The scheduled completion date for all work is September 1, 2000.

AQUACULTURE

Question. What is the USDA's strategic plan for a national policy to encourage development of, promote, and support U.S. aquaculture as required by the National Aquaculture Act of 1980?

Answer. The USDA's strategic plan for a national policy to encourage development of, promote, and support U.S. aquaculture is being updated and the working draft entitled, "National Aquaculture Development Plan of 2000" is near completion.

Question. What efforts are underway to coordinate American aquaculture efforts on a national level?

Answer. As mandated by the National Aquaculture Act of 1980 and amendments, the Joint Subcommittee on Aquaculture (JSA) coordinates Federal research, technology transfer, and assistance programs in aquaculture, reporting to Congress and the Executive Office of Science and Technology Policy through the cabinet level National Science and Technology Council (NSTC), chaired by the President.

The JSA has interacted with the aquaculture industry and other customers, stakeholders, and partners to assure federal programs meet the needs of the industry and the American public. ARS participates in JSA sponsored workshops as well as holding program planning workshops to obtain stakeholder input on ARS aquaculture research program. The JSA meets formally four times a year to bring membership from 12 plus agencies together; ARS is a regulate participant. ARS national program leaders and ARS scientists are regular participants in planning meetings with the five Regional Aquaculture Centers administrated by Cooperative State Research, Education, and Extension Service (CSREES) and frequently collaborate on research projects.

ARS has developed a plan Aquaculture Research for the future: Five Year Research Plan in response to an outcome of a stakeholder meeting. Stakeholders identified under investment in aquaculture research by ARS as a major issue. In response to that criticism, ARS is developing within a broad framework specifically how the Agency would invest future appropriations for aquaculture research.

Program managers in ARS and CEREES are responsible for assurance for quality and relevancy of national aquaculture research.

Question. What role will the National Center for Cool and Cold Water Aquaculture play in the strategic plans?

Answer. ARS scientists, especially Research Leaders, participate in workshops, both intramurally and extramurally to establish relevancy of ARS aquaculture research programs and often are requested to participate in similar activities held by others at the national level. The staff at the National Center for Cool and Cold Water Aquaculture will participate in national strategic planning meetings sponsored by ARS. Another very important role for the National Center for Cool and Cold Water Aquaculture is to conduct the research to solve the aquaculture industries highest priority problems. This research will involve intramural and collaborative extramural and intramural projects.

POULTRY GROWERS

Question. Contract poultry growers face the difficult task of disposing of excess poultry litter. West Virginia State College and the West Virginia Department of Agriculture are working to explore technology to control the adverse impact of excess poultry litter and, at the same time, produce a value-added product from the litter. A $500,000 appropriation that I added for waste utilization through the West Virginia Department of Agriculture's Poultry Waste Energy Recovery (POWER) project was reduced by fifteen percent as a result of across-the-board rescissions. Excess poultry litter is a serious problem that pollutes water supplies and causes health problems. What USDA efforts seek to improve disposal methods of excess poultry litter?

Answer. An important conceptual consideration regarding poultry litter management is that we attempt to have industry personnel and others understand the need to utilize a valuable source of nutrients, rather than to dispose of a waste. One problem is excess nutrient availability from all sources, which include commercial fertilizer and bio-solids, as well as urban run-off. When poultry litter/manure is seen as having a comparative value, utilization options should increase.

USDA has a number of programs that attempt to assist the poultry industry in dealing with environmental issues. For example, CSREES cooperates in various ways with the Environmental Protection Agency (EPA) National Agricultural Compliance Assistance Center, such as in grant coordination. CSREES is managing competitive grants for a National Curriculum Development for Environmental Protection project, and the USDA/EPA National Agricultural Compliance Assistance Program.

CSREES has recently initiated the Waste Management National Initiative Team. CSREES has for many years provided competitive and other grants to states through the Water Quality National Initiative Team, some of the results of which are summarized in the document entitled, National Extension Targeted Water Quality Program, 1992–1995".

The CSREES National Research Initiative (NRI) can support research on poultry litter utilization methods through competitively-awarded grants. In the past, the NRI has funded poultry research, which included a broiler litter project.

CSREES, Land Grant University, other agency personnel, and private groups recently held the Alliance for Environmental Stewardship: A Comprehensive Approach workshop in St. Louis, Missouri. The proceedings, which will be available by April, prioritized recommendations as to what is needed to develop a comprehensive approach to environmental protection, and how all parties can fulfill their responsibility to protect the environment.

POULTRY GROWERS

Question. What opportunities are available to West Virginia poultry growers who wish to employ better poultry litter management techniques?

Answer. Independent poultry growers should first contact their county Extension agent for assistance with concerns about poultry litter management. Note that litter refers to the manure and wood shavings or other absorbent material used in the production of poultry, but for this response the term will include caged layer manure. Agents will provide written and technical assistance to the farmer. If the problem is beyond the expertise of the agent, assistance will be requested from state specialists at West Virginia University.

CSREES supports the National Poultry Waste Management Symposium. This symposium is a biennial event started in 1988, focuses on cutting edge technologies and concepts, and includes commercial exhibits and poster sessions that cover various hot topics. Grower participation is encouraged through publicity and through a reduced registration fee. The next symposium is scheduled for October 2000.

The West Virginia Poultry Association holds an annual Convention and Festival during which educational sessions are held, and participate in other areas of assistance throughout the year and cooperate in various educational events. Independent

producers and growers are encouraged to attend meetings such as the National Poultry Waste Management Symposium.

Future opportunities for the West Virginia industry relate to projects on which the industry is working at this time, such as the pelleting of poultry litter, and generation of electricity from litter.

CONSERVATION AND WATER

Question. The Natural Resources Conservation Service in West Virginia, under the leadership of Bill Hartman and Paul Dunn, continues its important work to implement watershed and conservation programs in West Virginia that make a positive impact on the state's rural communities. Funding for Small Watershed Projects in West Virginia was reduced by fifteen percent. This will delay treatment of mine drainage sites, and slow the work of the Potomac Headwaters Land Treatment Watershed Project. Unfortunately, delays to these programs will also mean a delay of the day when all West Virginians have reliable access to healthy drinking water. What action is the USDA taking to improve conservation and water services in rural America? How can West Virginians participate and benefit from these programs?

Answer. One option for rural communities and watershed sponsors in West Virginia would be to include water supply source development in any new Public Law 566 or Public Law 534 watershed projects that are currently being planned. Although these projects have been historically developed for upland land treatment, flood prevention, water quality, or recreation purposes, local sponsors can include water supply as a project purpose. By doing so, the cost for developing a quality water supply can be significantly reduced. Currently NRCS has statutory authority under Public Law 566/534 to provide a 50 percent cost-share for such source water development. However, priorities for funding watershed projects in the last ten years has been focused on soil erosion control, land treatment, water quality and environmental benefits.

Also, the President's Budget provides $1.6 billion for the Rural Utilities Service's water and waste loans and grants programs.

SUBCOMMITTEE RECESS

Senator COCHRAN. The hearing is recessed.

[Whereupon, at 12:55 p.m., Thursday, February 10, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

TUESDAY, FEBRUARY 29, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:03 p.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Gorton, Kohl, Dorgan, and Durbin.

DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

STATEMENT OF KEITH COLLINS, CHIEF ECONOMIST

FARM AND FOREIGN AGRICULTURAL SERVICES

STATEMENT OF AUGUST SCHUMACHER, JR., UNDER SECRETARY

FARM SERVICE AGENCY

STATEMENT OF KEITH KELLY, ADMINISTRATOR

ACCOMPANIED BY PARKS SHACKELFORD, ASSOCIATE ADMINISTRATOR FOR PROGRAMS

FOREIGN AGRICULTURAL SERVICE

STATEMENT OF TIMOTHY J. GALVIN, ADMINISTRATOR

ACCOMPANIED BY RICHARD G. FRITZ, GENERAL SALES MANAGER

RISK MANAGEMENT AGENCY

STATEMENT OF KENNETH D. ACKERMAN, ADMINISTRATOR

ACCOMPANIED BY DENNIS KAPLAN, DEPUTY DIRECTOR FOR BUDGET, LEGISLATIVE AND REGULATORY SYSTEMS, OFFICE OF BUDGET AND PROGRAM ANALYSIS

OPENING STATEMENT OF SENATOR THAD COCHRAN

Senator COCHRAN. The subcommittee will please come to order. Today we are convening a hearing of our Subcommittee on Agriculture Appropriations to review the outlook for production agriculture, and the budget request for farm programs. We are pleased to have as our panel today Mr. Gus Schumacher, Jr., Under Secretary for Farm and Foreign Agricultural Services of the U.S. De-

partment of Agriculture, Mr. Keith Collins, Chief Economist of the Department of Agriculture, and Dennis Kaplan of the Budget Office of the U.S. Department of Agriculture.

We are coming off 2 years where Congress and the Administration have agreed to supplement the assistance that is provided directly to producers of agriculture commodities. This assistance has taken place because of disasters that have occurred on the farms and ranches in the United States by reason of weather, other related problems, and economic stress that has beset agricultural producers due to changes in economic growth and health in other parts of the world, and among the customers who buy what is produced on the farms and ranches in the United States.

Statistics have indicated that this difficulty in production agriculture is not yet over. As a matter of fact, the President's budget request includes increases of some $10 to $11 billion that would be made because of changes that are recommended in farm program law and conservation programs and other Agriculture Department activities because of changes that are recommended by the President in the laws, not to produce any more discretionary funding from this committee, necessarily, but rather to mandate additional spending by changing the law.

The difficulty with that is that we are under a 5-year farm bill. It has not yet expired. It has 2 more years to go. It is not likely that Congress is going to, in an election year, be able to come in and revamp the agriculture programs as the Administration is suggesting, so I hope this panel will help us look at alternatives to changing the law and the program law and looking at the discretionary funding that we might consider if we should consider any such supplementary payments as we did during the last 2 years, or what other forms of relief we might consider to help deal with this problem.

I understand that some of the commodity prices may be increased, or the outlook for increases in prices over the next couple of years, but I am also told that this year we could have just as serious a problem in some commodity areas as we have had since 1993.

I also have heard that we may see some substantial increases in production in foreign countries that could have an effect on the overall world supply of commodities. For example, in Brazil, cotton production is expected to be much higher. What impact is that going to have on the U.S. cotton producer? These are things we will look at today, and we appreciate very much your being here and helping us work our way through this dilemma and figuring out what we can do as a committee in charge of setting the spending and funding levels for the Department of Agriculture to solve the problems that are faced by the producers of U.S. agriculture commodities.

We have copies of your statements, and we will make those a part of the record in full. We encourage you to make whatever summary comments you think would be helpful to the committee.

Mr. Collins.

STATEMENT OF KEITH COLLINS

Mr. COLLINS. Mr. Chairman, thank you. Thank you for inviting me, and I am going to take just a few minutes to provide some context for this discussion today. I will try to answer at least a couple of questions about the state of the farm economy that you just raised in your comments.

As you look back over the last couple of years, as you and everyone know we have had very weak commodity markets in the United States, but we have not seen an erosion or a deterioration in the U.S. farm financial condition to the extent that might be expected, and there are a lot of reasons for that, and let me mention four.

One, of course, is the large built-in payments of the farm bill and the supplementary payments that have been enacted in the last 2 years.

A second reason is, I think farmers have made lots of prudent choices not to take on more debt over the last 2 years.

A third reason is that we have an overall farm balance sheet that has not broken down during the last 2 years, and a fourth reason is, we have had a strong off-farm economy which has helped farmers have better off-farm job opportunities and higher off-farm incomes.

The result of all of that is that when we look at nonperforming loans at agricultural banks, and we have data as of October 1999, we see that nonperforming loans have hardly increased. They are not much different than they were in the early 1990's, for example. Nevertheless, certain farms, certain regions, certain commodities around the country will have more financial pressures than others.

I think in all likelihood, as we look out to the rest of this year, that we are going to face very weak markets for all of our major commodities in the year 2000, particularly for crops and for dairy. Despite an improving world economy, our exports are still stagnant. They are moving sideways. We expect the global economy to grow a little over 3 percent this year. That would be the highest rate since 1996, and that is certainly good news. However, import recovery in a number of our major markets is very slow.

We can look at Japan. We can look at Europe. As well as that, we have fierce competition, as you mentioned, from a number of competitors such as Argentina and Brazil, in addition to China and even the European Union as well.

For 2000, we are currently projecting agricultural exports at $49½ billion. That is up only slightly from last year's $49 billion. When we add in USDA's recently announced humanitarian assistance package, that will add to that forecast.

I want to mention a few forecasts of average farm prices to again put this situation in a historical context and illustrate the farm price problem that producers face. Soybean prices during this marketing year are expected to be the lowest since 1972–1973. Cotton prices, so far since August, have been the lowest since 1974–1975. Corn and wheat prices this year we think will be the lowest since 1986–1987. Milk prices this year will be the lowest since 1990–1991, and rice prices the lowest since 1992–1993.

Those are all price forecasts for the 1999–2000 year, so many farmers could see an escalation of financial stress in the year 2000 as the farm economy, I think, is poised to take a fairly sharp drop in farm income. Farm cash receipts this year are going to go down another $2 billion. That will make them about $18 billion below the record of 1997.

In addition to that, without new legislation, Government payments would go down $5½ billion in the year 2000. So with lower receipts from the market and lower Government payments, we have a forecast of net cash farm income in 2000 of $49.7 billion, which would be a 16 percent, roughly $9 billion, drop. That would be the lowest net cash farm income since 1986.

Many farmers are also going to face higher production costs this year, and I would mention interest rates and fuel prices are also squeezing that income level down. During the fourth quarter of 1999, farm interest rates averaged 35 to 45 basis points higher than the fourth quarter of the year earlier. In addition to that, if you look at West Texas intermediate crude oil prices during 1999 they averaged $19.24 a barrel. At the end of last week they hit a 9-year high of almost $31 a barrel, and farmers are not going to be able to avoid those higher fuel costs, particularly as we move now into the peak diesel fuel period of use from February through May.

Farm real estate values have maintained farm balance sheets up to this point. However, with rising interest rates, and if we get this drop in income that we are projecting, we expect little to no growth in farm land values over the next couple of years.

I would like to conclude with just a couple of very brief comments about the state of commodity markets. Last week, the Department of Agriculture held its annual Agricultural Outlook Forum, and we had about 1,300 people, an all-time record high in attendance, and I think you could hear much concern at that conference about the weakness in commodity markets. If I could summarize the concerns in two words I would say they are weather and competition, and wheat is a good example of that.

If you look at wheat acreage, it is going to be down again in the year 2000. We have had very dry weather in the plains States, and we think that the lower acreage will reduce U.S. production, but our stocks on June 1 are going to be the highest level since 1988. The Australians in all likelihood will have a record crop this spring. The European Union will likely have a record crop in the fall. As a result of that, any wheat price advances are going to be limited.

For corn, we have had record high total use in 1999. Next year, we expect higher production, with use about the same. That would result in little to no change from the $1.90-a-bushel price that we see this year, and China's role as a corn exporter is going to be a very important factor in the price outlook.

I would say that the soybean perspective is a little different than that for grains. Soybean acreage is likely to expand again in the year 2000. We could see record production, rising carry-over, and even lower prices than the $4.75 a bushel expected this year.

Cotton and rice prices have also been very low this marketing year. Cotton production, we think, will be up in the year 2000, with

the price outcome dependent very much on the role of China as a cotton exporter in the world market.

This year's lower rice prices—they are down about 33 percent this year—will probably trim back acreage a little bit, but continuing large rice stocks are going to hold prices in check.

The picture for livestock and poultry in the year 2000 I think is more optimistic than it is for crops. We expect cattle prices to average about 5 percent higher. I would point out that we are starting out this year with the largest number of animals in feed lots in 25 years, so we are probably not going to see much of a pop in cattle prices until we get into the second half of the year.

Lower hog numbers are expected to reduce pork production and push up hog prices about 15 percent. Broiler prices, on the other hand, I think will be down a little bit, but lower feed costs will help maintain producer net returns.

Milk is going to be the significant weak spot on the whole livestock side of the economy this year. In the last 2 years, 1998 and 1999, and we had strong milk prices, we had low feed costs. That gave us, in 1999, the highest year-over-year increase in milk production in the decade of the 1990's, and that continuing surge is going to keep pressure on milk prices for much of the year 2000 and probably result in about a 13-percent drop in milk prices for the year.

PREPARED STATEMENT

Well, Mr. Chairman, in conclusion I would say that the year 2000 is shaping up to be a year of lower income, particularly for producers of major field crops, for dairy, as well as for other crops which I did not go into, such as tobacco, sugar, peanuts, and some horticultural crops. So once again, it appears that the role of Government payments is going to be a crucial factor in determining where the state of farm finances end up at the end of the year 2000.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF KEITH COLLINS

Mr. Chairman and Members of the Subcommittee, thank you for inviting me to discuss the state of the farm economy and its prospects. I will describe the situation in major commodity markets, the financial well-being of farmers and the prospects for economic recovery.

While an overall farm economic crisis during the past year of generally weak markets has been averted, in part due to emergency assistance, market fundamentals remain weak, especially for crops. Global economic prospects are improving, yet commodity supplies are large and rapid recovery in farm income appears unlikely. In fact, under current legislation and programs, net cash farm income in 2000 is projected to be the lowest level since 1986, prompting the President, consistent with his concerns about the 1996 Farm Bill, to include several proposals in his budget to provide farmers and ranchers additional income protection. While U.S. agriculture continues to face the prospect of low prices and incomes and ongoing structural change, many indicators remain favorable up to now, including asset values, debt levels, inflation, interest rates, and productivity.

GENERAL ECONOMY BOOMS; AGRICULTURE SLUMPS—WHY?

The U.S. economy just established a record for the longest expansion in history. Strong income growth, low unemployment, surging productivity, low inflation and interest rates and a stunning increase in equity markets have made life better for

most Americans. While the farm economy prospered in the mid 1990s, it did keep pace with the general economy in the late 1990s. Several factors that propelled the national economy have been absent from the farm economy.

One factor has been strong investment in the U.S. economy. The growth in the U.S. economy combined with economic problems in recent years in other countries has fueled an enormous increase in direct foreign investment in the United States and a large increase in investment in U.S. stocks and bonds. Another factor has been rapid technological change and productivity increases which have reduced per unit labor costs and improved competitiveness. The U.S. appears to be in the global lead in high technology, ranging from information sciences to biological sciences to communications, creating new industries and transforming other industries that can use these technologies, such as financial sectors, retailing, travel and entertainment.

Production agriculture has been helped by some of these trends, such as low inflation and interest rates and new technology. However, production agriculture has been particularly vulnerable to foreign competition and economic recession in foreign countries, which have reversed the upward export trend of the earlier 1990s. In addition, growth in investment has lagged that in the general economy, as agriculture has not benefitted greatly from international capital and has had a reduced rate of return on assets. Moreover, production agriculture has probably not been able to utilize new technology to the extent of the rapidly growing nonfarm industries.

As we assess the prospects for 2000, many agricultural commodity markets show little improvement in their fundamentals. For the 1999/2000 marketing year, USDA forecasts the average price of soybeans to be the lowest since 1972/73, the prices of corn and wheat the lowest since 1986/87 and the price of rice the lowest since 1992/93. Cotton prices are also down sharply and so far this season are the lowest since 1974/75. Cattle and hog prices were relatively weak in 1999 but have strengthened recently and are expected to be up this year. Milk prices were relatively strong in 1999 but dropped sharply at year's end and are expected to average the lowest level in 9 years in 2000.

In addition to historically low agricultural commodity prices, many producers the past couple of years have been adversely affected by drought, excessive heat, pests, flooding and wind which lowered crop yields and quality, reduced forage supply and quality and lowered milk production. In recent months, many areas of the United States have experienced subnormal precipitation. Unseasonably mild and windy weather also has accompanied the lack of precipitation since October, increasing the evaporation of moisture from the topsoil. Soil moisture levels are very low in the northern Great Plains and upper Mississippi Valley due to the prolonged absence of precipitation. Another area, extending from western Texas to southern California, also remains very short of soil moisture. In addition, parts of the Great Plains, eastern Corn Belt, mid-Atlantic and New England endured long-term drought in 1999, depleting subsoil moisture reserves in those areas.

Congress and the Administration have responded to these problems by providing over $15 billion in emergency assistance to farmers and ranchers the past 2 years, greatly limiting the farm financial stress that farmers and ranchers would otherwise face because of historically low prices and reduced production. These emergency payments plus payments authorized under the Federal Agriculture Improvement and Reform Act of 1996 (1996 Farm Bill) pushed government payments to a record-high level in 1999 and net cash farm income to a near record-high. Had Congress not provided emergency assistance, net cash income would have likely fallen below $50 billion in 1999, the lowest level since the farm financial crisis of the mid-1980s. Reduced government payments and continued low prices could push net cash farm income below $50 billion in 2000, increasing farm financial stress and debt repayment problems.

EXPLAINING THE FARM ECONOMIC DOWNTURN IN MORE DETAIL

The primary source of the farm economy's weakness is imbalances in commodity markets brought about by several years of large U.S. production—despite production problems in many areas—and by lower exports. Exports have been pulled down by large foreign production, economic problems in Asia, Russia and South America and a strong dollar.

Reduced Exports.—The value of U.S. agricultural exports in fiscal year 2000 is forecast to remain at last year's $49 billion, after reaching a record high of $60 billion in fiscal year 1996. Asia accounts for a large portion of the drop in exports of both bulk and high-value agricultural products. In fiscal year 1996, $26 billion in U.S. agricultural products were exported to Asia, compared with $18 billion projected for this fiscal year, a drop of $8 billion.

As for total bulk products, such as feed grains, wheat, soybeans, cotton and rice, export value is down 40 percent since 1996. Declines in tonnage account for about one-fifth of the drop in export value of bulk agricultural products, and declines in export prices account for four-fifths of the drop. In contrast, the export value of high-value agricultural products has changed little since fiscal year 1996, remaining steady at about $32 billion. The value of livestock product exports is projected to be down about 2 percent and the value of poultry product exports is forecast to be off nearly one-quarter in fiscal year 2000, compared with 4 years ago. However, the volume of livestock and poultry products exported has increased since 1996.

As the global economy has improved, exports for some commodities have picked up. Within this weak export picture, there has been some positive news. In volume terms, U.S. corn exports are up nearly one-third during January–November, compared with the same period last year, with expanded sales to Japan, South Korea, Egypt, South America and Taiwan. Wheat and wheat flour exports are up 9 percent over that period, as sales to Japan, South Korea, Mexico and South America have improved and food aid shipments to Russia led to a sharp increase in exports to that country. During January–November, soybean exports were up 13 percent over a year ago, as increased sales to East and Southeast Asian countries more than offset reduced sales to Europe.

Although an acceleration of U.S. exports toward 1996 levels is not expected, the apparent turnaround in several key macroeconomic indicators make the outlook for higher exports more positive than it has been in a couple of years. South Korea's economy has emerged from recession, growing 9 percent in 1999, and the economic recovery that began last year in Southeast Asia is expected to accelerate in 2000. In addition, several Latin American countries are forecast to show positive growth in 2000 after being in recession last year. With economic recovery, most forecasters expect world economic growth in 2000 to exceed 3 percent, a rate not seen since 1997.

Another key factor for U.S. exports is the U.S. exchange rate. Over the past year, the value of the U.S. dollar has been declining in value against several key currencies. On an agriculture trade-weighted basis, the value of the dollar is down about 5.5 percent from a year ago, although the dollar continues to remain about 11 percent stronger than in the early 1990s. A decline in the value of the dollar makes U.S. commodities more attractive to foreign buyers.

Large Global Crop Production and Stocks.—Despite some weather problems, global crop production exceeded consumption each of the past 3 years leading to rising U.S. and world stocks of grains and oilseeds. Global stocks of grains at the end of the 1998/99 marketing year reached 350 million tons, up from 256 million tons at the end of 1995/96 marketing year. The growth in global carryover of grains is almost entirely due to increased yields per acre, as grain planted area over the past 3 years is about unchanged relative to the average of the early to mid-1990s. In 1999/00, global consumption is expected to exceed production causing global ending stocks of grain to drop to 335 million tons.

Global stocks of oilseeds have risen by 63 percent since 1996/97, increasing from 17.1 to 27.9 million tons at the end of the 1998/99 marketing year. Unlike grains, much of the increase in oilseed carryover can be attributed to increased plantings. World oilseed area increased 8 percent from 1996 to 1998 and global oilseed area remained about unchanged in 1999. In 1999/00, record global oilseed production for the fourth consecutive year is expected to cause global ending stocks of oilseeds to remain at near last year's level.

While adverse weather has reduced crop yields in many areas of the United States over the past 2 years, these production declines generally have been offset by good yields in other sections of the country. In 1998/99, the U.S. corn and rice crops were the second highest on record, soybean production was record high and the wheat crop was the largest since 1990. Only cotton production was down appreciably in 1998, as severe weather problems in much of the cotton belt resulted in the smallest crop in nearly 10 years. In 1999/00, weather adversely affected yields for most major crops. Even so, U.S. rice production was record high, the corn crop was the fourth highest on record and the soybean crop was the third highest on record.

IMPLICATIONS OF THE FARM CRISIS AGGREGATE INDICATORS

Cash Flow.—For 2000, farm cash receipts are forecast to fall to $189.9 billion, or $17.7 billion below the record of $207.6 billion set in 1997. Lower receipts mean lower net cash farm income, which for 2000 is forecast at the lowest level since 1986 and more than $9 billion less than in 1999. These aggregate figures mask the steep declines in cash receipts and farm income expected for major crops, hogs and milk.

Cash receipts for wheat, feed grains, soybeans, cotton and rice are forecast to decline from a record $56.8 billion in 1997 to $40.3 billion in 2000, a 29-percent drop. While projected to be up from last year's $9.2 billion and 1998's $9.4 billion, cash receipts for hogs are forecast to be $9.7 billion in 2000, down 26 percent from 1997's $13.1 billion. Dairy receipts are forecast to drop to $21.4 billion in 2000, down 9 percent from last year.

Government payments have offset much of the decline in cash receipts for major crops, thereby helping to maintain producers' cash flow. Total government payments increased from $7.5 billion in 1997 to a record $22.7 billion last year. In calendar 2000, government payments could exceed $17 billion under existing program authorities, the second highest ever. The emergency farm aid package passed by Congress in 1999 is expected to provide $2.4 billion in payments to farmers in calendar 2000.

Farm cash production expenses, forecast at $171.5 billion in 2000, are expected to increase by about 1 percent for the third consecutive year, after rising more than 4 percent each year from 1993–97. A large part of the stagnation in production expenses is due to the fall in grain prices, which has greatly lowered livestock producers' feed costs. Feed costs are projected to fall to $23.8 billion in 2000, down from $26.3 billion in 1997.

Balance sheet.—Farm business balance sheets have shown considerable improvement since the mid-1980s. Farm operator debt levels are about 10 percent below the peak levels of the 1980s and asset values are substantially higher. The debt-to-asset ratio for farm operators is up a little from 1997, but it is still expected to remain at about 16 percent at the end of 2000, compared with the low 20s during the mid-1980s. Even though farmers' balance sheets are much improved from the mid-1980s, the projected decline in farm income will reduce farmers' credit reserves and an increasing number of producers will face debt repayment problems.

Debt repayment capacity utilization measures the extent to which farmers are using their available lines of credit. In 1999, record government payments boosted net cash income and increased the level of debt farmers could service, lowering farmers' debt repayment capacity utilization to 56 percent of the debt that could be supported by current income. In 2000, farmers are expected to use more than 66 percent of the debt that could be supported by their current income. This figure is substantially down from over 100 percent in 1981 and somewhat down from the more than 70 percent during 1977–85, but would the highest level since 1985.

While the balance sheet for agriculture in the aggregate looks reasonably sound, that could change if farmland values fall sharply. Farm real estate values, which showed strong increases through much of the 1990s, started to level off last year. Cropland values declined in 5states in 1998, and in 1999, cash rents declined in 9 states, although the declines were small. In 2000, the value of farm real estate, which represents the largest component of farm assets, is expected to rise 0.5 percent, compared with a 1-percent increase estimated last year. Farmland values will likely remain stagnant or decline in areas of the country in which crop production dominates the farmland market, but increase in those areas where farmland values are influenced by urban pressure and other factors, such as the Northeast and some Western States. Farmland value data are reported with a lag, and thus far, the data show the drop in hard hit crop regions have been fairly modest. Recent Federal Reserve Bank data show that for certain parts of the country, such as portions of Iowa, Illinois and Indiana, land prices declined 2–5 percent between October 1, 1998, and October 1, 1999. Given current production and price prospects, we can expect further pressure on land prices in the months ahead, particularly in the Corn Belt, Plains States, and Mid-south.

Commercial lenders report declining farm loan repayment rates, increasing numbers of farm loan extensions and renewals and more stringent collateral requirements. However, all major institutional lenders continue to experience historically low levels of delinquencies, foreclosures, net loan charge-offs and loan restructuring. In 1985, over 10 percent of all bank nonreal estate loans to farmers were either delinquent (past due 30–90 days) or nonperforming (past due 90 or more). In the first quarter of 1999, 2 percent of all bank nonreal estate loans were either delinquent or nonperforming. Bank charge-off rates, which reached 3.36 percent of nonreal estate loans in 1986, remained below 0.2 percent in the first quarter of 1999. In addition, delinquencies of the Farm Service Agency (FSA) have declined from a year ago and since 1996.

Over the past year, the amount of credit provided to farmers and ranchers by FSA directly or through credit guarantees to commercial banks has increased sharply. The total value of loans provided to farm borrowers through direct and loan guarantees is up 75 percent, compared with a year ago. Congress authorized over $5.7 billion in FSA guaranteed and direct loan program authority in fiscal year 2000 to as-

sist farmers in obtaining credit. The fiscal year 2000 program level for FSA farm loans is $1.9 billion more than the $3.8 billion obligated during fiscal year 1999 and $3.5 billion more than the $2.2 billion obligated in fiscal year 1998.

IMPLICATIONS OF THE FARM CRISIS—FARM LEVEL INDICATORS

On January 1, 1999, USDA classified 59 percent of farms as being in a favorable financial position—positive cash flow and low debt compared with assets. The remaining farms had a debt-to-asset ratio above 0.4, 4 percent of farms; or negative farm income, 33 percent of farms; or both, 5 percent of farms. Most dairy producers entered this year in a strong financial position following 2 years of strong prices and low feed costs. However, sharply lower milk prices could contribute to growing financial stress for those producers who remain highly leverage. For producers of field crops who are already highly leveraged, continued low prices of these commodities and weather-reduced production will increase their financial vulnerability. The areas of the country that specialize in the production of these commodities, such as the Corn Belt, Plains States, Delta and Southeast and areas affected by adverse weather, will likely see more of an increase in farm financial stress than other areas of country. The extent farm financial stress increases in the coming months will also depend on whether the Congress passes an emergency aid package and the size of that package.

Looking ahead at the 2000/01 crop years, income prospects from a crop sector perspective suggest sharp declines in income. The net income—cash receipts plus government payments less cash production expenses—for wheat, feed grains, upland cotton, rice and soybeans could fall to $18 billion, down $6 billion from $23.8 billion for 1999/00 and the 1995–99 average of $24.0 billion.

MARKET PROSPECTS—THE NEXT 12–18 MONTHS

Crops.—Large U.S. and global production of major crops coupled with more than ample stocks going into 1999/2000 marketing year are expected to continue to pressure grain, oilseed, cotton and rice prices through the remainder of the 1999/00 marketing year. Given no major weather disruptions in the major crop growing regions of the country, crop prices are expected to remain low over the next several months and into the 2000/01 marketing year.

In 1999, U.S. producers planted the lowest wheat acreage since 1972. But, wheat prices in 1999/00 are projected to decline from $2.65 per bushel last season to $2.50–$2.60 per bushel this marketing year, as winter wheat yields were record-high in 13 states and higher carryin stocks this season nearly made up for the year-to-year drop in production, leaving total wheat supplies very near last year's level. Wheat exports are forecast to be up slightly, reflecting the combination of strong export competition and increased food aid shipments. However, total use is projected to fall this season due to a nearly 100-million-bushel drop in feed use. Ending stocks are forecast to increase from 946 million bushels at the end of the last season to 997 million bushels at the end of this marketing year, the highest since 1987/88. (This forecast does not account for the 3-million-ton food aid program announced on February 10.)

Looking ahead to the 2000/01 marketing year, which begins on June 1, a further decline in winter wheat acreage will likely push total U.S. wheat acreage and wheat production lower. Winter wheat plantings last fall were down 1 percent from a year earlier. Lower wheat supplies and some improvement in exports could lead to slightly higher wheat prices next season.

The 1999/00 corn crop of 9.44 billion bushels is down from last year's crop of 9.76 billion bushels. While the size of the corn crop is down this season, total supplies are up as higher beginning carryover added nearly 500 million bushels to current-year supplies. Higher use is expected to more than offset the increase in total supplies, causing ending stocks of corn to drop from last season's 1.79 billion bushels to 1.74 billion bushels at the end of this marketing year. Total corn use this season is projected to reach a record-high 9.5 billion bushels, compared with last season's 9.3 billion bushels, as domestic use is projected to increase by about 3 percent while exports are projected to fall slightly from last year. The farm price of corn for the 1999/00 marketing year is projected to average $1.75–$2.15 per bushel, compared with last year's $1.94.

In 2000, corn acreage is expected to be near last year's level and assuming trend yields the corn crop would be up slightly and total corn supplies would be near this year's level. Total use also may be near this year's level, as ethanol use expands but declining livestock numbers hold down feed use. With little to no change in ending stocks, corn prices are expected to show only modest improvement next season.

Soybean plantings of nearly 74 million acres in 1999 exceeded the record of 72 million acres in 1998. However, soybean production dropped 4 percent in 1999, as drought adversely affected yields in several States. Despite the drop in production, total soybean supplies this season are record-high, as larger carryin stocks more than compensated for the drop in production. Most of the increase in supplies is expected to be absorbed by larger exports, which are forecast to be up 11 percent, leaving soybean ending stocks about unchanged from last year. Soybean prices for 1999/00 are currently projected to average $4.50–$5.00 per bushel, compared with last season's $4.93.

Plantings of soybeans could continue to expand in 2000, as returns to soybeans, including loan deficiency payments and marketing loan gains, relative to other major crops encourage farmers to switch acreage into soybeans. Higher acreage and trend yields could lead to record soybean production in 2000 and another year of rising carryover. Under the pressure of rising stocks, soybean prices could face additional pressure in the 2000/01 marketing year.

The 1999 cotton crop is estimated at slightly less than 17 million bales, up 22 percent from last year's crop of 13.92 million bales, pushing 1999/00 carryover stocks up nearly 12 percent from last year's 3.94 million bales. In both, 1998 and 1999 weather reduced cotton yields in several States. Despite abundant current-year supplies, U.S. cotton mill use is projected to decline from last season's 10.4 million bales to 10.2 million bales, as textile imports continue to grow. U.S. cotton exports are forecast at 6.4 million bales during 1999/00, up 2.1 million bales from last year, as the continuation of Step 2 payments has improved the competitiveness of U.S. cotton in U.S. and foreign markets. From August through December, the U.S. farm price of cotton averaged 44.9 cents per pound, compared with 60.2 cents last season.

Plantings of cotton are expected to remain about unchanged in 2000. However, cotton production could be up in 2000, assuming weather does not adversely affect yields in the major cotton producing States. Despite the expected increase in production, price prospects could possibly improve, especially if China's supply of exportable cotton declines in the coming months.

Rice production in 1999 rose 12 percent from a year earlier, as acreage rose 7 percent to the second highest level on record and per acre yields improved. The combination of larger production and stagnant total use is projected to lead to a near doubling in carryover stocks to 40.6 million cwt. Rice exports are projected to increase slightly in 1999/00, due to stronger milled rice exports resulting from lower U.S. prices and larger food aid shipments, while domestic use is expected to drop from last year's record high. Rice prices are forecast to average $5.75–$6.25 per cwt., compared with last season's $8.89. The decline in prices could lead to a cutback in rice plantings and production in 2000, but large carry-in and another year of large supplies will likely continue to pressure rice prices during the 2000/01 marketing year.

Other crops face mixed prospects in 2000. Sales receipts of fruit, vegetable, greenhouse and nursery crops are expected to rise $1.2 billion to $41.7 billion. While fresh vegetable prices are likely to rise from last year's reduced levels, fresh citrus prices are returning to normal after the December 1998 freeze. Horticultural exports are also likely to rise slightly in 2000 after 2 flat years, as Asian economies strengthen and U.S. citrus supplies recover. Tobacco receipts will decline again in 2000 to $1.8 billion, down $0.4 billion from the year before. Rising retail prices and reduced use are causing sharp quota reductions. Peanut production may decline a little with a return to trend yields and reduce cash receipts somewhat. Sugar production is likely to continue growing, despite reduced prices, as weak prices for alternative crops deter switching. International trade obligations will cause increasing concern about 2000/2001 imports and supplies.

Livestock and Poultry.—Record-high per capita meat production pressured livestock and broiler prices last year. In 2000, higher poultry production is expected to be about offset by lower beef and pork production, causing per capita meat consumption to drop below last year's. Lower red meat production is expected to boost prices for cattle and hogs in 2000. In addition, livestock, poultry and dairy producers should benefit from another year of low feed costs.

In 1999, hog prices steadily improved throughout the year averaging $34 per cwt. for the year. During the fourth quarter of 1999, hog prices averaged over $36 per cwt., more than $14 higher than one year earlier. In December and January, hog prices averaged $38 per cwt., moving above break-even for the first time since late 1997. Responding to the low returns the past couple of years, producers began to reduce their breeding herds in late 1998 and continued to reduce them in 1999. Although the number of sows farrowing in June–November was down 4 percent from a year earlier, the increase in pigs per litter was up 2 percent, leading to a 3-percent decline in the pig crop. The drop in hog numbers is expected to lead to nearly a

4-percent decline in pork production in 2000. The decline in pork production could push hog prices above $40 per cwt. during the second half of this year, with hog prices averaging $39–$41 for the entire year.

Cattle prices are projected to average about 5 percent higher in 2000 following last year's nearly 7 percent increase, as the liquidation of the nation's cattle herd finally leads to reduced beef production. The USDA's January 1 inventory of cattle and calves on farms showed 98 million head, down from 103.5 million head on January 1, 1996. In 1999, lower cattle and calf numbers did not translate into less beef production, as record slaughter weights, another year of poor incentives to hold back heifers for herd expansion and reduced forage due to drought led to record beef production. Beef production will remain large during the first 6 months of 2000, as cattle on feed inventories continue at record levels. On January 1, the number of heifers on feed was up 11 percent, while the number of steers on feed was up 6 percent from a year ago. During the second half of 2000, higher cattle prices and low feed costs should provide an incentive for producers to reduce heifer slaughter and begin rebuilding the cattle herd. Reduced placements of cattle on feed is expected to lead to a sharp reduction in beef production during the last half of 2000. For all of 2000, beef production is forecast to be down 3 percent.

Broiler prices in 2000 are projected to be off about 2 percent from last year after falling 8 percent in 1999. In response to attractive returns in 1998, poultry producers expanded the hatchery flock which could be about 5-percent larger than a year ago through the first half of this year. In the face of larger supplies, prices for whole birds are expected to remain weaker than a year ago. Prices for most broiler parts in January were 10–20 percent below a year ago, while strength in the export market kept leg quarter prices about 5 percent above last year. Despite the price drop, producer net returns are expected to continue to remain positive.

For all of 1999, milk prices averaged $14.38 per cwt., down from the record of $15.42 per cwt. in 1998, but still well above the previous 5-year average. These strong milk prices coupled with low feed costs and favorable weather in most areas of the country caused producers to expand milk production by over 3 percent in 1999, the highest year-to-year gain in milk production this decade. Increasing milk production and seasonally soft demand for dairy products caused milk prices to collapse at the end of 1999. The surge in milk production will likely pressure milk prices over the next several months. For all of 2000, the all-milk price is forecast to average $12.55 per cwt., down nearly $2 from last year and about $1.60 below the previous 5-year average.

OTHER FACTORS AFFECTING THE OUTCOME

There is no doubt the farm economy is weak and many producers are having serious cash-flow problems. A number of key factors that will determine the financial fate of U.S. agriculture over the coming year are as yet unknown. A few key things to watch:

Market access.—There is continuing concern by producers over the acceptance of transgenic crops and the economic returns to producing them. Consumer and government reaction to these crops in overseas markets will determine producer use of transgenic seeds, marketing practices, and farm prices.

China.—China will continue to be a potentially major factor in world agricultural markets for several reasons. First, China's domestic macroeconomic policy is a factor in Asian trade patterns and exchange rates. Second, China has not been much of a wheat importer in recent years and holds large stocks of cotton and corn. China has lowered producer prices for major commodities in 2000 and that may result in some crop production cutbacks or switching among crops. China's exports limit U.S. prices of corn and cotton, but production changes and stock reductions in the 2000 crop year may begin to limit China's effect on world markets.

Accession to the World Trade Organization (WTO) would be a very positive factor for U.S. exports and farm prices. China's commitment to eliminate export subsidies should reduce their exports and reinforce domestic policy changes that reduce production incentives. Recent USDA analysis suggests that U.S. farm exports to China could rise as by at least $2 billion by 2005.

Global weather.—As always, adverse or exceptionally good weather around the world could affect the level of crop food, feed and fiber supplies and prices. At this point, weather generally looks favorable, with dry areas in the U.S., North Africa and the Middle East.

Emergency assistance legislation.—The drop in farm prices the past 2 years raised concerns with the farm income safety net resulting in Federal emergency assistance of over $15 billion. The President's fiscal year 2001 budget proposes a new farm safety net initiative. The initiative, designed to broaden Federal support, includes

four complementary proposals that would: (1) enhance farm income support by providing supplementary countercyclical income assistance, (2) increase environmental benefits and farm income with expanded conservation programs, (3) improve risk management programs and (4) expand economic opportunities in farm and rural areas. These legislative proposals would provide about $11.5 billion in additional assistance to the farmers and ranchers during 2000–2002.

The income assistance program would provide supplemental income assistance payments to eligible producers of wheat, feed grains, rice, upland cotton, and oilseeds. The supplemental payments would be provided to eligible producers if the projected nationwide gross income for the crop falls below 92 percent of the preceding 5-year average. To target the program to smaller farmers who typically have lower farm income, payments would be subject to a separate $30,000 per person payment limitation. The income assistance program is projected to cost $3.1 billion during fiscal year 2000–01. In addition, the President proposed to extend the dairy price support program, which terminates at the end of this year, for 2 additional years.

The budget proposes an additional $1.3 billion for a Farm Conservation Programs Initiative, which includes a new $600 million Conservation Security Program to provide annual payments to farmers and ranchers who implement sound conservation practices. Additional funding is also provided for the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP). In addition, the President proposed to remove the enrollment cap on the Wetland Reserve Program (WRP) and to increase the enrollment cap on the Conservation Reserve Program (CRP) from 36.4 to 40 million acres.

The fiscal year 2001 budget would extend the premium discount available in 1999 and 2000 for farmers who purchase buy-up coverage for crop insurance. The premium discount and the costs associated with higher participation are expected to total $640 million. The budget also requests $100 million to establish coverage for multi-year losses and $100 million to provide livestock producers with price protection.

Lastly, the Administration proposes using $80 million in fiscal year 2001 to provide equity capital for new livestock and other processing cooperatives. The proposal would help address concerns about market concentration and provide farmers with an additional source of income through cooperative ownership.

That concludes my remarks, and I invite questions. Thank you.

TABLE 1.—FARM ECONOMY OVERVIEW

[Dollars in billillions]

	1996	1997	1998	1999E	2000F
Cash receipts	$199.1	$207.6	$196.8	$191.9	$189.9
Government payments	$7.3	$7.5	$12.2	$22.7	$17.2
Cash expenses	$159.9	$169.0	$167.8	$170.0	$171.5
Net cash farm income	$57.5	$58.5	$55.0	$59.1	$49.7
Net farm income	$54.9	$48.6	$44.1	$48.1	$40.4
Farm debt	$156.1	$165.4	$172.9	$172.8	$172.5
Farm assets	$1,003.9	$1,051.6	$1,064.3	$1,067.2	$1,072.8
Debt-to-assets (percent)	15.6	15.7	16.2	16.2	16.1
Agricultural exports)	$59.8	$57.3	$53.6	$49.0	$49.0
Agricultural imports	$32.6	$35.8	$37.0	$37.4	$38.0
Value of the dollar [1]	101.0	109.6	115.5	112.0	108.7
Farm production (mmt) [2]	410	417	431	415	NA
Farm prices received [3]	112	107	101	95	NA
Grain stocks-to-use (percent) [4]	16.0	17.9	18.7	18.1	NA
CPI-food (percent)	3.3	2.6	2.2	2.2	1.9

E=estimate; F=forecast.

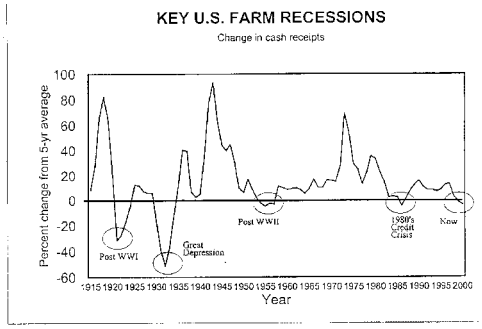
[1] Real agricultural trade weighted, 1990=100.

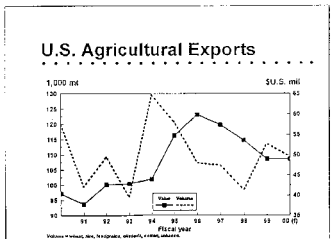
[2]/ U.S. production of grains and oilseeds.

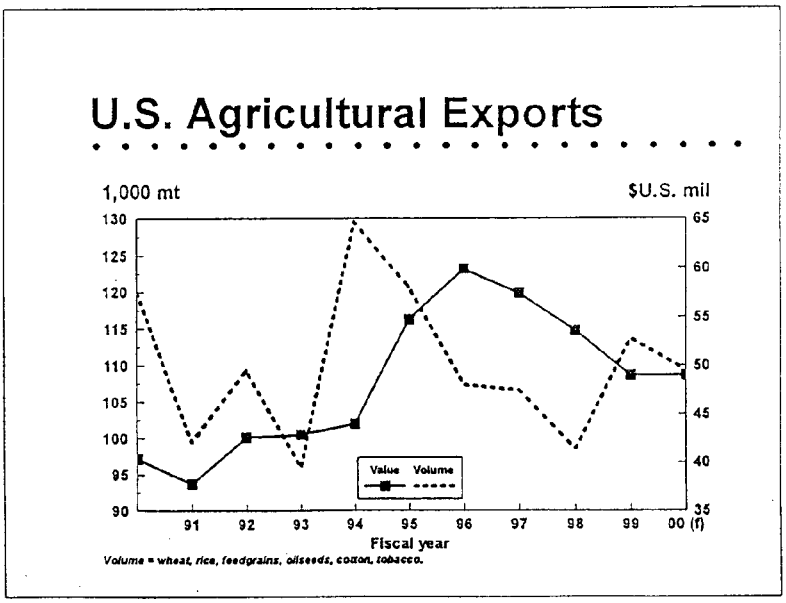
[3] Index of prices received by producers for all farm products, 1990–92=100, data for 1999 is for the month of August, 1999.

[4] Marketing year world ending stocks in the year indicated.

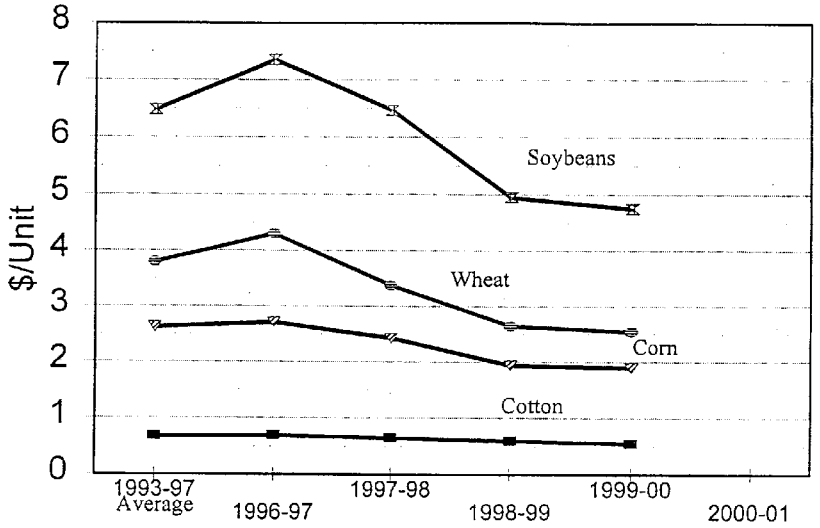
Note: Data and forecasts are based on early February 2000 conditions.



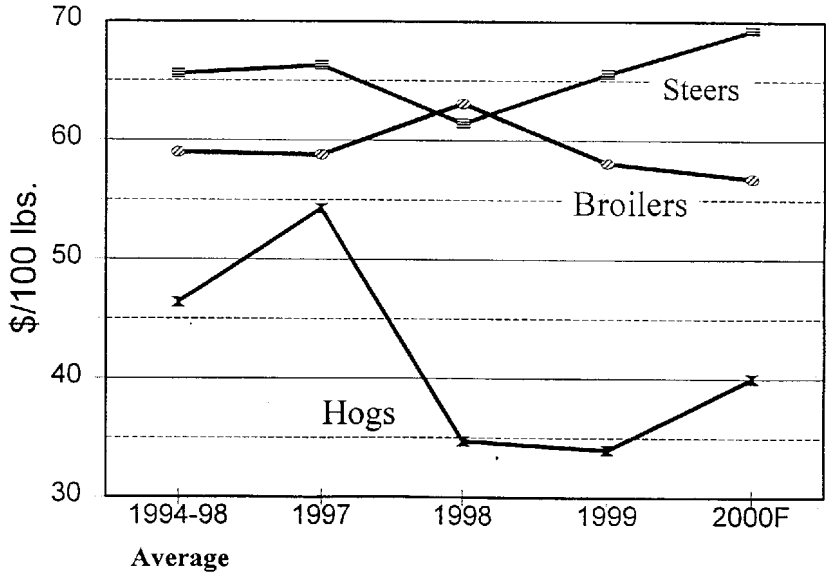


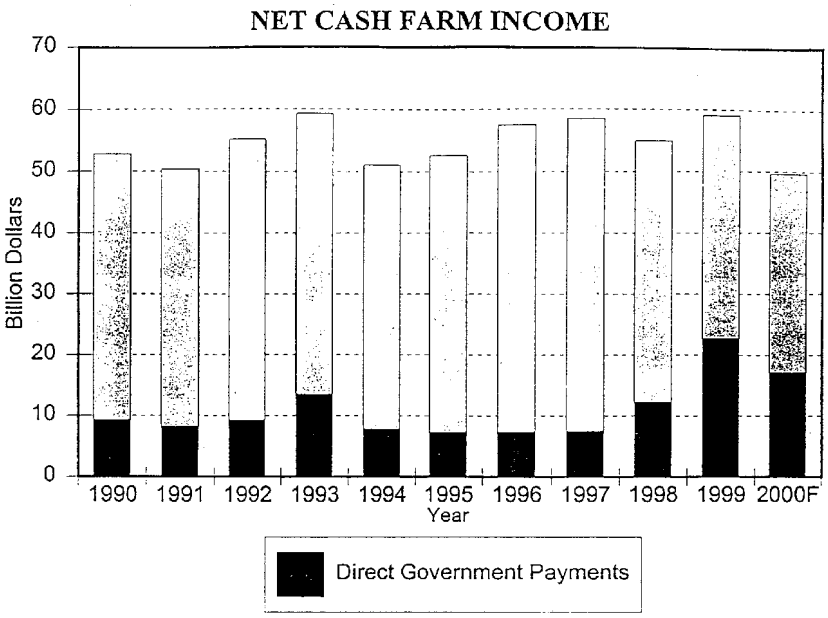


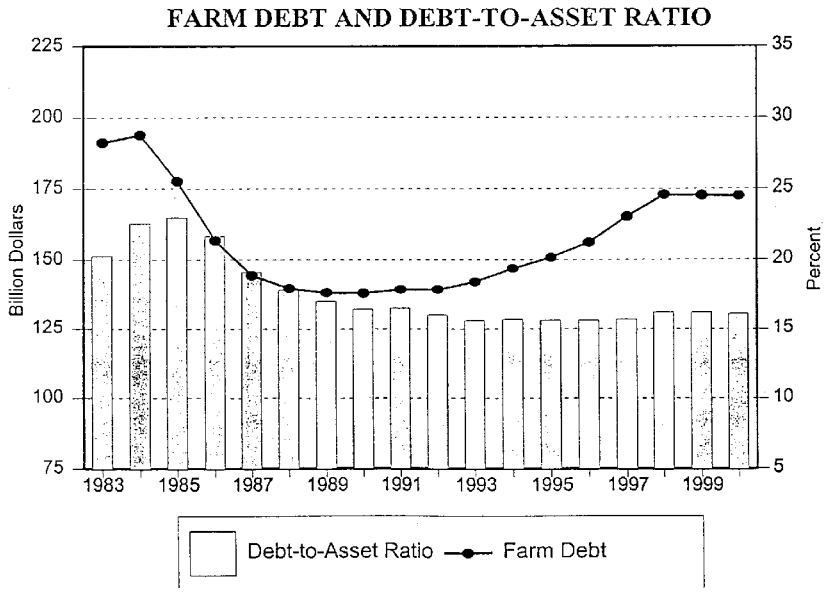
Crop Prices

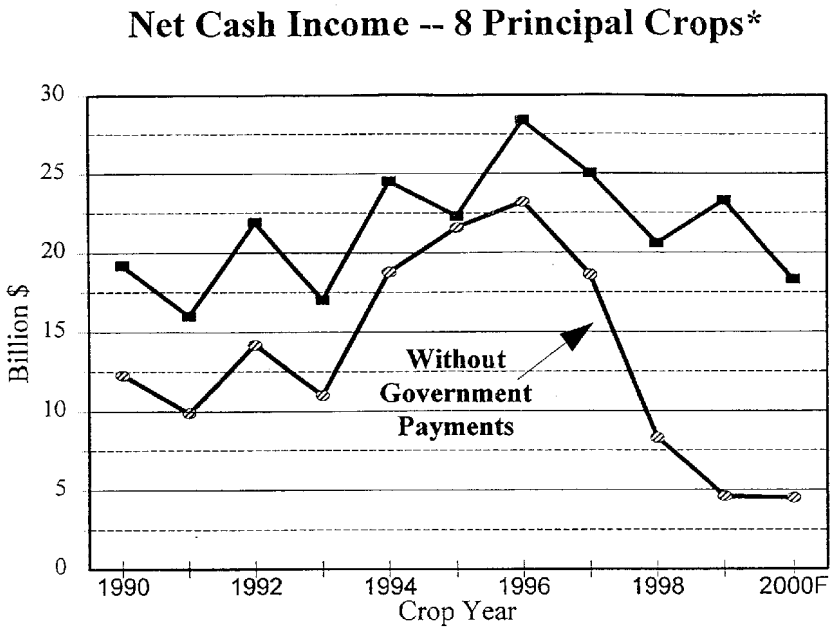


Livestock Prices




NET CASH FARM INCOME
Billion Dollars
70
60
50
40
30
20
10
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000F
Year
Direct Government Payments


FARM DEBT AND DEBT-TO-ASSET RATIO
Billion Dollars
225
200
175
150
125
100
75
Percent
35
30
25
20
15
10
5
1983
1985
1987
1989
1991
1993
1995
1997
1999
Debt-to-Asset Ratio
Farm Debt



*Wheat, rice, corn, sorghum, barley, oats, soybeans, upland cotton

Senator COCHRAN. Thank you, Mr. Collins. We have been joined by other Senators, members of the committee, and I am going to yield to them at this point for any comments or questions they may have of our witness panel.

Senator Gorton.

STATEMENT OF SENATOR SLADE GORTON

Senator GORTON. I thank you very much, Mr. Chairman. You recognize better than anyone how we are pulled by our various responsibilities. I have a hearing starting in 10 minutes or so with another part of the Department of Agriculture, the Forest Service, for which I have a particular responsibility, so I appreciate being able to make a statement and at least leave some questions for Mr. Schumacher with respect to my constituents who live under the ambit of his jurisdiction.

We are not any different than that of the rest of the country, from wheat growers to apple orchards, potato growers, asparagus farmers, and an adverse set of markets has really taken its toll in Washington State as well as it has elsewhere. My farmers produce more than 230 food, feed, and seed crops, and only two, wheat and barley, are under the guise of program crops. When overseas markets are lost and ignored, and when excessive regulations are imposed, when the tools necessary for production are stripped away, and when the younger generation becomes discouraged, they do need some forms of assistance.

Last year, one of our peculiar needs was with apple growers. Our most recognizable and profitable crop had its lowest price level in decades. There was a combination of adverse economic conditions both at home and abroad that were directly related to that struggle. There were all kinds of environmental restrictions placed on the growers, and our growers also needed support in overseas marketing and sales.

Under Secretary Schumacher visited the State last July, unfortunately politicized the plight of the growers and Members of Congress from the State. They did tell him of a desire to see loan programs made available for their commodity as well as increased trade and market access.

You, Mr. Chairman, ended up being tremendously helpful in providing in the big agricultural relief bill a specific mention of apples, I think perhaps for the first time ever.

Then, of course, in December the President came to Seattle during the World Trade Organization ministerial, and made the apple industry his poster child for world trade 1 day before he trashed the entire WTO ministerial itself and guaranteed for all practical purposes that we will not get any agricultural trade opening during the balance of his term.

Now, in spite of what you did, Mr. Chairman, I have just learned that several of our apple grower applications for the loan program have been declined by the Department of Agriculture, and I hope that Under Secretary Schumacher will explain why, and when we can get some of the things that you helped create for us.

On perhaps a less significant level our potato growers have expressed concern about their markets, and are very worried about the closure of the Foreign Agricultural Service Office in Singapore, and perhaps the Under Secretary can tell us what his alternatives are to that.

Now, we did just in the last 48 hours have the good news that China has finally gotten into the wheat market and announced a 50,000 metric ton purchase, but that 50,000 metric ton purchase by China is exactly one-eighth of the loss that we had from 1998 to 1999 in wheat sales to Pakistan, our best existing market, and I think we need to know, my wheat growers need to know how it is that we suffered such tremendous losses in our sales to Pakistan.

Asparagus growers are concerned about the influence of low cost product from Peru, hop growers about the loss of chemical tools, cherry growers are threatened by a lack of labor and housing, dairymen and cattlemen are constantly battling Federal agencies on water use and buffer zones, pea and lentil growers are at odds over the cuts in the Public Law 480 program, and all of the commodities in my State are barraged by those in the Administration and out of it advocating an anti-dam sentiment, cutting off water supplies in areas in which agriculture is simply not possible without irrigation.

So basically, it seems to me that we need an Administration that speaks with one voice in favor of agricultural industries, that does not simply advocate with lip service opening up foreign markets, but really helps to do so, that does not destroy by its regulations with respect to the tools of agriculture the availability of the tools that agriculture needs, including water, and that attempts to ad-

vance both a free market system and the use of the huge amounts of money, the billions of dollars that we appropriated for temporary relief, at the same time.

I must say, I am frustrated when you provide us with help for crops like apples and nothing much happens. I am frustrated by the loss of markets that we have historically held in the United States, and I am frustrated by the increasing regulations that impose grave difficulties on a business, on a profession that already has enough problems created by lower market prices overseas, and by increasing competition, and does not need to be regulated out of existence by its own government at the same time.

So I thank you, and now I have got to do the Forest Service bit, but I do hope that Secretary Schumacher will talk both about the apple loan program, about the office in Singapore, and about how it is that we have managed to lose our wheat markets so dramatically in countries that have been good customers of ours in the past, while we are at least beginning to get a little bit of encouraging news from China, though only very modest in comparison with what we have lost.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Senator, and we will see that the questions you have are submitted for the record.

Senator GORTON. Thank you.

Senator COCHRAN. Senator Burns.

[The statement follows:]

PREPARED STATEMENT OF SENATOR CONRAD BURNS

Mr. Chairman, thank you for holding another hearing today so we may further discuss the administration's farm proposal.

As I mentioned at the last hearing, I have more than a few concerns with this plan. To start with, this administration is asking for less money than last year. In small grain country there has been no improvement in price or movement. An effective and imaginative approach that will provide adequate short-term assistance, as well as a long-term plan to keep farmers in business is not only needed but required. The administration's proposal before us today, does neither.

It appears that the Administration is putting a heavier emphasis on the conservation side of their proposal, when we have an economic emergency across the countryside. Our efforts should be spent on trade and economic issues, not on promoting Vice President Gore's environmental agenda. Good economics and prosperity in farm country do more for good conservation practices.

I am very concerned about the $1.3 billion for conservation in the farm safety plan. Not only does it promote an agenda that is not necessarily in the best interest of the agricultural community, but it leaves out any real commitment to crop insurance reform. It is imperative we have an effective risk management plan. All the conservation initiatives in the world are not going to help a producer make sound economic decisions to keep their farm a sustainable operation in the first place.

I think conservation plans can be highly effective. I don't mean to downplay their importance. However, I am very suspicious about this proposal and its intent. Especially when staff levels for technical assistance for NRCS were not adequately increased. CRP acreage would be increased in this proposal from 36.5 million acres to 45 million acres, meaning there will be more contracts to administer. There is no way the staff levels allocated will be able to handle the increased workload.

Effectively, this proposal provides no real solutions to the farm crisis. The counter-cyclical income support proposal provides only $6 billion over the next 3 years. Last year alone, the emergency package totaled $8.5 billion, and over the past 2 years, over $16 billion has gone to agricultural producers. Even with the counter-cyclical income assistance plan as a supplement to AMTA, $6 billion is simply not going to pull farmers through.

This new Farm Safety Net proposal also contains a $30,000 cap on payments. Montana producers cannot support their families and stay in business on $30,000. Currently, with the $40,000 payment limit, many Montana farmers and ranchers are already eliminated. I have no idea why the USDA is decreasing the amount to further hurt farmers.

18 percent of producers in this nation account for 85 percent of production. USDA figures estimate that only 8 percent of the nation's producers will be eliminated from this payment plan. Again, I have no idea where USDA came up with this figure. I believe a much larger number than 8 percent would be eliminated from the counter-cyclical payment. It should not be the intent of this proposal to put the primary producers of this country at a disadvantage.

I know my Montana farmers and ranchers are not looking forward to another year of zero profit. However, it seems that is what this plan would provide them.

At a time when we are fighting for a place in the world market, why we are cutting funds for important export programs? Nearly every export program was cut. The Public Law 480 program was cut drastically as was the Section 416 program. Farm-states like Montana depend on export programs for their agricultural economy. We have been cut off from over 10 percent of the world market, due to sanctions and under-funded and under-utilized market development programs.

This administration has shown no stomach to take on our competitors. We must use these programs and stop allowing our competitors an advantage. Why do you feel these tools provided you by Congress are either unimportant or misunderstood or ineffective? If it is the latter two, why hasn't the administration approached Congress with some ideas to make them understood and effective?

Mr. Secretary, all the social programs that look and sound nice can all be replaced by a strong farm economy. That is what we need for rural economic development. There can be no other way. Excess acres in CRP has led to the decay of our rural cities and towns. Our standard of life in rural America continues to decline. This administration can brag all they want about how great this economy is and has been, but that has not been the case in farm country and the figures show it. We cannot get a handle on our cost production. Unrealistic rules and regulations cost untold dollars—dollars we do not have. It is not whether we like to do the right thing to ensure sustainability of our operations; it is a fact that we do not have the money.

In times like these our producers need every available marketing option open to them. We must provide them effective risk management. If we are not, why not? We must assist in a reliable export system. If we are not, why not? We must assist in short-term resources to again cope with another year of depressed grain prices and if we are not, why not?

I do not know how many employees you have there between 13th and 14th on Independence and how many of them have BS's, MS's and PHD's . It sounds like we have some misdirected resources that should be spending valuable time devoted to farm income. Mr. Secretary, that is where it is at . . .

Thank you again Mr. Chairman. I look forward to working with you and other members on this committee to come up with effective solutions to the farm crisis.

Senator COCHRAN. Senator Dorgan.

STATEMENT OF SENATOR BYRON L. DORGAN

Senator DORGAN. Mr. Chairman, thank you for holding this hearing, and let me also thank you for helping us in Congress craft an emergency package to respond to collapsed commodity and livestock prices, which has been very important to family farmers. In fact, I think the testimony today by Mr. Schumacher and Mr. Collins indicates that, without the two emergency packages in the last couple of years, the farm economy would have been in much more desperate trouble than it now finds itself in.

I must say—just to begin, before I ask a question of the witnesses—I was in Seattle as well, and it is interesting how two people can have different views of the exact same event. I was, in fact, at the presentation that President Clinton made to the apple growers and others in Seattle, and my own view of that circumstance is that the President did not trash the WTO, as was said by my colleague.

In fact, he stated the obvious: When we talk about globalization, and the movement towards a global economy, the rules of trade must keep pace with the movements towards globalization. The rules have not kept pace, and the result was tens of thousands of people marching in the streets of Seattle. I think the President simply stated the obvious, and did not in any way trash the WTO talks and put us in a position where we will not get an agricultural agreement. I just wanted to make that point.

I do not think you will ever have trade talks, especially dealing with agriculture, but trade talks generally, without having substantial numbers of people demanding that the rules of trade be discussed along with the increasing pace towards globalization. Those rules are critically important to working people, to the environment, and to a range of other issues.

Having said that, let me now say to Mr. Schumacher and Mr. Collins: Your testimony is not very heartening to those of us who are yearning for a stronger agricultural economy. Mr. Schumacher, you talked about the past. Last year, U.S. farmers experienced the lowest wheat prices in 8 years, lowest corn prices in more than a decade, lowest soybean prices in 27 years, lowest hog prices since the depression, the steepest decline in milk prices in history, and so on. When you talk about the future, Mr. Collins, you talk about U.S. agriculture continuing to face the prospect of low prices and incomes, and ongoing structural change.

I guess that leads to this question. Farmers are now in the Dakotas preparing to think through their plans for the year. They are going to need to borrow some money. They are going to go to a lender to talk about getting some seed, and some fuel, perhaps machinery repairs in order to plant some seed this spring.

Their lenders are only going to look at what the current farm program provides as a safety net. I assume the lenders will not be able to look at some anticipated emergency response that may or may not happen later in the year. While these emergency responses have been critical, I expect that if we do not do something to change the underlying safety net itself, a lot of farmers are going to find their lenders saying, well, look, all we can do is project what might happen to you given market prices and given the current farm program. We cannot anticipate that Congress may or may not pass some kind of emergency piece later.

Am I correct in that circumstance? I mean, have you analyzed that, Mr. Schumacher?

Mr. SCHUMACHER. If I may, Mr. Chairman. Yes, I went through the same discussions with farmers from North Dakota, Washington, and California in the last few weeks. The farmers are saying that the Congress will provide another emergency package. And the lenders are saying, well, we are not sure, or, we are not sure what form that might take. The Administration has a proposal on the table that will extend a couple of years, to give a little more surety to farmers and their lenders so they can get through probably another year or year and a half, of a pretty tough time in commodities.

Senator DORGAN. Mr. Collins.

FARM SAFETY NET

Mr. COLLINS. I agree with your general assessment, Mr. Dorgan. Certainly a bird in the hand is worth two in the bush. I think if you are a banker particularly, we know from Federal Reserve surveys over the last 2 years, that bankers have been increasing credit requirements on farmers.

You combine that with the fact that income to debt is going to go down. That ratio will go down quite substantially in the year 2000 without additional government payments. And I think there is no question that makes it more difficult to get a loan for those producers that are on the edge. Yes.

Senator DORGAN. Mr. Chairman, I know that you do not relish seeing myself and my colleague, Senator Conrad, come to the floor to talk about agriculture, but to us it is the single most important issue in our State's economy. Almost 40 percent of North Dakota's economy is agriculture. And it has just dropped off the table. We have been hit by floods, by chronic rain and moisture that has caused the worst crop disease in an entire century, on top of collapsed prices and a safety net that just does not make up the difference. So that is what has pressed us on behalf of our constituents to say we have to do something different.

Your testimony today, Mr. Schumacher and Mr. Collins, in my judgment, underscores the need for us to review how we can change the underlying safety net, how we can make changes to it that provide more structure and more assistance during collapsed grain prices without having to rely on an emergency bill later in the year. Because if we have to rely on an emergency bill again this year or next, a lot of those farmers will be told by their bankers, you do not cash flow here, you better take whatever little equity is left and get off the family farm.

And my fear is that we are losing so many family farmers because we have a lot of pride of authorship in the current farm bill and a reluctance to reopen it. It is painfully obvious to virtually everyone that this is not working. This would work in certain times. During good times, when prices are good, you could transition and it would be just fine.

You could transition people out of a safety net with $5 wheat. I suppose it would be just fine. But when grain prices collapse, this is an unworkable system. This farm program does not work. The quicker Congress comes to grips with that, the better, and the more family farmers will be given a chance to continue to do what they do best.

So I think your testimony today gives us a good description of where we are, a description of where you think we are headed, and this ought to be a wake-up call to every single Member of Congress who cares about farm policy and cares about retaining a network of family farms in this country's future.

Mr. Chairman, thank you very much.

Senator COCHRAN. Thank you, Senator Dorgan.

Senator Durbin, I had indicated that Senators could either make an opening statement or ask questions, because I know there are other obligations that each of us has. If you want to do both or one, that is your choice.

STATEMENT OF SENATOR RICHARD J. DURBIN

Senator DURBIN. At the risk of pushing too hard, I will submit my statement for the record and make a very condensed version of it, and ask a few questions, all in 5 minutes.

Let me first thank you all for being here. Thank you, Mr. Chairman for this hearing.

Mr. Collins, we have had a chance to speak many, many times. And, Mr. Schumacher, of course, Mr. Kaplan, great to have your team here with us today.

I am trying to step back for a moment. I listened to my colleague from the State of North Dakota and so many others in the farm belt, I'm probably trying to do the impossible. I am trying to figure out whether this is an anomaly that we are living through and, a few years from now, we will look back and say, those were the bad times and we have recovered, or whether we are facing a trend line here, which is inexorable, that we just cannot overcome.

Are we facing changed circumstances in the global economy, when it comes to agriculture, which we just have to concede are inevitable? Are we facing new production in countries that, years ago, could not have considered it, at levels that we never would have been able to predict, that have now become our competition? Are we dealing with a global demand for product which is so unpredictable from year to year that we find ourselves at the mercy of this market? Can we even, on the best bipartisan day, come up with a new approach to helping American farmers that can anticipate some of these variables, as well as the variable of weather and exchange rates and so many other things that come into play?

PREPARED STATEMENT

I guess, Mr. Collins, since yours is the role of an economist, I really would try to ask you if you feel that there are certain changes in the global economy that account for the current doldrums that we have been in in agriculture for the last couple of years and appear to face for the next few months at least.

[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD J. DURBIN

Good afternoon. Chairman Cochran, Senator Kohl thank you for holding this important hearing today. I think it is important for this committee to examine the severe economic crisis that continues to plague rural America while exploring options that can help relieve the stress and promote U.S. agricultural products abroad.

First, as I've said before, I am encouraged by the Administration's proposal designed to improve the farm safety net. A quick review of that proposal suggests that it would be a significant boost to Illinois farmers. In fact, it would mean more than $140 million under USDA's Supplementary Income Assistance Program, over $60 million for conservation programs, and more than $64 million in new risk management assistance for Illinois farmers in the first year alone.

Obviously, our farmers need help. According to a University of Illinois study, about a fifth of the state's 73,000 farms won't cover their 1999 operating expenses and a majority won't make enough to cover family living expenses. Farm net worth is expected to drop about 15.5 percent on average. The Illinois Farm Bureau predicts that about 18 percent of Illinois farms will have negative 1999 net incomes and about 22 percent are in danger of going out of business.

Mr. Chairman, since 1989 the federal government has spent $27 billion in emergency funding for farm-related disasters, 60 percent or $15.9 billion in the last 2 years alone.

I think it's important for all of us to realize that the 1996 Farm Bill, Freedom to Farm, was not written in stone. It can and should be changed. I believe we must start now by reforming Freedom to Farm because clearly it has failed to meet the most basic needs of producers. Restoring the farm safety net, targeting payments to farmers in need, and ensuring that livestock producers are not left behind should be the first steps.

I also believe that we should begin a bipartisan effort to expand markets for American agricultural products so that farmers can take advantage of the immense buying capacity of developing countries. I am pleased that Under Secretary Gus Schumacher has joined us today to talk about efforts being undertaken by the Foreign Agricultural Service.

Allow me to touch briefly on Africa. As you probably know, I was in Sub-Saharan Africa in January and had an opportunity to see U.S. food aid programs in action. I was impressed and heartened by direct feeding programs as well as programs that sell U.S. food products at low cost to finance development projects. But I was overwhelmed by the impact of AIDS on Africa—particularly by the millions of children being left orphaned by the epidemic and the devastating impact on African countries' economies. I believe U.S. food aid could be used to target communities heavily affected by AIDS. I recently introduced legislation, the AIDS Orphans Relief Act of 2000 (S. 2030), to target $50 million of U.S. food aid for nutritional assistance for people living with AIDS, for families and children affected by AIDS, and for development projects for communities heavily impacted by AIDS.

Mr. Chairman, I would like to get Under Secretary Schumacher's views on this legislation and the potential for U.S. food aid being used to help those children, families, and communities affected by AIDS in Africa and elsewhere in the world. I would also like to suggest that the Senate Appropriations Committee, particularly the Agriculture and Foreign Operations Subcommittees, should schedule a joint hearing to further explore this issue.

Finally, I included language in last year's bill calling upon the Administration to specifically request funding in fiscal year 2001 to implement the U.S. Action Plan on Food Security. Instead, I found a 17 percent drop in Public Law 480 funding (from $1.23 billion to $1.02 billion), and no specific program funding for the Action Plan. I'm very interested in an explanation on this matter.

Mr. Chairman, again thank you for the opportunity to raise these important issues today.

CAUSES OF AGRICULTURAL SLUMP

Mr. COLLINS. Your comment just before those questions is a whole bunch of questions in one, and I would almost like to say, all of the above, to all of the factors that you raised. There are a couple of things that strike me, and let me go back to the simplistic part first. There are two fundamental forces that have been at play over the last couple of years. One has been a dramatic slowdown in the world economy. We were growing at 3 to 3.5 percent and, all of a sudden, we were growing at less than 2 percent. And that has really pared back demand in a lot of areas of the world.

Second, we have had several successive years of very good crops around the world, part of it due to technology, but part of it due to just very good weather. We are on track to have pretty good weather again this year. I just reviewed all of the global weather maps, and we have dry weather in western North Africa, some dry weather in Iran, and I think that is pretty much it for the major commodities.

So those two factors have helped create a cyclical trough that we have been in right now. Agriculture does run in cycles, not predictable ones, but we go up and down, and we are down right now. And I think you have to take care not to think that we are going to be down forever.

But, at the same time, there are some surprising structural changes taking place around the world that are going to be, I think, promising for some crops and not so promising for others.

Senator DURBIN. May I ask you, if I might, to kind of zero in on one particular thing? For a long period of time, the Federal farm policy, among other things, focused on the belief that if we took certain acreage out of production in the United States of America, it would have an impact on world price. And we used that thinking for a long time in terms of the number of acres you could plant in certain program crops, the conservation reserve program and the like. Is that premise still valid in the world today?

Mr. COLLINS. I think that it is for major field crops. To give you an example, our share of world wheat trade this past year was 31–32 percent. Our share of world cotton trade, 25–26 percent. Our share of world corn trade, 70 percent. Our share of world soybean trade, somewhere about 60 percent. These are very large percentages of world trade. And if we were to take acreage out of production, no doubt it would have an effect on foreign acreage.

Now, some of those shares are not as big as they used to be. The soybean share is not as big. The wheat share is not as big. So, to that extent, taking land out of production would have less of an effect than it would have had in the past, but it still would have an effect.

Senator DURBIN. But are we such a market maker that if we took the 31 percent of world production in wheat and said, we are going to set aside 10 percent of the acreage and we are going to reduce our production by 10 percent, in other words, reduce 3 percent of the total sales of wheat worldwide, that would have a price impact sufficient to warrant that plunge on our part?

Mr. COLLINS. No, I did not say that. I do not know that it would have a price impact sufficient to warrant taking that land out of production, but it would have some price impact. I still think that we are in a world market where we have lots of competitors who are price responsive—Argentina and Australia, with respect to wheat prices. When wheat goes up, we know Australia will divert land from livestock to wheat, for example. Brazil and Argentina, with respect to soybeans, we know that they would like to see higher soybean prices, and that would accelerate the rate at which they are bringing new land into production in Brazil.

So we could take land out of production; I think we could affect prices, but, over time, the effect would be eroded by competitor response.

Senator DURBIN. Well, I am going to make one last footnote on this particular aspect and say that I have a special interest, as many do in the Midwest, about the ethanol program. I think it has been conceded by you and others that absent a quick response by the Administration to our concerns about this ethanol program, we put at risk some 10 cents a bushel in corn price. So I hope that our friends in the EPA and the White House could come together on this very quickly.

FOOD ASSISTANCE FOR AFRICA

Mr. Schumacher, it is good to see you. Let me ask you a specific question based on a trip that I took in January to Africa. I really went to look at food assistance programs and microcredit, and ended up spending most of my time looking at the AIDS epidemic,

which is just overwhelming and devastating, and may be the most moral challenge of our generation.

One of the things I came away with was the belief that, as overwhelming as it is, there are things that work. And some of the things that work are food assistance, particularly to those families willing to bring in AIDS orphans. These are families that literally are living hand to mouth on a day-to-day basis, who, because of the extended family custom in Africa, will bring in the orphans from the households of their brothers and sisters and relatives and bring them under their roof if they can do it economically.

The question is answered as to whether they can do it by basic things, like microcredit programs, which do not relate directly to your Department, but equally food assistance programs. I really came away believing that if we did nothing else but try to strengthen the existing African families so that they can bring in these orphans and find a home for them and keep them off the street, it may have more tangible impact on this epidemic than many other grandiose plans.

In the nation of Uganda, which is viewed as the most successful nation in Africa in dealing with the AIDS epidemic, they have reduced the infection of pregnant women from 30 percent just 10 years ago to 15 percent. That is an amazing thing to occur in a very small country. And yet, in this nation of 17 million people, there are 1.7 million orphans today.

What I am hoping to do is to work with you and the Department to talk about food assistance programs directed toward Africa and other countries facing this epidemic in the hopes that we can strengthen these families and keep the kids off the street and the girls out of prostitution. But when I look at the Administration's budget when it comes to Public Law 480, for example, or the 416(b) donations, we are moving in the opposite direction.

At a time when we have more stock on hand, it appears that we are cutting back in the food assistance that we want to provide in the world in the donations that might come out of food sales in countries in Asia and Africa. So I would like to ask you, can you tell me what the Administration's commitment is in these two areas and whether you think there is a receptive attitude toward some of the suggestions I have made?

Mr. SCHUMACHER. I think you have two questions. I had not really thought about that first question, and certainly it is something I will go back and discuss with my staff. Because if you look at what happened about a year ago in Kosovo, when the Kosovars were being driven out by the Milosevic government, refugee camps were set up, but many Albanian families took in their cousins from Kosovo and fed them.

What we tried to do with our food aid is to provide food for the host families, which I think is what you would like to counsel us to do in Africa, as well, to have some kind of programs where people take in AIDS orphans and would get some relief funds, food, and also provide some microcredit to help them move along. I think it is an excellent idea and I am going to explore that with my staff later on.

On the level of food aid overall, we did 9 million tons last year, feeding 40 million people in nearly 60 countries. This year we have

announced another 3 million tons, and we are going to push very, very hard. If there are additional needs due, for example, to the floods in Mozambique or difficulties in Ethiopia, certainly we will consider those on their merits.

Senator DURBIN. Well, let me be specific with you. When it comes to the U.S. action plan on food security, a 17-percent decline in the Administration's request in funding for that program. That worries me.

Similar to that decline, the 416(b) donation program seems to be in decline. Yet the most recent food security assessment report indicates an increase in the current food gap over the previous year's report, from almost 11 million tons to 12.7 million tons. So we would be giving less assistance in food to the World Food Program, the largest food program on the earth, at a time when the demand is growing in Africa, as well as other countries, Africa in particular, presents a great challenge to us as to whether we will respond to this AIDS crisis.

So my question to you is, why are we gearing down in these programs at a time when it appears the world need is gearing up?

Mr. SCHUMACHER. Well, I think we are in fact increasing our 416(b) over last year, and we have pushed hard this year to get the 3 million tons. We had some carryover funding available for Public Law 480 this year. Because we used so much 416(b) last year, we did not use as much Public Law 480. And I think that is why the request for new budget authority was a little less this year, because of the carryover we had from unused Public Law 480 that we are going to be using this year.

Senator DURBIN. Thank you. And I hope to work with you, as I have in the past, on this, particularly as it relates to this AIDS epidemic.

Mr. Chairman, I want to thank you for the hearing and for all your cooperation. Just last week, Senator Frist had a hearing in the Foreign Operations Committee, on the African Subcommittee, about this AIDS epidemic. And it is our belief that we have an opportunity this year, on a bipartisan basis, to try to address this terrible crisis. And I hope that in the course of this appropriation bill we can as well.

Mr. SCHUMACHER. Tim Galvin, Administrator of the Foreign Agricultural Service, was indicating that last year we did quite a lot of food aid, the highest in 25 years. And our budget reflects not only the fact that we have the carryover this year in Public Law 480, but also that we donated 500,000 tons of food to Russia last year, and we do not have that big Russian donation this year. I think on our day-to-day work, especially in Africa, in really vulnerable countries, we have been pretty aggressive. But if you feel that we need to do more in certain areas, I will come to visit with you on that.

Senator DURBIN. I learned a lot on my trip, Mr. Chairman. I learned, in Africa, that we are shipping a lot of vegetable oil, which is being sold locally and used for development. Their biggest complaint is we are shipping it in a can and they wanted it in durable plastic containers. So I told them, if I do nothing else as a United States Senator from Illinois, I am going to work on changing that

container. And so, maybe as part of this hearing, we can get into that as well. Thank you.

Senator COCHRAN. Thank you very much, Senator. I appreciate your participation in the hearing and your work of this subcommittee.

Mr. Schumacher, you really did not have a chance to make a statement before we started asking you questions. I will yield to you now for any comments or statements that you would like to make as a part of your testimony to the committee.

STATEMENT OF AUGUST SCHUMACHER

Mr. SCHUMACHER. I do have a prepared statement I hope we can put in the record.

Senator COCHRAN. It will be.

Mr. SCHUMACHER. But if I may I would like to make a very short statement, because there are many questions I would like to answer. First of all, I have my three administrators here who are going to counsel me when I make mistakes or, with your permission, come to the table, and also Mr. Fritz, our General Sales Manager, who has really worked very, very hard on this food aid issue. It has not been easy, but we have managed to ship an enormous tonnage to many, many countries and have had a major benefit.

For example, I was down in the Dominican Republic over the weekend and looked at the impact of the 100,000 tons of wheat that we donated, and how that had affected that country, and the enormous number of small projects that we have done, including even starting some very small markets that are benefitting producers. So when you see the results actually on the ground, it is quite extraordinary what is occurring with the counterpart monies of this food aid.

As Mr. Collins has indicated, things do not look great for this coming year in agriculture, and it was brought home to me in a number of areas. Mr. Gorton mentioned my trip to Washington State last year. With all due respect to Senator Gorton, that was not a political trip. I was invited out because the apple industry was in such trauma. They have the lowest prices in many, many years. Growers were going out of business. They were desperate. There were 270 growers of all sizes that came, and we talked and we listened. The result of that is, working together, we developed an apple action plan, and we are putting a lot of things together to help the apple industry.

In my own home State of Massachusetts, I met yesterday with some of the cranberry growers. Usually we call cranberry income the Massachusetts mortgage lifter, but prices have plummeted from $80 a few years ago to, they said yesterday, $20. Those producers are in desperate straits.

Governor Bush of Florida was in to see the Secretary and me on Sunday at the Governors Conference and was mentioning the crisis in his citrus industry, not only with citrus canker but some of the low prices that I think, Keith, you mentioned in your testimony. So beyond just the major commodities, we are seeing low prices in almonds, apples, oranges and, in California, some very great difficulties as well, so this poor price outlook is extending except in livestock.

We have a chart here where you can see that total CCC outlays, which we are predicting to be $27 billion this year, are higher than the previous peak. Total CCC outlays, in unadjusted numbers, were $25.8 billion in 1996 and $19 billion in 1999.

What we have done, as you have indicated, is put on the table a proposal in four parts to take us through the end of the 1996 farm bill, building on it and adding to it where we think it really is needed. What we propose, Mr. Chairman, is an $11 billion package, offset and on budget. Let me go through the four parts, and then Keith and I can answer questions on those. First, as Mr. Dorgan has indicated, we need to build on the basic AMTA payments with a countercyclical income assistance program. Our proposal calls for payments if the projected gross income for major commodities falls below 92 percent of its 5-year average. Payments would be made in addition to, not in lieu of, the production flexibility contract payments. We propose, and it is controversial, combined supplemental payment limitations of $30,000.

It does not address the issues that Senator Gorton raised, of how to assist other commodities, for example, his hard-pressed apple industry. We can discuss that here or elsewhere as well.

These payments, in contrast to the AMTA, will be countercyclical, as I mentioned, rising when farm incomes fall and falling when farm incomes rise. They would also be crop specific, and they would be based on actual production rather than some historical base, so that only producers actually producing the crop would be eligible for the payments. As I have travelled around the country I have picked up some criticism from farmers, who say that some folks who live in the apartments in Chicago were getting payments when perhaps the farmers were not. There has been a bit of controversy in some of the areas there. So that is one of our proposals: countercyclical income support.

The second part of our proposal is improving crop insurance. We understand the Senate Agriculture Committee is beginning to mark up a crop insurance reform bill, and we certainly commend that. We have noted that farmers responded very favorably to the subsidy of buy-up coverage last year and the year before. We want to build on that success, and the budget proposes to extend the buy-up discount, thus encouraging farmers to become steady customers, and to provide multi-year coverage just like any other business.

We are also proposing a pilot livestock insurance program. And for those crops that do not have crop insurance, the budget proposes removal of the NAP area trigger, which will be particularly welcome I think in California and some of the eastern parts of the country, and maybe even the South, where you have crops that are not insured.

This will help those farmers that are hit by hailstorm or an isolated freeze get support. The yellow sticker is to remind me to talk about the Non-insured Assistance Program. At my age, I sometimes forget to do that. We have a very major issue on crop insurance. The budget provides a total of $1.3 billion through fiscal year 2002 for these reforms.

The third part of our proposal is on conservation. And this we think is also a very important part. Senator Durbin inquired about set-asides. What we are proposing here is sound land management.

I think the heart of our conservation proposal is the $600 million Conservation Security Program, which could help all farmers, because all farmers would be eligible to receive it. If, for example, a cranberry grower, an apple grower or a soybean grower undertook good conservation practices by reducing chemicals or reducing runoff, they would be entitled to a payment regardless of where they farmed. The program would be available to all farmers. We are working out the details with NRCS. I think this is an important issue and we would like to discuss it further if you wish.

And then, finally, the fourth part of our proposal is getting trade back on track. One of the things we call for, and we have called for it a couple of years in a row, is the authority from Congress to use the unobligated balances of the Export Enhancement Program to promote our exports overseas.

One of our problems, and we will come to this in a minute, is staffing. Senator Gorton has raised the issue of Singapore. We have some major staffing problems in our mission area. And we are not able to do the kind of work we were doing a couple of years ago when I was before you. This is the seventh year I have been before you in different capacities. So we would like to use the unexpended funds. For example, when China comes into the WTO, we will need to ratchet up our trade promotion work in China and, Senator, ratchet up more food aid. We would like to use those unexpended balances for food aid or trade promotion, to move products overseas.

We also have in the budget some proposals to enhance marketing flexibility. We have asked for $130 million over 2 years to help cooperatives develop livestock processing facilities. We will be announcing fairly shortly the program under CCC for construction of on-farm grain storage. This is going to be very important as more and more marketeers would like specialty kinds of grains, and we want those farmers to have access to storage to provide for those specialty grains. And we are launching a new program to encourage production of bio-based energy.

Let me focus for just 1 or 2 minutes more, with your permission, on the staffing issue, Mr. Chairman. We are in trouble on staffing. If you look at the graph in front of you—it is kind of a busy graph—but you can see that in 1998, 1999, and 2000, as our CCC outlays have gone up, our staffing has gone down a bit. And we really are working very hard. We proposed some staffing initiatives here. We are proposing not to lay off any permanent staff. FSA has been using temporary staff, but we are under tremendous pressure. We had to absorb, for example, and I think quite rightly to absorb, the staffing for the consent agreement implementation. That is $13 million to $15 million.

We are very concerned about staffing in the Foreign Agricultural Service, where we have been down $5 million over the last couple of years. We have asked for increases. We have not received them. And we really need to work with you to see if we can get the Foreign Agricultural Service back on track to get exports back up again.

For the Risk Management Agency, we are having some difficulties with staffing, because their liabilities have gone up quite a bit and the staffing has been basically straight-lined. Again, in the Farm Service Agency, the county employees are working overtime night after night after night to service the kind of demands that we are putting on them to implement the 22 new programs that Congress gave us last year. So we have a lot of work to do in the staffing area, and my gency Administrators are here to answer any of your questions on staffing issues that you may want to ask us.

Finally, we very much appreciated your help last year on the critical funding authority for CCC for the current appropriation for net realized losses. We thank you for giving us this authority. It was very, very important. I also want to particularly thank you and the committee for recognizing the strain that the workload has placed on our agencies and providing the additional resources last year to the Farm Service Agency for delivering those programs. We have been overtaken by events in all three mission areas. And in addition to those staffing resources, we are asking for a little bit more in this budget in certain key areas.

So, to summarize, we focused on proposals for countercyclical assistance, trade, conservation, and crop insurance, and also some of the difficult management issues we have had in delivering 22 new programs in addition to administering the loan deficiency payments and related programs that have gotten farmers through and provided the kind of income support to stabilize agriculture through these very difficult times that Mr. Collins has described.

PREPARED STATEMENT

I appreciate being before you today, sir, and look forward to taking your questions.

[The statement follows:]

PREPARED STATEMENT OF AUGUST SCHUMACHER, JR.

Thank you, Mr. Chairman. I am pleased to appear before you and members of the Subcommittee to talk about the Administration's budget proposals which assist farmers and ranchers. I would like to thank my colleague Keith Collins for his opening statement. I have with me today Keith Kelly, Administrator of the Farm Service Agency, Ken Ackerman, Administrator for the Risk Management Agency, Tim Galvin, the Administrator of the Foreign Agricultural Service, and Richard Fritz, the Department's General Sales Manager.

As Keith Collins indicated, and as you are all aware, this will be yet another challenging year for America's family farmers.

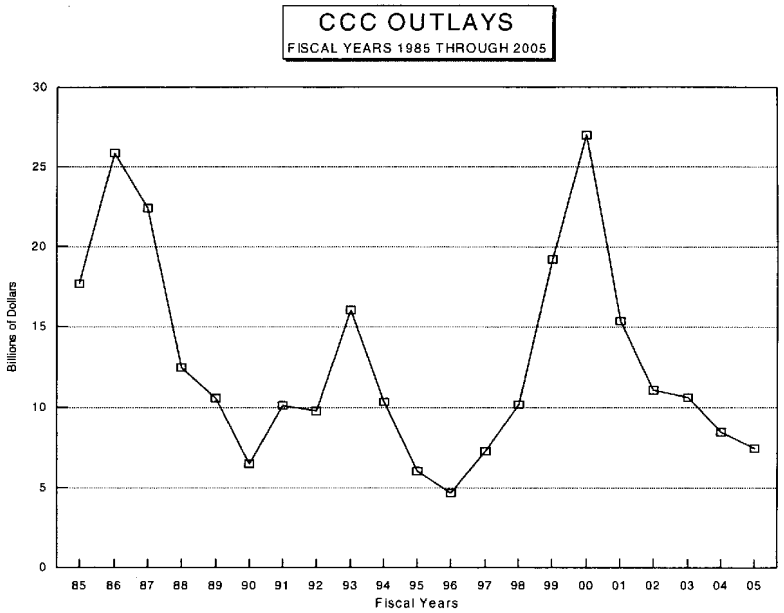
Last year, U.S. farmers experienced the lowest wheat prices in 8 years; the lowest corn prices in more than a decade; the lowest soybean prices in 27 years; the lowest hog prices since the Great Depression; and the steepest decline in milk prices in history. Even cranberries, which are known in my home State as the Massachusetts mortgage lifter, have plunged from $65.90 a barrel in 1996, to $38.80 a barrel in 1998—down some 37 percent.

And, to make matters even worse, Mother Nature has added to farmers' problems with continuing bad weather in broad areas of the country, including hurricanes, tornadoes, and the recent drought that plagued virtually the entire East Coast.

This situation has put USDA and its support programs in the spotlight. As you are aware, domestic farm commodity loan and income support programs are administered by the Farm Service Agency (FSA) and financed through the Commodity Credit Corporation (CCC), a government entity for which FSA, as well as certain other agencies, provides operating personnel. The CCC is also the source of funding for the Conservation Reserve Program (administered by FSA) as well as many of the conservation programs administered by the Natural Resources Conservation Service (NRCS), and it funds many of the export programs administered by the For-

eign Agricultural Service (FAS). When called upon, CCC also finances various disaster assistance programs authorized by Congress. Funds are borrowed by the Corporation from the Treasury to finance CCC programs. Commodity support operations, handled primarily through loans, payment programs and some limited purchase programs, currently include those for wheat, corn, soybeans, minor oilseed crops, cotton (upland and extra long staple), rice, tobacco, milk and milk products, barley, oats, sorghum, peanuts and sugar.

Fiscal year 1999 CCC net outlays totaled over $19 billion, and net outlays in 2000 are expected to reach an all-time high of $27 billion. The historical CCC outlay trend is shown on the following graph:



When you look at these trends, they are particularly ironic, especially given that the thrust of the provisions of the 1996 Farm Bill was aimed at distancing government from providing disaster assistance. In an effort to address a looming farm crisis, Congress has had to provide ad-hoc assistance, time and again.

But why is the farm economy in crisis? Can you lay all the blame on the Federal Agriculture Improvement Act and Reform of 1996? No, in large part, the crisis is being fueled by 4 consecutive years of record global grain production and weak export demand—both of which are beyond the scope of the 1996 Act. U.S. agricultural exports are projected to be only $49.5 billion this fiscal year after reaching a record high of nearly $60 billion in fiscal year 1996. Large global production, the Asian and Russian economic crises, and a strengthening dollar, have all contributed to a weakening in our exports.

The more appropriate question is: Is the 1996 Act doing what farm policy should to help deal with the problem and help with the recovery? Clearly the answer to that question is no.

PRESIDENT'S 2001 BUDGET PROPOSALS FOR AMERICAN AGRICULTURE

Last month, in his State of the Union Address, the President made clear his commitment to this country's farmers. The President said "We must work together to strengthen the farm safety net, invest in land conservation, and create new markets by expanding our program for bio-based fuels and products." This Administration has put forward a set of proposals that will address the shortcomings of the 1996 Act directly.

Let me be clear today, the President's proposal reaffirms that Government farm policy cannot simply keep lurching from one expensive bailout to another. Ad-hoc

assistance is expensive; it's inefficient; it's hard on our farmers; its hard on our overworked USDA staff; and it's hard on the taxpayers. It is time to move beyond annual "damage control," and to a stable policy that helps farmers prepare for disasters and price downturns, invest in long-term market development and export promotion programs, and gives them the tools they need to thrive—not just survive.

This set of proposals will focus the spotlight on our mission area—Farm and Foreign Agricultural Services. The Farm Service Agency, Risk Management Agency, and the Foreign Agricultural Service will have the lead in administering the President's package.

When I've spoken with various farm groups, I've likened this proposal to the solid kitchen chairs that my family used to have at the farm house, with four firm legs and a well-built back.

—The first leg is a counter-cyclical income support for the basic program crops—which we estimate at approximately $6 billion over 3 years.

—The second is the reformed and broader risk management/crop insurance package.

—The third leg is a creative conservation package ($4.8 billion through 2005) that expands CRP to 40 million acres, provides for a conservation security reserve investment, and provides for farmland protection cost sharing.

—Leg four is an expanded trade initiative that aggressively uses all of our export programs and in addition requests authority to use any unobligated Export Enhancement Program (EEP) funding for long-term investment in trade promotion as well as for food aid.

—Equally important is the back of the chair, which supports the farmer when the farmer leans back on the back legs of the chair. This chair back includes proposals for stabilizing the crucial USDA workforce that has become over-stressed the past 3 years, farm loan programs, a bio-fuels initiative, the freezing of loan rates, and an extension of the dairy program.

The Administration package has a number of benefits: it is flexible; it benefits farmers in all regions (of vital importance following 1999 eastern droughts and floods and California freezes); it is targeted; it continues to provide planting flexibility; it has conservation initiatives benefitting all farmers in all regions; it is on budget and funded within the President's balanced budget that preserves the Social Security surplus; it is consistent with our trade commitments; and most importantly, it provides some stability—and a consistent framework—for a new farm bill in 2002.

Counter-Cyclical Income Support

It seems like a pretty common-sense notion—that those who are struggling the most deserve the most help. But the AMTA formula that we've been living by for nearly 4 years, with its fixed payments, has no such logic. Thanks to AMTA, recent supplementary farm payments haven't been tied to need, to size, or to current production.

The Administration proposes supplemental income assistance for crop years 2000 and 2001, to eligible producers of wheat, feed grains, rice, upland cotton and oilseeds. The payments would be made only if projected gross income—including other Government payments—from the crop falls below 92 percent of the preceding 5-year average. These payments would be crop-specific and would be based on actual production rather than some historical base. The proposed program will provide payments only to current producers of those crops with low prices and income. It is estimated that $600 million in assistance will be provided in fiscal year 2000, $2.5 billion in fiscal year 2001 and $2.5 billion in fiscal year 2002.

Still, we're not looking to replace AMTA with our plan. We are letting the basic principles of the FAIR Act live on through the life of the bill. The new income assistance will come on top of—not in place of—AMTA payments and other 1996 Farm Bill payments. AMTA participants would continue to receive their full payments, and 98 percent of them would also be eligible for an additional check under this proposal. However, we believe this counter-cyclical method of income assistance should form the basis for how the next farm bill proposal should be structured.

Crop Insurance Reform

Even with such improvements in our farm programs, we know that we will continue to need strong risk management programs. That brings me to our efforts to reform our crop insurance programs. Crop insurance is and will continue to be USDA's primary means of helping farmers survive major production losses. In 1999, American farmers purchased some 1.3 million crop insurance policies covering 196 million acres. Liability coverage rose from just $14 billion in 1994 to more than $30 billion in 1999, with indemnity payout in 1999 at $2.2 billion.

Past reform of the crop insurance program was made in the context of an agricultural program that no longer exists. Plunging prices, the effects of multiple years of crop losses, and under-insured farmers have prompted us to develop an aggressive crop insurance reform proposal.

While crop insurance hasn't been the panacea for all our producers' problems, there is a certain irony about the crop insurance program: When people say the system is broken, what they mean is there isn't enough crop insurance coverage.

Today's crop insurance program was designed to work in tandem with our farm programs. We need a program with sturdy underpinnings, solid, steady, reliable legs, that can withstand price and weather volatility.

We need a strengthened crop insurance program, a program that provides premium discounts, a strong risk management education effort, new product development, assists livestock producers, provides multi-year loss coverage, and lifts the Non-insured Assistance Program (NAP) area trigger. I understand the Senate Agriculture Committee will conduct markup on risk management in early March 2000, with the House of Representatives having already passed its version on voice vote in 1999. Some Senators favor a direct payment approach, while others like the alternative of enhanced coverage for all producers. Crop insurance has become a hot political item. There are high expectations that cannot be met by current resources.

The Administration also proposes to modify the Non-insured Assistance Program area-wide trigger requirement, so that producers with individual qualifying losses in areas that have been designated for natural disasters are able to receive program assistance. This change will provide an additional $110 million of assistance in fiscal years 2000 and 2001.

Conservation Initiatives

The Administration believes that any reform initiatives should promote conservation. The 2001 President's Budget seeks an additional $1.3 billion in budget authority for a Conservation Programs Initiative. This is a key component of the Administration's Farm Safety Net Proposal to strengthen farm family income while promoting environmentally sound land management. Within the $1.3 billion, increases are provided for five ongoing CCC-funded conservation programs: the Environmental Quality Incentives Program (EQIP); Wetlands Reserve Program (WRP); the Conservation Reserve Program (CRP); Farmland Protection Program (FPP) and the Wildlife Habitat Incentives Program (WHIP). Under current law, an additional $125 million in bonuses will also be offered to producers who enroll in CRP through the continuous signup.

For EQIP, part of the President's Clean Water Action Plan, the annual authorized funding level would be increased from $200 million to $325 million. This program provides financial, technical, and educational assistance to farmers and ranchers who wish to implement conservation practices for land currently in production.

Under WRP, which offers technical and financial assistance to farmers who wish to restore and protect agricultural wetlands, the initiative would remove the current cumulative acreage cap of 975,000 acres and enroll an additional 210,000 acres in 2001, and an additional 250,000 acres in each subsequent year.

The Conservation Reserve Program provides farmers with technical and financial assistance in exchange for removing environmentally sensitive land from production for a 10–15 year period and implementing conservation practices. The CRP currently allows for up to 36.4 million acres to be enrolled. The President's Initiative would increase the enrollment cap by another 3.6 million acres to 40 million. Bonuses totaling up to $100 million in 2000 and up to $125 million each year in 2001 and 2002 would also be offered to producers who enroll land in CRP through continuous signup. These bonuses are expected to encourage enrollment of high environmental-value acreage, and are included in the CCC baseline. Legislation is also being proposed to provide $75 million in additional technical assistance funding for the CRP and WRP for 2001.

CRP is USDA's largest environmental program. The purpose of CRP, administered by FSA, is to cost-effectively assist farm owners and operators in conserving and improving soil, water, air, and wildlife resources by converting highly erodible and other environmentally sensitive acreage normally devoted to the production of agricultural commodities to a long-term resource-conserving cover. CRP participants enroll contracts for periods from 10 to 15 years in exchange for annual rental payments and cost-share and technical assistance for installing approved conservation practices. CRP acreage also contributes to the USDA Conservation Buffer Initiative, the Conservation Reserve Enhancement Program, and the Administration's Clean Water Action Plan, which are estimated to enroll 4.2 million acres through 2002. Also, in rules adopted after the 1996 Act, USDA reinstated the eligibility of certain cropped wetlands.

In 1999, a general CRP signup was held (signup 18) from October 26, 1998, through December 11, 1998. Of the 7.1 million acres offered, a total of 5 million acres were approved for enrollment beginning in 2000. The national average annual rental payment for this acreage is estimated to be about $46 per acre. Technical assistance for this signup was funded with unobligated appropriated funds and authorized CCC funds. Rental payments for signup 18 begin in 2001.

Another general CRP signup began on January 18, 2000, and continued through February 11, 2000. We are in the process of collecting bid data from our field offices, and expect to make final enrollment decisions and offers in April.

In 2000, CCC made payments of approximately $1.450 billion for rental costs and will make payments of about $124 million for sharing the cost of permanent cover on replacement acres. For 2001, the Budget projects CCC program costs of approximately $1.690 billion, consisting of $1.567 billion for rental payments on previously enrolled and extended acres and $123 million for cost-share assistance for permanent cover on enrolled acres. Rental payments for 2001 are not affected by the 20th signup which just concluded, since rental payments are not due until 2002.

The Initiative proposes a new $600 million Conservation Security Program (CSP), which would provide annual payments to farmers and ranchers who implement certain conservation practices including practices related to such matters as nutrient management, grazing, grassed waterways and windbreaks. Payments would be based on the comprehensiveness of the farm's conservation plan. Of the $600 million, $90 million (15 percent of the program) will be used by the NRCS to provide necessary technical assistance to farmers and ranchers.

Funding provided by the 1996 Farm Bill for both the FPP and the WHIP has been exhausted. Under the conservation initiative, the FPP, which is also part of the President's Lands Legacy Initiative, would be funded at $65 million annually. This program provides matching funds to State, local, and Tribal governments to purchase permanent easements and thereby protect farmland which may otherwise be threatened by urban and suburban sprawl. The initiative also proposes $50 million annually for WHIP, which offers cost-share assistance to farmers and landowners for habitat restoration and technical assistance.

Successes in Food Aid, and Export Promotion

The last leg of our chair will be provided by our initiatives in food aid and export promotion.

With domestic supplies high, one can only imagine how much worse the situation would be if we had not continued the vigorous use of our long-standing food aid programs. With large surpluses and rock-bottom prices here at home, we have actively used food aid to move commodities out of the U.S. marketplace to needy areas around the world. Under 1999 food aid programs, including the President's Wheat Initiative, USDA programmed nearly 8 million metric tons of U.S. commodities—close to five times the previous year's shipments and the largest tonnage in many, many years.

American commodities went to around 50 countries last year—from the unprecedented assistance package for Russia to food relief for Kosovo refugees, famine victims in North Korea, and hurricane victims in Central America and the Caribbean. Under the authority of Section 416(b) of the Agricultural Act of 1949, as amended, CCC donated nearly $800 million worth of commodities, including 5.2 million tons of wheat and wheat products, 274,000 tons of corn, and about 23,000 tons of dry milk. These U.S. surpluses were taken off the market and put to good use, helping to relieve hunger and suffering abroad.

Our export credit guarantee programs facilitated sales of more than $3 billion in U.S. agricultural products. Our GSM–102 program helped U.S. exporters overcome disadvantages in Turkey, and make record sales of over $1.2 billion in Mexico. The program helped U.S. oilseed exporters sell more than $19 million worth of oilseeds to Uzbekistan, traditionally a buyer of South American oilseeds. Our GSM–103 program helped U.S. exporters sell over $14 million worth of wheat to Jordan. The Supplier Credit Guarantee Program was used for the first time by importers in the Baltic Region, Georgia, and Turkey, resulting in sales of nearly $1 million worth of meat products to buyers in the Baltic Region, and nearly $3 million worth of poultry products and other products to buyers in Georgia and Turkey.

With the aid of the Dairy Export Incentive Program (DEIP), U.S. exporters sold more than 136,000 tons of dairy products valued at $337 million. USDA awarded more than $145 million in bonuses to help U.S. dairy exporters meet prevailing world prices and develop foreign markets.

The Export Enhancement Program was used only sparingly in 1999 because of market conditions, with bonuses of about $1.4 million awarded for sales of more than 2,000 tons of frozen poultry.

We continue to stress the importance of market development. In 1999, we allocated $90 million to 65 U.S. trade organizations, State regional groups, and cooperatives for export promotion activities under the Market Access Program (MAP), and approved allocations of $27.5 million for 26 trade organizations under the Foreign Market Development (FMD) program.

And, through the Cochran Fellowship Program, USDA introduced nearly 800 participants from 70 emerging markets to U.S. products and policies in 1999, and plans to meet and exceed that record this year.

TRADE POLICY INITIATIVES

On the trade policy front, USDA worked successfully to open, expand, and maintain markets for U.S. agriculture. For example, last April, the United States and China signed the Agreement on U.S.-China Agricultural Cooperation, an unprecedented step in U.S.-China agricultural trade relations. With this agreement, China finally removes the longstanding bans on exports of U.S. wheat, citrus, and meat and poultry to China, and calls for China's commitment to the application of sound science, a key principle of the Uruguay Round Sanitary and Phytosanitary (SPS) Agreement. The agreement confirms a U.S.-China agricultural partnership in achieving some key objectives: resolving trade barriers, increasing technical cooperation and scientific exchanges and further developing our agricultural sectors.

In addition, we negotiated an agreement with China regarding its membership in the World Trade Organization (WTO). Implementing that agreement could add an estimated $1.6 billion annually to U.S. exports of grains, oilseeds and products, and cotton by 2005, and could grow to nearly $2 billion as the Chinese reduce their tariffs on other products. These gains will mean higher prices for farmers and, ultimately, higher U.S. farm income. Of course, the first step toward realizing these gains would be Congressional approval of permanent Normal Trade Relationship status for China.

USDA continues to monitor aggressively foreign countries' compliance with Uruguay Round Agreement commitments. For example, a WTO dispute settlement panel is examining Korea's import and domestic support programs for beef. As a result of Korea's failure to meet minimum import quotas under its Uruguay Round commitment in 1997 and 1998, it became clear that numerous market access barriers exist, and threaten to inhibit full market liberalization. We will continue to insist on compliance in this and all cases where access to U.S. agriculture is at stake.

For example, at 1999 meetings of the Committee on Agriculture, USDA analysts reviewed and raised questions on over 250 WTO notifications. The value of trade addressed through U.S. vigilance of commitments is over $500 million. This was achieved through questioning member's domestic grain purchasing policies that appeared to violate export subsidy commitments; challenging the discriminatory issuance of import licenses for dairy products, pork and poultry; questioning the WTO-inconsistent execution of a preferential trade arrangement that harmed U.S. apple exports; and questioning low tariff rate quota (TRQ) application for a range of commodities. These efforts contributed to several members halting implementation of or modifying WTO inconsistent practices.

Exports have played, and will continue to play, a key role in the health of our farm economy, and we intend to step up our efforts in the near future, ensuring that U.S. agriculture is competitive around the globe.

"The Chair Back"

Mr. Chairman, meeting sharply growing workload demands within existing resources is having a profound affect on the working environment in my mission area. FSA is implementing over 20 new or additional emergency related programs that were enacted by Congress this year—more than twice the number of such programs it had to deliver in 1999. Unbudgeted costs associated with the Consent Decree—which came out of the lawsuit filed by African-American farmers against USDA—have also added to FSA's administrative expenses and workload in 2000. Similarly, the Risk Management Agency has been undertaking new initiatives to strengthen our risk management services for producers.

In the case of the Foreign Agricultural Service, its workload has increased dramatically as a result of record levels of food assistance we are providing. The Agency also is deeply immersed in a number of critical trade policy matters, including the accession of China to the WTO, the new round of multilateral trade negotiations, as well as trade issues related to biotechnology and food safety.

I point out these workload concerns in order to stress the importance of working with you and the committee to ensure that adequate resources are made available

to these agencies. It is vitally important that the work of the FFAS mission area, which is critical to the future of American agriculture, can continue.

I would like to review with you some of our projected outlays, so that you can fully appreciate the magnitude of the workload.

CCC PROGRAM OUTLAYS

The current 2001 budget estimates largely reflect estimated supply and demand conditions for the 2000 crop based on November data. Commodity Credit Corporation net expenditures for 2001, including proposed "Safety Net" legislation outlays of $3.6 billion, are estimated at $19.0 billion, down $8.7 billion from a record high expenditure level of $27.7 billion—including $700 million in proposed legislation outlays—in 2000. The previous record CCC expenditure level occurred in 1986, when net outlays were $25.8 billion.

The net decrease of $8.7 billion in projected 2001 CCC expenditures reflects decreases which include the ending of the $5.8 billion of 2000 market loss assistance payments, the ending of $1.3 billion in 2000 crop loss assistance, the ending in $210 million of 2000 emergency livestock assistance, a decrease in production flexibility payments of $992 million, a decrease in commodity net lending of $595 million, a projected decrease in of $848 million in loan deficiency payments from the huge levels of 2000, a decrease of $130 million in Section 416(b) ocean transportation expenses, a decrease in other direct producer payments and expenditures of $369 million.

Other Initiatives

FUND COOPERATIVE DEVELOPMENT INITIATIVES

Total funding proposed for cooperative development for new livestock and other processing cooperatives includes $80 million in 2001 and $50 million in 2002. These funds would be used to provide equity capital for new livestock and other cooperatives to help finance, for example, the construction of cooperative-owned, value-added, meat processing facilities that would help counter concentration and retain income in rural areas.

EXTEND THE DAIRY PRICE SUPPORT PROGRAM

The Administration also proposes the extension of the dairy price support program. Current appropriations language extended the dairy price support to December 1, 2000; however, this proposal further extends the dairy price support program to December 2002. Under this proposal, $150 million is estimated to be needed to support dairy prices in each of fiscal years 2001 and 2002.

CCC AUTOMATED DATA PROCESSING CAP

In April 1996, a cap of $275 million for CCC-funded automated data processing (ADP) obligations for 1997 through 2002 was mandated by the 1996 Act. Subsequently, the Agricultural Research, Extension, and Education Reform Act of 1998 reduced the CCC ADP cap to $193 million. Finally, the Fiscal Year 1999 Agriculture Appropriations Act (Public Law 105–277) again reduced the CCC ADP cap to $188 million. As last year, legislation is again proposed to provide annual funding of $35 million in 2001 and 2002 for Farm Service Agency computer systems to ensure essential system availability and continued ADP services in headquarters and field offices at bare minimum levels. This funding is critical because such expenditures were formerly made using the CCC's general funds subject to the mandated ADP limit. The funds available under that limit were depleted in early fiscal year 2000. Without further new funding, Mr. Chairman, it will be virtually impossible for FSA to adequately respond to the thrust of Service Center modernization or to ensure the continuity of uninterrupted program delivery.

REIMBURSEMENT FOR REALIZED LOSSES

Mr. Chairman, the 1999 appropriation for reimbursement of CCC net realized losses was $8.4 billion. This appropriation reflected reimbursement for net realized losses which covered the actual amount of unreimbursed losses incurred 2 years earlier.

The 2000 appropriation for reimbursement of net realized losses was $30.037 billion, an increase of $21.637 billion from the 1999 appropriation of $8.4 billion. The appropriation reimbursed CCC for the remaining unreimbursed net realized losses for 1997 and 1998, and all of 1999 actual losses. The appropriation to reimburse the Corporation for net realized losses enacted by Congress for 2000 was a current, in-

definite appropriation. This provided CCC with the flexibility to request funds as needed from Treasury, up to actual losses recorded for the most recent actual year. Without this current, indefinite appropriation, CCC would have been unable to fully replenish its borrowing authority at the beginning of 2000, and timely assistance to farmers would have been jeopardized due to insufficient borrowing authority. Mr. Chairman, we appreciate your help in providing that critical funding authority.

The 2001 budget reflects a request to once again enact appropriation language to eliminate the requirement that only allows reimbursement for actual realized losses recorded in CCC books as of the end of the preceding year. Our request is that you provide a current, indefinite appropriation to reimburse the Corporation for all actual net realized losses, even if incurred in the current fiscal year.

FARM LOAN PROGRAMS

The loan programs funded through the Agricultural Credit Insurance Fund (ACIF) provide a variety of loans and loan guarantees to farm families who would otherwise be unable to obtain credit. In times of economic stress, access to adequate farm credit is often the only way for some farmers to continue their operations.

As a result of the continuing financial hardship in much of the agricultural sector, the demand for Farm Service Agency loans and loan guarantees remains very high in 2000. However, the 2000 subsidy funding provides loan levels totaling a record $5.8 billion that are expected to meet the strong demand including $2.5 billion through emergency funds. The 2001 budget likewise responds to an anticipated high demand by providing a total program level of about $4.6 billion in loans and guarantees, an increase of $1.6 billion excluding emergency funds The largest segment of FSA lending is carried out in partnership with private lenders through the guarantee programs, and this budget continues strong support for guaranteed loans, with a proposed program level of nearly $3.5 billion.

For direct farm ownership loans we are requesting a loan level of $128 million, a decrease of $22 million from the 2000 appropriated level (including supplemental funding). The proposed program level would enable FSA to extend credit to about 1,250 small and beginning farmers to purchase or maintain a family farm, about 500 fewer than estimated for the current fiscal year. The agency has established annual county-by-county participation targets for members of socially disadvantaged groups, based on demographic data. Also, 70 percent of direct farm ownership loans are reserved for beginning farmers, and about 35 percent are made at a reduced interest rate to limited resource borrowers, who may also be beginning farmers. For direct farm operating loans we are requesting a program level of $700 million, $200 million above the 2000 level, excluding supplemental funding, to provide over 14,400 loans to family farmers.

For guaranteed farm ownership loans in 2001, we are requesting a loan level of $1 billion, the same as 2000. This program level will give over 4,500 farmers the opportunity to either acquire their own farm or to save an existing one. For guaranteed farm operating loans we propose a fiscal year 2001 program level of nearly $2.5 billion, compared to $1.8 billion in 2000 excluding emergency loans. This level will enable approximately 16,600 producers to finance their farming operations.

The Budget also proposes $150 million in emergency disaster loans in fiscal year 2001, sufficient to provide approximately 1,800 low-interest loans to producers whose farming operations have been damaged by natural disasters. We are proposing to close the "eligibility gap" between USDA and SBA emergency loans, so that in times of natural disaster, every sized farm and ag businesses have a place to turn to for emergency assistance. These new loans would be made at higher interest rates than our currently authorized borrowers. In addition, our budget proposes just over $2 million for Indian tribe land acquisition loans and $100 million for boll weevil eradication loans.

STATE MEDIATION GRANTS

Our request of $4 million for State Mediation Grants would assist States in developing programs to deal with disputes involving a variety of agricultural issues—distressed farm loans, wetland determinations, conservation compliance, pesticides, and others. Operated primarily by State universities or departments of agriculture, the program provides neutral mediators to assist producers, primarily small farmers, in resolving disputes before they culminate in litigation or bankruptcy. Mediation, at about $500 per case, offers significant savings over national level administrative hearings, which cost about $3,000 to $4,000 per case in direct costs alone. Authority for State Mediation Grants expires at the end of 2000. A legislative proposal is being submitted to reauthorize the program through 2005.

SERVICE CENTERS

Another important part of our effort to deliver services to rural customers is the initiative to streamline and modernize the field offices and create Service Centers. While we have physically established these Centers, we still have much work to do to make the promise of better service a reality. A key ingredient in providing well coordinated, quality assistance at USDA Service Centers is the replacement of separate agency, aging information technology systems with the common computing environment along with reengineered business processes. The USDA Budget proposes $75 million for this effort in appropriated funds under the Office of the Chief Information Officer. Rural Development will provide additional funding, as necessary, to support the modernization plan and service center initiative. Additionally, an important part of the efforts to modernize field operations is the streamlining of the administrative services for the Farm Service Agency, Rural Development, and Natural Resources Conservation Service. By conserving resources in this arena, each agency will be in a better position to provide greater program support. We would like to work with you to see that these administrative services can be consolidated.

CONCLUSION

Over the last 60 years, agriculture has been dramatically transformed, and yet farm policy has remained relatively stagnant. People generally do not and cannot farm the way they did in the 1930s and 40s, so government's role in helping them has to change accordingly.

The days when every farmer could survive by simply bringing commodities to market are over. That's why a new farm policy must change and improve the ways the government provides assistance, and highlight new and different ways for farmers to make money and capture a greater share of the consumer dollar. That means promoting future access to food systems through improved marketing, strong farm cooperatives, reinforced direct marketing schemes, innovative use of the Internet, and farmers markets. It means encouraging the use of crops for energy and bio-based fuels, encouraging the production of value-added, consumer-ready goods, organics, aquaculture and so on.

Of course, traditional row crop farming will continue to be an important part of the American agricultural portfolio. And the government will continue to support the people who grow traditional crops. But a new century calls for a more holistic approach based on the understanding that, even if there are fewer farmers, there are more kinds of farmers living in more places than ever before.

In closing, I am reminded of an event at which Secretary Glickman was talking about helping farmers through tough times—helping them to survive, which is a common theme these days. All of a sudden a farmer in the front row stood up and shouted, "Hey, I don't want to survive! I want to thrive!" We are doing all we can to help American family farmers reach that goal. As we work to pull our farm economy up from these tough times, I encourage your input and look forward to an ongoing dialogue with you.

Thank you.

STAFFING

Senator COCHRAN. Thank you very much. I think I will ask a couple of questions right away on the staffing issues that you raised. You have highlighted the workload demands here with this last chart in the Farm Service Agency, administering programs, and also the Foreign Agricultural Service, administering food aid and trade policy programs. Does the Administration's budget request provide adequate resources to deal with these requirements that you have outlined?

Mr. SCHUMACHER. I am going to ask Keith Kelly, with your permission, to join me on this issue, and Dennis Kaplan to help as well. With your help last year we basically have been able to maintain our staffing, and the request this year maintains the permanent staffing levels. Where we are going to get some problem is on temporary employees. And I mentioned the issue that was unexpected, which is the much larger than expected budgetary requirements for the consent agreement.

Keith, do you want to expand a little bit on some of the concerns you have on staffing?

PREPARED STATEMENT

Mr. KELLY. Yes, thank you, Senator. With regard to your question on staffing in the 2001 budget, the budget proposal before you right now would provide for a reduction of actually around 622 temporary staff years but leave the permanent Federal and non-Federal county staffing at the 2000 level. We are committed to carrying out a timely program. And if service delays do occur, then we will have to work with you to readdress this issue. In the past, you have been helpful to us in providing some relief, such as this year's $56 million reimbursement from CCC for program delivery. We put that mostly into the temporary staffing level, to handle the very, very heavy workload related to this agricultural crisis, to get those programs out the door.

[The statement follows:]

PREPARED STATEMENT OF KEITH KELLY

Mr. Chairman and Members of the Subcommittee, I am pleased to present the fiscal year 2001 budget for the Farm Service Agency (FSA). This budget focuses on a response to the continuing economic hardships facing much of agriculture. As you know, fiscal year 2000 is setting new records in two major areas: Commodity Credit Corporation (CCC) net outlays are expected to reach an all-time high of $27.7 billion, and farm loan programs are providing loans and loan guarantees amounting to $5.8 billion. While this assistance is enabling most producers to keep their farming operations afloat, depressed commodity prices are forecast to continue into fiscal year 2001. In this context, the budget for fiscal year 2001 emphasizes timely delivery of the programs currently in place to assist producers through difficult times, and it offers a number of proposals to strengthen the safety net for those in the farm sector who are not sharing in the overall prosperity being enjoyed across the nation.

COMMODITY CREDIT CORPORATION

Domestic farm commodity price and income support programs are administered by the Farm Service Agency and financed through the CCC, a government entity for which FSA provides operating personnel. The CCC is also the source of funding for the Conservation Reserve Program administered by FSA as well as many of the conservation programs administered by the Natural Resources Conservation Service (NRCS), and it funds many of the export programs administered by the Foreign Agricultural Service (FAS). When called upon, CCC also finances various disaster assistance programs authorized by Congress. The Corporation borrows funds from the Treasury to finance CCC programs. Commodity support operations, handled primarily through loans, payment programs and some limited purchase programs, currently include those for wheat, corn, soybeans, minor oilseed crops, cotton (upland and extra long staple), rice, tobacco, milk and milk products, barley, oats, sorghum, peanuts and sugar.

Program Outlays

The current 2001 budget estimates largely reflect estimated supply and demand conditions for the 2000 crop based on November data. Commodity Credit Corporation net expenditures for fiscal year 2001, including proposed "Safety Net" legislation outlays of $3.6 billion, are estimated at $19.0 billion, down $8.7 billion from a record high expenditure level of $27.7 billion—including $700 million in proposed legislation outlays—in fiscal year 2000. The previous record CCC expenditure level occurred in fiscal year 1986, when net outlays were $25.8 billion.

The net decrease of $8.7 billion in projected fiscal year 2001 CCC expenditures reflects the expiration of $5.8 billion of 2000 marketing loss assistance payments, the expiration of $1.3 billion of 2000 crop loss assistance, the expiration of $210 million of 2000 emergency livestock assistance, a decrease in production flexibility payments of $992 million, a decrease in commodity net lending of $595 million, a projected decrease of $848 million in loan deficiency payments from the huge levels of

fiscal year 2000, a decrease of $130 million in Section 416 ocean transportation, and a decrease in other direct producer payments and expenditures of $369 million.

The following "Safety Net" legislative proposals are included in the budget for commodity, conservation, and other CCC-funded programs.

CCC Program Initiatives

Supplemental income assistance is proposed for crop year 2000 and 2001 to eligible producers of wheat, feed grains, rice, upland cotton and oilseeds. The payments would be made only if projected gross income, including other Government payments, from the crop falls below 92 percent of the preceding 5-year average. The supplementary payments would be crop specific and would be based on actual production rather than some historical base. The proposed program will provide payments only to current producers of those crops with low prices and income. It is estimated that $600 million in assistance will be provided in fiscal year 2000, $2.5 billion in fiscal year 2001 and $2.5 billion in fiscal year 2002.

Total funding proposed for cooperative development for new livestock and other processing cooperatives includes $80 million in fiscal year 2001 and $50 million in fiscal year 2002. The fund would be used to provide equity capital for new cooperatives and help finance the construction of cooperative-owned, value-added, processing facilities needed to counter concentration and retain income in rural areas. The fund would provide financing and obtain an equity interest in new processing cooperatives.

The initiatives propose to modify the Non-insured Assistance Program areawide trigger requirement so that producers with individual qualifying losses in areas that have been designated as natural disaster areas are able to receive program assistance. This change will provide an additional $110 million of assistance in both fiscal year 2000 and 2001.

Extension of the dairy price support program is proposed. Current appropriations language extended the dairy price support to January 1, 2001; however, this proposal further extends the dairy price support program to January 2003. Under this proposal, $150 million is estimated to be spent to support dairy prices for fiscal years 2001 and 2002.

Legislation will also be proposed to enable unused balances in the Export Enhancement Program during fiscal year 2000 to be transferred to other USDA export promotion and food aid programs.

In April 1996, a cap of $275 million for CCC-funded automated data processing (ADP) obligations for fiscal year 1997 through 2002 was established by the 1996 Act.

Subsequently, the Agricultural Research, Extension, and Education Reform Act of 1998 reduced the CCC ADP cap to $193 million. Finally, the Fiscal Year 1999 Appropriations Act (Public Law 105–277) again reduced the CCC ADP cap to $188 million. As it was last year, legislation is proposed to provide annual funding of $35 million in fiscal year 2001 and 2002 for Farm Service Agency computer systems to ensure essential system availability and continued ADP services in headquarters and field offices at bare minimum levels. This funding is critical because such expenditures were formerly funded under the legislated CCC ADP expenditure cap, and the new cap was depleted in early fiscal year 2000. Without further funding, Mr. Chairman, it will be virtually impossible for FSA to adequately respond to the thrust of Service Center modernization or to ensure uninterrupted program delivery.

Conservation Programs Initiative

The fiscal year 2001 President's Budget seeks an additional $1.1 billion in budget authority for a Conservation Programs Initiative. This is a key component of the Administration's Farm Safety Net Proposal to strengthen farm family income while promoting environmentally sound land management. Within the $1.1 billion, increases are provided for five ongoing CCC-funded conservation programs: the Environmental Quality Incentives Program (EQIP), the Wetlands Reserve Program (WRP), the Conservation Reserve Program (CRP), the Farmland Protection Program (FFP), and the Wildlife Habitat Incentives Program (WHIP). Also, under current law, an additional $125 million in bonuses will be offered to producers who enroll in CRP through the continuous signup. The Vice President announced these proposed conservation program initiatives on January 7. They include the following:

For EQIP, part of the President's Clean Water Action Plan, the annual authorized funding level would be increased from $200 million to $325 million. This program provides financial, technical and educational assistance to farmers and ranchers who wish to implement conservation practices for land currently in production.

Under WRP, which offers technical and financial assistance to farmers who wish to restore and protect agricultural wetlands, the Initiative would remove the current cumulative acreage cap of 975,000 acres, under which only 40,000 acres remain, and

provide for the enrollment of an additional 210,000 acres in fiscal year 2001 and an additional 250,000 acres in each subsequent year.

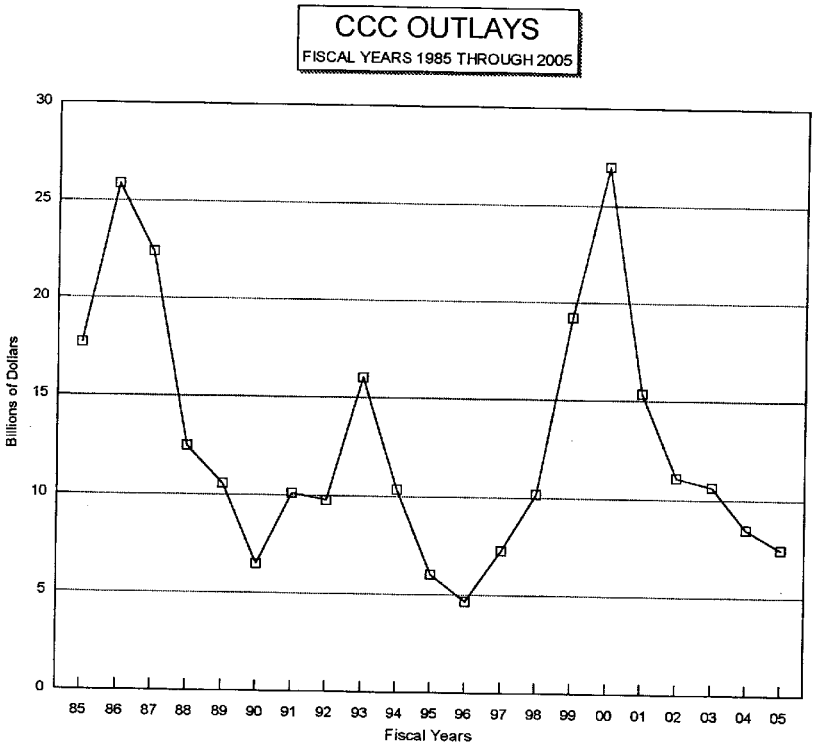
Funding provided by the 1996 Farm Bill for both FPP and WHIP has been exhausted. Under the Conservation Initiative, the FPP, which is also part of the President's Lands Legacy Initiative, would be funded at $65 million annually. This program provides matching funds to State, local, and Tribal governments to purchase permanent easements and thereby protect farmland which may otherwise be threatened by urban and suburban sprawl. The Initiative also proposes $50 million annually for WHIP, which offers cost-share assistance to farmers and landowners for habitat restoration and technical assistance.

The CRP provides farmers with technical and financial assistance in exchange for removing environmentally sensitive land from production for a 10- to 15-year period and implementing conservation practices. The CRP currently allows for up to 36.4 million acres to be enrolled. The President's Initiative would increase the enrollment cap by another 3.6 million acres to 40 million. Bonuses totaling up to $100 million in fiscal year 2000 and up to $125 million each year in fiscal year 2001 and fiscal year 2002 would also be offered to producers who enroll land in CRP through continuous signup. These bonuses are expected to encourage enrollment of high environmental-value acreage, and are included in the CCC baseline. Legislation is also being proposed to provide CRP and WRP technical assistance of an additional $75 million for fiscal year 2001.

The Initiative proposes a new $600 million Conservation Security Program (CSP), which would provide annual payments to farmers and ranchers who implement such conservation practices as nutrient management, grazing, grassed waterways and windbreaks. Of the $600 million, $90 million (15 percent of the program) will be used by the NRCS to provide necessary technical assistance to farmers and ranchers.

CCC Outlays

Fiscal year 1999 net CCC outlays totaled over $19 billion, and outlays in fiscal year 2000 are expected to reach an all-time high of $27 billion. The historical CCC outlay trend is shown on the following graph.



Emergency Assistance Outlays

The 1999 appropriations bill provided about $5.8 billion in budget authority to support farmers and rural communities with emergency assistance. The Fiscal Year 2000 Agriculture Appropriations Act (Public Law 106–78) and the Consolidated Appropriations Act (Public Law 106–113), authorized emergency disaster and market loss assistance to producers of almost $9.0 billion in budget authority using several programs.

Reimbursement for Realized Losses

Mr. Chairman, the fiscal year 1999 appropriation for reimbursement of CCC net realized losses was $8.4 billion. This appropriation reflected reimbursement for net realized losses which covered the actual amount of unreimbursed losses incurred two years earlier.

The fiscal year 2000 appropriation for reimbursement of net realized losses was $30.037 billion, an increase of $21.637 billion from the fiscal year 1999 appropriation of $8.4 billion. The appropriation reimbursed CCC for the remaining unreimbursed net realized losses for fiscal years 1997 and 1998, and all of 1999 actual losses. The appropriation to reimburse the Corporation for net realized losses enacted by Congress for fiscal year 2000 was a current, indefinite appropriation. This provided CCC with the flexibility to request funds as needed from Treasury, up to actual losses recorded for the most recent actual year. Without this current, indefinite appropriation, CCC would have been unable to fully replenish its borrowing authority at the beginning of fiscal year 2000, and timely assistance to farmers would have been jeopardized due to insufficient borrowing authority. Mr. Chairman, we appreciate your help in providing that critical funding authority.

The 2001 budget reflects a request to again revise the current appropriation language to eliminate the requirement that only allows reimbursement for actual realized losses recorded in CCC books as of the end of the preceding year. Our request provides a current, indefinite appropriation to reimburse the Corporation for all actual net realized losses, even if incurred in the current fiscal year.

Conservation Reserve Program

CRP is USDA's largest conservation/environmental program. The purpose of CRP, administered by FSA, is to cost-effectively assist farm owners and operators in conserving and improving soil, water, air, and wildlife resources by converting highly erodible and other environmentally sensitive acreage normally devoted to the production of agricultural commodities to a long-term resource-conserving cover. CRP participants enroll contracts for periods from 10 to 15 years in exchange for annual rental payments and cost-share and technical assistance for installing approved conservation practices. CRP acreage also contributes to the USDA Conservation Buffer Initiative and the Conservation Reserve Enhancement Program, which are part of the Administration's Clean Water Action Plan and are estimated to enroll 4.2 million acres through 2002. Also, in rules adopted after the 1996 Act, USDA reinstated the eligibility of certain cropped wetlands.

In fiscal year 1999, a general CRP signup (signup 18) was held from October 26 through December 11, 1998. Of the 7.1 million acres offered, a total of 5 million acres was approved for enrollment beginning in fiscal year 2000. The national average annual rental payment for this acreage is estimated to be about $46 per acre. Technical assistance for this signup was funded with unobligated appropriated funds and authorized CCC funds. Rental payments for signup 18 begin in fiscal year 2001.

Another general CRP signup was held January 18 through February 11, 2000. We are in the process of collecting bid data from our field offices and expect to make final enrollment decisions and offers in April.

In fiscal year 2000, CCC made payments of approximately $1.450 billion for rental costs and will make payments of about $124 million for sharing the cost of permanent cover on replacement acres. For fiscal year 2001, the Budget projects CCC program costs of approximately $1.690 billion, consisting of $1.567 billion for rental payments on previously enrolled and extended acres and $123 million for cost-share assistance for permanent cover on enrolled acres. Rental payments for fiscal year 2001 are not affected by the 20th signup which just concluded, since rental payments are not due until fiscal year 2002.

FARM LOAN PROGRAMS

The loan programs funded through the Agricultural Credit Insurance Fund (ACIF) provide a variety of loans and loan guarantees to farm families who would otherwise be unable to obtain credit. In times of economic stress, access to adequate farm credit is often the only way for some farmers to continue their operations.

As a result of the continuing financial hardship in much of the agricultural sector, the demand for FSA loans and loan guarantees remains very high in fiscal year 2000. However, the record $5.6 billion loan level that Congress provided for fiscal year 2000 is expected to meet the strong demand. The 2001 budget likewise responds to an anticipated high demand by providing a total program level of about $4.6 billion in loans and guarantees, an increase of $1.5 billion, excluding emergency funds. The largest segment of FSA lending is carried out in partnership with private lenders through the guarantee programs, and this budget continues strong support for guaranteed loans, with a proposed program level of nearly $3.5 billion.

For direct farm ownership loans we are requesting a loan level of $128 million, the same as the fiscal year 2000 appropriated level, excluding supplemental funding. The proposed program level would enable FSA to extend credit to about 1,250 small and beginning farmers to purchase or maintain a family farm, about 500 fewer than estimated for the current fiscal year. The agency has established annual county-by-county participation targets for members of socially disadvantaged groups, based on demographic data. Also, 70 percent of direct farm ownership loans are reserved for beginning farmers, and about 35 percent are made at a reduced interest rate to limited resource borrowers, who may also be beginning farmers. For direct farm operating loans we are requesting a program level of $700 million, $200 million above the 2000 level excluding supplemental funding, to provide over 14,400 loans to family farmers.

For guaranteed farm ownership loans in fiscal year 2001, we are requesting a loan level of $1 billion, the same as 2000. This program level will give over 4,500 farmers the opportunity to either acquire their own farm or to save an existing one. For guaranteed farm operating loans we propose a fiscal year 2001 program level of nearly $2.5 billion, compared to $2.9 billion in 2000. This level will enable approximately 16,600 producers to finance their farming operations.

The Budget also proposes $150 million in emergency disaster loans in fiscal year 2001, sufficient to provide approximately 1,800 low-interest loans to producers whose farming operations have been damaged by natural disasters. We are pro-

posing to close the eligibility gap between USDA and Small Business Administration emergency loans so that in times of natural disaster every size farm and ag business has a place to turn for emergency assistance. In addition, our budget proposes just over $2 million for Indian tribe land acquisition loans and $100 million for boll weevil eradication loans.

OTHER APPROPRIATED PROGRAMS

State Mediation Grants

State Mediation Grants assist States in developing programs to deal with disputes involving a variety of agricultural issues—distressed farm loans, wetland determinations, conservation compliance, pesticides, and others. Operated primarily by State universities or departments of agriculture, the program provides neutral mediators to assist producers, primarily small farmers, in resolving disputes before they culminate in litigation or bankruptcy. Mediation, at about $500 per case, offers significant savings over national level administrative hearings, which cost about $3,000 to $4,000 per case in direct costs alone.

Participating States certify their programs with FSA annually. In fiscal year 2000, 23 certified States have received grants.

The Budget requests $4 million, an increase of $1 million over fiscal year 2000, to help participating States expand the range of issues they are able to mediate and to meet the rising demand expected as a result of the slump in the farm economy. This year's record volume of farm loan activity, particularly in the context of continuing economic stress for producers, can be expected to generate an increased number of conflicts needing mediation.

Authority for State Mediation Grants expires at the end of fiscal year 2000. A legislative proposal is being submitted to reauthorize the program through fiscal year 2005.

Emergency Conservation Program

The President's Budget requests no Emergency Conservation Program (ECP) funding for fiscal year 2001. Although no new funding was provided in the Fiscal Year 2000 Agriculture Appropriations Act, the Fiscal Year 2000 Consolidated Appropriations Act provided supplemental funding of $50 million. With these funds as well as carryover unallocated balances remaining from fiscal year 1999 and reallocation of unused portions of prior allocations, ECP has allocated about $58.6 million to States so far in fiscal year 2000. All funding is likely to be allocated by the end of the fiscal year.

Dairy Indemnity Program

The Dairy Indemnity Program compensates dairy farmers and manufacturers who, through no fault of their own, suffer income losses on milk or milk products removed from commercial markets due to residues of certain chemicals or other toxic substances. Payees are required to reimburse the Government if they recover their losses through other sources such as litigation. The fiscal year 2001 appropriation request of $450,000 would cover a higher than normal but not catastrophic level of claims.

ADMINISTRATIVE SUPPORT

The costs of administering all FSA programs are funded by a consolidated Salaries and Expenses (S&E) account. The account is comprised of direct appropriation, transfers from program loan accounts under credit reform procedures, user fees, and advances and reimbursements from various sources.

The fiscal year 2001 Budget proposes funding of $1.095 billion from appropriated sources including credit reform transfers, a net increase of about $89.4 million over the fiscal year 2000 level. The largest component of the increase reflects a change in source of financing rather than an actual increase in funding. Under Section 822 of the Fiscal Year 2000 Agriculture Appropriations Act, $56 million was reimbursed to the S&E account from CCC for program delivery costs in fiscal year 2000. Based on economic assumptions used in the President's Budget, we estimated the need for $45.2 million in fiscal year 2001 to carry out similar workload, which was expected to decline somewhat. Therefore the fiscal year 2001 Budget proposes restoration of $45.2 million of the one-time CCC funding to the S&E appropriated baseline. Other items of increase include pay and related costs, a new funds control system for farm loan programs, reengineering of other farm loan program systems, and telecommunications costs. These increases are partially offset by decreases in some operating costs and a reduction in temporary employee staffing. Based on historical trends, the Budget also assumes that $16 million in carryover funding from fiscal

year 2000 will be available to support the proposed county office staffing level in 2001.

The Budget also proposes to adjust the proportion of total S&E funding that is provided by transfer from the Agricultural Credit Insurance Fund in order to accurately reflect the full cost of administering the farm loan programs in accordance with the Federal Credit Reform Act of 1990. Over the past 5 years, the transfer has remained virtually flat and has not reflected approved pay raises and rising operating costs or an increase in the number of employees actually carrying out the farm loan programs. To rectify the accumulated imbalance and bring our accounts into compliance with credit reform requirements, we are proposing an increase of $55.5 million in the ACIF transfer amount for fiscal year 2001. A corresponding decrease has been taken from the S&E direct appropriation component, although it is not readily discernible due to the aforementioned increase for baseline restoration.

Mr. Chairman, I would like to comment briefly on the current status of FSA's program delivery and the outlook for the months ahead.

As you know, 2000 is expected to be a record high for both CCC and farm loan program outlays, and the level of expenditures is mirrored in the FSA workload in county offices. We made maximum use of temporary employees early in the year to enable county offices to keep up with their workload and avoid the delays that were experienced during the early months of fiscal year 1999. However, funding to retain these temporary employees is insufficient, and it has become necessary to begin dismissing many of them. Most will be off the payroll by mid-March. We have also encountered significant unbudgeted costs during fiscal year 2000, including both contractor and in-house costs associated with the Pigford Consent Decree. We have also had to pay for maintenance of information technology operations from the S&E account due to the depletion of the CCC cap on ADP expenditures early this fiscal year. The 2001 Budget does propose an increase of $35 million in the ADP cap for 2001 and 2002, which would allow us to meet our minimum ADP operations requirements. However, in order to make any progress toward realizing the considerable benefits of a Common Computing Environment (CCE) for the county-based agencies, positive action by the Congress is needed on the Department's request for $75 million under the Office of the Chief Information Officer for CCE expenditures.

A key element in the success of this effort is the replacement of aging business and technology systems of these partner agencies that will allow sharing of data and implementation of streamlined business processes. The new technology will also allow these agencies to use modern business approaches such as the Internet to provide better access to programs for customers. However, until the CCE is fully operational, the service center agencies will have to continue to fund the outmoded existing systems to provide programs to customers.

The proposed $75 million in CCE funds for 2001 would fund essential capital investments needed to achieve the goal of a fully operational common computing environment in 2002 as set forth in the Department's Service Center Modernization Plan. These investments are needed to integrate the workstations and more fully achieve the benefits of shared systems and re-engineered business processes, in order to improve service to our customers.

An important part of the effort to modernize field operations for FSA, the Natural Resources Conservation Service, and Rural Development agencies is the effective consolidation of three separate and largely redundant administrative systems into one under the proposed Support Services Bureau. Separate systems constitute a glaring inefficiency that needs to be eliminated. Consolidated support would be provided for information technology, financial management, travel, procurement, civil rights, and human resources management. These services would be provided under the direction of an Executive Director who would report to a board of directors comprised of the heads of the serviced agencies. Unfortunately, language in the Fiscal Year 2000 Appropriations Act prevented us from implementing our plans for the Support Services Bureau. I ask the Committee to take a look at that language and work with us to move our operations into the modern world. By pooling resources in the administrative arena, each agency will be in a better position to provide greater program support.

Before closing I would like to note that the Administration will soon transmit a legislative proposal to convert all non-Federal county office employees to Federal status in 2000. This change will allow greater accountability of all employees under one personnel system and improve efficiency of Agency operations.

Mr. Chairman, this concludes my statement. I will be happy to answer your questions and those of the other Subcommittee Members at any time.

SUPPLEMENTAL FUNDING NEEDS

Senator COCHRAN. We are considering, as you know, a supplemental funding bill. You have pointed out these problems that you have right now in this fiscal year. Can you identify the levels of funding that you need to meet your current workload requirements?

Mr. SCHUMACHER. We have a proposal that Mr. Kelly has provided to me that I passed through to the Secretary, and Dennis, that we will be hopefully moving forward in an expedited fashion. Truthfully, Mr. Chairman, we have basically used up most of the support for temporary staffing in the first 6 months of the year because of the tremendous workload we have had. So we are working through a supplemental right now, and the exact numbers will hopefully be available very shortly from the OMB.

Senator COCHRAN. We noticed that in the budget request you basically request the amount of money that you have already gotten for the next fiscal year in this year's fiscal year budget. Is that not true?

Mr. KELLY. Senator, what you have to look at in the budget is that we got——

Senator COCHRAN. That is for the Farm Service Agency; let me be more specific.

Mr. KELLY. Correct. The budget request reflects the fact that we got Commodity Credit Corporation reimbursement for program delivery through the emergency title of the appropriation this fiscal year. So of the increase in the President's Budget, $45 million is just to get us back to a comparable appropriated baseline and prevent the reduction in force of about 700 employees, just to hold us completely neutral. That is the key part of it. When you see that increase in the budget, actually $45 million is to restore the portion of the $56 million reimbursement that the President's Budget estimated would be needed to carry out similar types of workload in fiscal year 2001.

STATUS OF FSA COUNTY EMPLOYEES

Senator COCHRAN. The budget suggests that the Administration will request legislation to convert non-Federal Farm Service Agency personnel to Federal employee status in 2000. Will this have any impact on the Agency's funding requirements or affect the staffing levels presented in the fiscal year 2001 budget?

Mr. SCHUMACHER. I do not think so. Keith? I will get back to you on that one, Mr. Chairman. I do not believe so, unless I stand corrected.

Mr. KELLY. Mr. Chairman, I can respond on that. The budget impact of that conversion is neutral, with the exception of some administrative costs of converting people from the county system to the GS employment system. We could ensure that those employees converting from the county to the Federal system would maintain their grades and maintain their seniority and all of those things, to leave it relatively neutral other than some administrative costs that we would necessarily absorb.

FSA TEMPORARY STAFFING

Senator COCHRAN. What impact has this had on the delivery of payments to farmers under the disaster assistance program? You talked about having to reduce the number of temporary employees since November of 1999. What impact has that had on delivering benefits, ad hoc disaster payments to farmers?

Mr. KELLY. Senator, if I can comment. First, we are just in the process right now of starting to lay off of the temporary employees. We started looking at that with all of our States, depending on the individual State, right after the 1st of the year. As the Under Secretary indicated earlier, we did keep people employed on the front end. We have had them employed at a very heavy level, to keep us from getting behind in the county offices. And one needs to recall only last year, as we got so buried with paperwork in the loan deficiency payments that we were forever digging ourselves out, which really necessitated two supplementals.

So now we are just getting in. We just closed the signup for the crop disaster program last Friday. We have been making the advance payments of 35 percent of the projected disaster programs payments. We have just about depleted all of the resources for temporary help to keep offices current with whatever disaster or emergency program or loan deficiency payment has been going on.

We are at a point that we are going to be sending people home. This month of March is the targeted date. Some have already gone home. And so we will probably be slowing down in getting some of these other payments, the remainder of the 22 programs, out the door.

FSA WORKLOAD

Senator COCHRAN. Are you going to tell the farmers that they are not going to get their payments on time or there will be a delay in getting their benefits? How are you all going to spin that one?

Mr. KELLY. Senator, we are doing the best we can with what we have out there. We just do not have the ability to go in the red. At one time or another it is going to happen. The loan deficiency payments, if we get behind on them, farmers are going to be banging on our doors. And I believe nobody here has been contacted with complaints yet, because at least for all of the payments and programs so far, we have been able to keep—I guess for lack of a better word—our nose above the water.

But we have got two major programs still sitting out there to finish up—the disaster program and, probably the biggest labor-intensive one, the oilseed program. We are going to have 800,000 to 1 million farmers coming through the door to sign up for the oilseed program, for that $475 million of the emergency legislation from last year. That is going to be the most labor-intensive program we have. And we are just going to have to set priorities of which programs we get through first.

Senator COCHRAN. We want to work with you to help deal with that problem. I do not know how quickly we can get the work done here and a consensus on the exact amount of money available for a supplemental, but we want to support you and be helpful to you. Any suggestions that you might have about action that we should

take to help deal with these shortfalls and these problems, we would love to have the benefit of your suggestions.

Mr. SCHUMACHER. This is my seventh hearing before you. You have always been very supportive, and I have indicated that in my testimony. We would very much like to work with you, Mr. Chairman. These are tough times. You know it in your own State. Keith and I and Parks and everybody here has worked very hard to get this huge level of the emergency payments out the door. This year it has been quite difficult with the 22 new programs, because it requires training. And I visited with some staff just yesterday about the consent agreement. They are just now going back to deal with the oilseed program.

So Keith and I and perhaps your committee and the committee on the other side can work together if and when this supplemental comes forward on an expedited basis.

CCC ADP CAP

Mr. KELLY. Senator, if I can add one other thing which would help us. That is to get the Commodity Credit Corporation cap on data processing lifted. Because the same thing with those——

Senator COCHRAN. Is this the so-called Section 11 cap?

Mr. KELLY. This is not the Section 11 cap. This is the ADP cap.

Senator COCHRAN. Another cap. How many caps are there?

Mr. KELLY. There are two caps that I refer to.

Senator COCHRAN. Are these your caps or our caps?

Mr. KELLY. The caps have come down from the Congress, with adjustments over time. I am talking now about the cap on the amount that the Commodity Credit Corporation was allowed to expend on automated data processing. Last year, we had a proposal up for a $35 million increase.

We had to use some salary and expense money this year just to keep the basic core computer operations running. And I know that proposal will be before you to raise that cap so we can maintain the tools for our employees to do the work. Otherwise, we guarantee it will become very, very labor-intensive and manual-intensive to do the work.

Senator COCHRAN. Thank you for telling us about that.

Senator Kohl, any comments or questions? You are recognized for whatever time you may want.

STATEMENT OF SENATOR HERB KOHL

DAIRY EXPORT INCENTIVE PROGRAM

Senator KOHL. Thank you, Senator Cochran.

In my opening statement, which I will submit for the record, I express my disappointment in the lack of any meaningful support for dairy in the Administration's farm safety net proposal. I will not belabor that point at this time. But I do want to focus on other tools that the Department has to help dairy farmers address market volatility, to take advantage of global markets and to manage financial risk. I think even in these categories the Administration is not doing all it could to help dairy farmers.

U.S. milk producers have relied on the Dairy Export Incentive Program to help them compete in badly distorted world markets.

I am concerned, however, about the future of this program in fiscal year 2001, given our WTO obligations to reduce both the volume and the value of DEIP exports. This is particularly a concern given the low milk prices predicted for the duration of this year. The dairy industry has often relied on DEIP to reduce price depressing surpluses.

How will our WTO obligations affect exports under DEIP in the coming years, and will there be an associated impact on milk prices?

[The statement follows:]

PREPARED STATEMENT OF SENATOR HERB KOHL

Welcome Secretary Schumacher, and Mr. Collins, it is good to see you again.

In reviewing your prepared statements, I noticed you have plainly stated an unfortunate generalization with which we have all become too familiar. In spite of an overall economic boom, the American farmer—and indeed, people throughout rural America—are suffering through difficult times.

Partially in response to this, Secretary Schumacher, you have outlined for us the Administration's proposal for a farm safety net initiative. Secretary Glickman provided a similar overview when he was before us a few weeks ago. Now, as then, I have to stress the glaring omission of any meaningful relief in your proposed package for dairy farmers—even though you highlight in your opening statement—in fact in your first few paragraphs—that last year dairy prices experienced their steepest decline in history. I repeat, in history.

Yet, your $11.5 billion package only offers an extension of the current dairy price support program. While better than nothing, I think you would agree, as Secretary Glickman conceded, that it falls far short of the type of assistance needed to protect dairy farmers in my State and elsewhere. And, I have to restate, the type of assistance you are providing for dairy farmers is nowhere close to the types and levels of assistance you are proposing for other agricultural commodities.

In my State, agriculture IS dairy. I will not watch another farm relief package go by that ignores this important and struggling industry.

Of course, the Farm Safety Net Initiative is only part of the President's proposal relating to agriculture. Aside from that legislative proposal, we have before this subcommittee a sizable request for discretionary and mandatory appropriations to fund a host of farm and foreign agricultural trade programs.

It goes without saying that USDA programs within the Farm and Foreign Agriculture mission area are far reaching. These programs range from the annual operating loan for a small or beginning farmer to humanitarian food assistance needed to feed a starving world. It is important that we all work together to make sure these programs function as they should. Risk Management must be designed in a way that truly manages risk. The Farm Service Agency must have the resources necessary to ensure that farmers receive adequate services. Our Foreign Market Development programs must truly develop and maintain foreign markets.

I look forward to your remarks.

Mr. SCHUMACHER. I want to ask Mr. Fritz to join me. He runs the Dairy Export Incentive Program. And while he is coming to the table let me say that we have used the DEIP program very aggressively, Senator. We have also used some of the rollover funds, as well, to help dairy farmers as much as possible to move some of this product overseas.

We also, in a related way, used our food aid authorities. We donated a substantial amount of nonfat dry milk last year. We may have to do more because more of that is coming in now. With your permission, I will ask Mr. Fritz to brief you on where we are on DEIP for this coming year.

Mr. FRITZ. Yes, sir, we feel we have used the DEIP program very aggressively in the last few years. We have used the rollover authority that we do have, to get up to over 100,000 tons of nonfat dry milk last year. But we will be significantly constrained due to

our WTO commitments in that in 2000, for nonfat dry milk, we are going to be at a maximum of 68,000 tons. And obviously we are not quite sure what the rollover level may be from this current year, but it will probably be in the neighborhood of 7,000 tons. But our tonnage and our dollar values will go down based on the WTO commitment significantly.

How this will impact dairy prices, I am not sure. Maybe Mr. Collins has an answer for that. We are taking in a lot of nonfat dry milk in the CCC loan forfeitures. We have put in 25,000 metric tons into the 416 program. And we will be using nonfat dry milk, as well, for PVO donations overseas.

Senator KOHL. I would like to ask what USDA plans to do to mitigate the impact of significant reductions in subsidized exports and to aid exports of U.S. dairy products. You have said a little bit; is there more you can say?

Mr. SCHUMACHER. Yes, sir, if I may, Mr. Fritz. Frankly, the Dairy Export Council does a terrific job. I think we are now providing about $1.5 million to promote their commercial exports overseas. And if the Congress were to allow us to use any unused Export Enhancement Program funds, we could provide further assistance for trade promotion for groups like this and your cranberry growers.

Mr. COLLINS. Can I make a comment on that, just in answer to the price effect question?

Senator KOHL. Yes, please.

NONFAT DRY MILK

Mr. COLLINS. I think, in the short term, it would not have much effect on prices. And I say that only because, as Mr. Fritz pointed out, we are making very substantial purchases under the price support program of nonfat dry milk. We could buy 300 million pounds of nonfat dry milk this year, probably 30 percent of the total nonfat dry milk production in the United States. So what happens is if you are not moving it out through DEIP—and most of the DEIP is nonfat dry milk—with prices at support, it is going to end up in the support program. So we will just keep prices right at support.

Now, if prices start to move above support, then the lack of having 100,000 tons of nonfat dry milk DEIP, like we had last year, then that would have a price reducing effect.

Senator KOHL. The Department recently announced 3 million tons of commodity donations under the Section 416(b) program. This program and others, like Public Law 480, have long proven to be of vital importance to help combat world hunger. They have the added benefit of providing an outlet for U.S. production, which will become increasingly important as the U.S. complies with its WTO obligations.

Unfortunately, the recent Section 416 announcement includes only 25,000 tons of nonfat dry milk as part of the 3 million ton aid package. Since it is clear that the Department will be purchasing surplus dry milk throughout much of the year as milk prices remain near the price support, why did not the Administration include more significant quantities of dry milk powder in this aid package?

Mr. FRITZ. If I could address that, Senator. One of the difficulties we do have is programming nonfat dry milk in terms of finding recipients for such a product. Number one, generally it is a non-fortified product, so we have to find people who are willing to fortify the product so that it can be used in various countries overseas. And, two, it is often used as an ingredient for other foods rather than consumed as nonfat dry milk. So it is a very difficult item to program in less developed and developing countries based on its usage and the fact that it is a non-fortified product.

Senator KOHL. Well, is there something that the Department can and will do to increase the proportion of milk powder provided in this aid package?

Mr. FRITZ. As we have done in the past, we are trying to do something to increase the fortification of the dry product. And we are meeting with the dairy industry, as we have with other commodities in 416, to try and better target our programming both now and in the future.

DAIRY OPTIONS PILOT PROGRAM

Senator KOHL. In addition to viable export markets, dairy farmers need risk management tools. That is why I have long been an advocate for the Dairy Options Pilot Program. When the Secretary was here 2 weeks ago, he told us the Department would be ramping up this program. However, I am troubled to learn that USDA is significantly limiting program availability in round two of the pilot. USDA is not allowing farmers from the initial pilot to participate in this program.

This is of special concern to Wisconsin farmers, where participation in round one of the pilot was strong. This decision is apparently based on what I believe to be a misinterpretation of the authorizing statute. You have effectively prevented any individual farmer from participating in the pilot more than once. And despite the Secretary's commitment to ramp up this program, it appears the program will terminate in just over a year.

Would you please tell this committee what steps the Department will take to ensure that this program will continue to be a risk management tool available for dairy farmers?

Mr. SCHUMACHER. Thank you, Senator. I am going to ask Ken to join me, Ken Ackerman of Risk Management, and I will certainly go back and check with our attorneys. We felt that this was a pilot program for 1 year, to help farmers get in to use the Dairy Options Pilot Program and it was just for 1 year. We will check again with the attorneys on that.

Ken, do you want to comment on that?

Mr. ACKERMAN. Yes, Senator, you are correct. We have been operating this program under a legal structure which designed it as a pilot program. That structure was created under the 1996 Farm Act which had limitations on the number of counties that can be in the program, limitations on the number of counties in each State, and it had a general approach that we would use it as an educational tool. A farmer would be in the program for 6 months, a limited period of time, during which they would have subsidized use of futures or options and then they would basically be on their own.

PREPARED STATEMENT

We are planning to roll out Round Two of the program later this year. We want to wait until milk prices are a little higher, so farmers would be more inclined to lock in a milk price rather than do it when prices are very low. But there will be these limitations on counties and States because of the pilot program structure of the Dairy Options Pilot Program.

[The statement follows:]

PREPARED STATEMENT OF KENNETH D. ACKERMAN

Mr. Chairman and members of the Subcommittee, I am pleased to testify in support of the President's fiscal year 2001 budget for the Risk Management Agency (RMA). Crop insurance remains USDA's principal means of production risk protection for the nation's producers. In 1999, the program provided farmers with more than $30 billion in protection on roughly 196 million acres through approximately 1.3 million policies. During that time, we and our private-sector partners provided hard-hit farmers with nearly $2.2 billion in payments, most delivered within 30 days of claims being filed.

Since 1993, the number of policies, insured acres, and liability have increased significantly. Further, the total crop insurance premium for 1999 exceeded our estimates by approximately 28 percent, representing a sizeable, 24 percent increase over the 1998 level. This remarkable increase can be attributed to the approximate 30 percent premium discount that was offered in 1999. Producers who have expressed concern over the increased cost of higher levels of insurance coverage responded to this initiative by enrolling approximately 20 percent more acres in buy-up coverage compared to the 1998 level. Emergency funding was also provided in 2000 to allow an approximate 25 percent discount on buy-up premium rates.

While impressive results have been achieved in a short period of time, rapidly changing events are forcing a hard examination of the agricultural safety net. The continuing farm crises have exposed weaknesses in the safety net as it too ultimately suffers from depressed commodity prices and deals with those areas hit repeatedly by crop loss in a depressed economic environment. In addition, crops and commodities, like livestock, do not have federally backed insurance available to them, and farmers have far too little instruction on the risk management tools and strategies that can protect and improve their farm revenue.

The Administration recently announced an $11.5 billion initiative to strengthen the farm safety net. This initiative will help thousands of cash-strapped producers lay the basis for more permanent and effective assistance to be enacted in the next farm bill. Components of the reform initiative directly related to the crop insurance program include the following:

—*Premium Discounts.*—Extends the initiatives taken in 1999 and 2000 by offering approximately $400 million in premium discounts on buy-up coverage for crop insurance in 2001. In addition, $200 million will be used to pay the delivery costs associated with the increase in coverage this discount will produce and $40 million will fund a reserve against under-estimation of increased program participation. Based on past experience, RMA anticipates that farmers will buy even more coverage and become steady customers.

—*Multi-year Coverage.*—Includes $100 million to address the problem of production losses and price declines that extend over several years. These funds will be used to provide producers with more options than currently available so that they are not driven out of the program by sharp reductions in their actual production history and allocated deductible.

—*Livestock Insurance Pilot Program.*—Funds $100 million to establish a pilot program for insuring livestock. The pilot program would be designed to subsidize producers' participation and establish intermediaries to offer options contracts. Conceptually, this program may be similar to the Dairy Options Pilot Program.

—*Risk Management Education.*—Expands risk management education activities through four methods: risk management clubs, direct producer training workshops, agricultural education at community colleges, and technology based information and education. The $40 million initiative would be modified regionally to accommodate the local needs of producers.

—*Research and Development.*—Includes $30 million to expand research and development activities through incentives and use of private and public sources uti-

lizing their expertise and resources to address an ever-changing risk environment.

RMA is committed to helping our private-sector partners build participation by providing new crop insurance programs and helping producers understand and manage their agricultural risks. Over the past several years, this goal has carried RMA into many areas beyond providing traditional crop insurance, including the development of innovative products and services based on proposals from the private sector. As a result of these partnerships, we have developed innovative insurance products, a dairy options pilot program, and a wide range of projects to help farmers become better risk managers. Today, I'd like to briefly highlight some recent initiatives and detail plans for fiscal year 2001.

RESPONDING TO THE MARKET

To help farmers manage their risk and diversify their operations, RMA has been aggressively creating new programs and expanding the availability of existing plans of insurance. For example:

—*New Crop Programs.*—For 1999 alone, RMA created new insurance programs to cover avocado, cabbage, cherries, crambe, cultivated wild rice, barley, mustard, rangeland, and winter squash. Crop insurance provides individual risk protection at higher levels than available under the Noninsured Assistance Program (NAP).

During fiscal year 2001, RMA will be continuing development of programs to better protect growers not currently covered by crop insurance. For 2000, priorities will be given to the development of insurance programs for cultivated clams, chile peppers, processing cucumbers, Florida fruit trees, onion stage removal, pumpkins, strawberries, and a coverage enhancement option on apples, canola, potatoes, grapes, rice, and citrus fruit.

—*Asiatic Citrus Canker (ACC).*—Several revisions to the Florida Fruit Tree Pilot Program were announced for the 2000 crop year. One key policy change insures producers against losses of citrus trees to ACC. The ACC coverage is part of the standard policy, not an option that the producer would purchase separately. Counties covered under the Florida Fruit Tree policy for crop year 2000 are: Brevard, Broward, Charlotte, Citrus, Collier, Dade, DeSoto, Glades, Hardee, Hernando, Henry, Highlands, Hillsborough, Indian River, Lake, Lee, Manatee, Marion, Martin, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Polk, Sarasota, Seminole, St. Lucie, and Volusia.

—*Adjusted Gross Revenue (AGR).*—The AGR insurance plan is a non-traditional, whole farm risk management tool. The AGR concept uses a producer's historic Schedule F tax form information as a base to provide a level of guaranteed revenue for the insurance period. AGR provides an insurance safety net for multiple agricultural commodities in one insurance product, establishes a common denominator for commodity production-cash receipts, makes simple straightforward use of income tax forms, and reinforces program credibility by using Internal Revenue Service tax forms and regulations. Eligible producers may choose one of three coverage levels: 65 percent coverage and 75 percent payment rate (65/75), 75 percent coverage and 75 percent payment rate (75/75), or 80 percent coverage and 75 percent payment rate (80/75).

—*Dairy Options.*—Through training and paying a portion of the transaction costs, the dairy options pilot program helps producers create their own financial safety net by purchasing exchange-traded options on the price of their milk. When milk prices fall, producers are able to offset losses based on projected future earnings, in effect putting a "floor" under their milk prices. Producers in certain pilot states and counties are now actively using the program.

LEVERAGING SCARCE RESOURCES

RMA is leading a joint effort with the Cooperative State Research, Education and Extension Service, the Commodity Futures Trading Commission, and a number of private-sector partners to help producers become active risk managers. In order to leverage scarce resources, the Agency funded approximately $900,000 in grants to diverse partnerships all around the country to better equip producers to manage risk. Without such partnerships, the cost of meeting our educational mandate would increase significantly.

For fiscal year 2000, under current law, we anticipate that 12,300 producers will receive direct training through approximately 600 RMA coordinated/facilitated risk management education sessions. In addition, we anticipate that around 1,000 producers will participate in risk management or marketing clubs. These estimates have dropped and are likely to continue dropping due to lack of funding.

RMA places a strong emphasis on reaching small and limited resource producers on the topic of risk management. These efforts are carried out through partnerships with community based organizations. These outreach efforts will be complemented with an information campaign to highlight educational themes and opportunities.

ADMINISTRATIVE AND OPERATING (A&O) EXPENSES

Discretionary account expenses are estimated to increase by $3.7 million from the fiscal year 2000 level of $64 million. This increase includes: $1.6 million for pay costs, of which $415,000 is for the annualization of the fiscal year 2000 pay raise and $1.2 million for the anticipated fiscal year 2001 pay raise; $1 million for research and development costs related to the study and evaluation of a program for biobased products as part of the President's initiatives; $700,000 for civil rights activities aimed at increasing the participation of women and minorities, and assuring that underserved and socially-disadvantaged producers/ranchers have full access to RMA programs; and an additional $403,000 for information technology costs. Fiscal year 2001 information technology needs include a wide variety of enhancements, additions, services, and maintenance in continued support of system integrity to meet the continuing growth and demands of the program.

FCIC FUND

Under current law, the budget for the FCIC Fund proposes an estimated $1.0 billion increase in program level. This seemingly large increase is a result of using a portion of prior years' unobligated balances—$953.8 million—to cover indemnities and other expenses in fiscal year 2000.

Premium subsidy is expected to increase by $66.2 million due, in part, to an estimated increase in participation. In accordance with the Federal Crop Insurance Reform Act of 1994, for the purpose of encouraging the broadest possible participation of producers, FCIC pays a portion of crop insurance premiums. The $956.1 million in premium subsidy, of which $298.6 million is for catastrophic (CAT) coverage and $657.5 million is for additional coverage, assists in providing producers a cost-effective means of managing their risk.

Delivery expenses, which represent the amount of administrative and operating expense reimbursements provided to approved insurance providers for delivering risk management services and products, are based on 24.5 percent of estimated total premium for fiscal year 2001 in accordance with the Agricultural Research, Extension, and Education Reform Act of 1998. As a result of increased total premium, RMA anticipates delivery expenses in the amount of $507.7 million, compared with the fiscal year 2000 estimate of $486.3 million. This increase will assure continued effective delivery of risk management products to the agricultural community.

RMA also expects excess losses, which are based on calculations of increased premium and program losses, to increase by $13.7 million to a level of $298.8 million. This estimate supports a loss ratio of 1.075 and is authorized under the appropriation language "such sums as may be necessary." Without these funds, which directly support the mission and goal of the Agency, FCIC would be unable to fully fund expected indemnities, thereby weakening the producers' safety net.

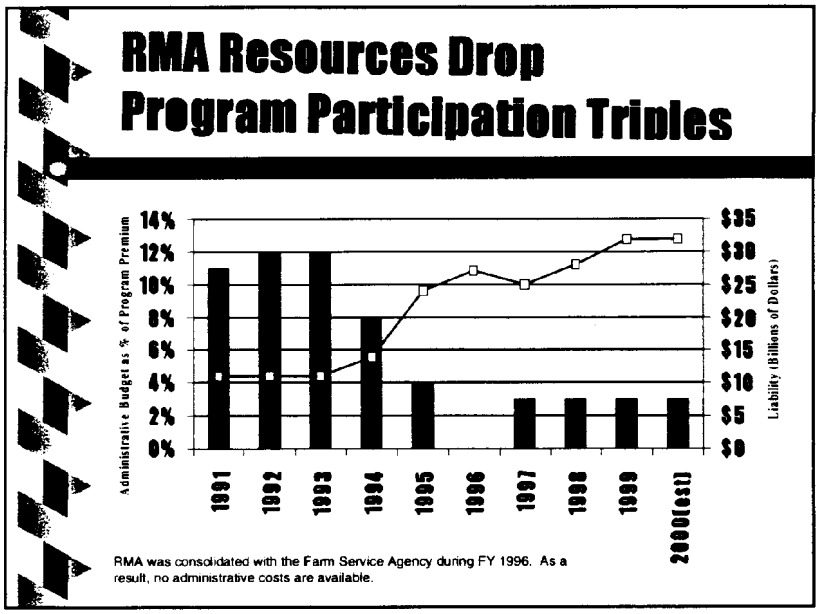
The fiscal year 2001 current law funding request for research and development expenses is $3.5 million. No increase or decrease is requested. In accordance with the Agricultural Research, Extension, and Education Reform Act of 1998, RMA's ability to develop new products, support private sector initiatives through section 508(h) products, and help farmers become better risk managers was severely limited. Under that legislation, RMA's research and education funds were capped at $3.5 million per fiscal year, an immediate 67 percent reduction from the fiscal year 1998 level of $10.7 million. This reduction has created an immediate need for additional funding so that we can continue to provide new products, support private sector initiatives, and provide educational outreach to farmers. This need is being addressed in the Administration's safety net initiative, which provides $30 million for research and development activities and $40 million for risk management education initiatives in 2001.

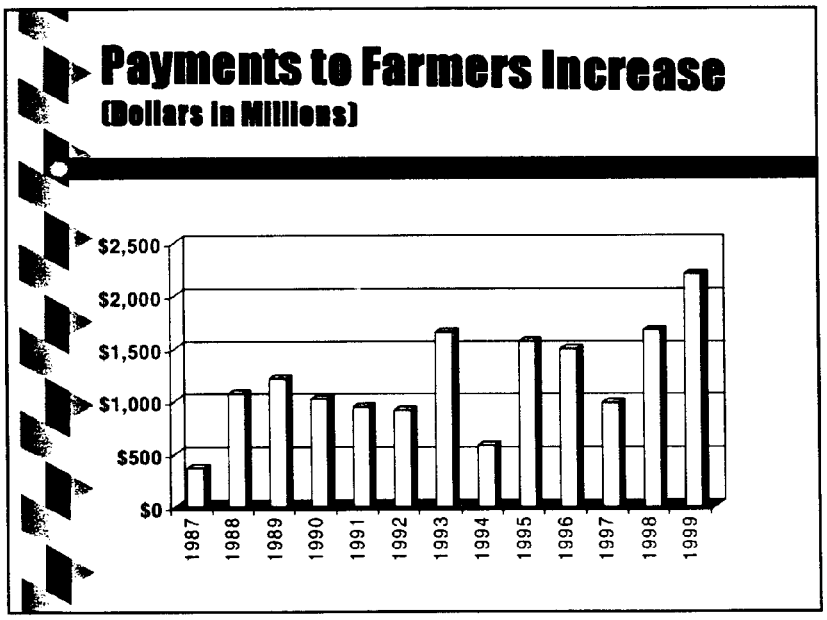
CONCLUSION

Mr. Chairman, we must succeed in strengthening the farm safety net or we may have a repeat of prior years' emergency spending package. We have made a good start by reducing farmer premiums by an estimated 30 percent in 1999 and an estimated 25 percent in 2000. However, more can and must be done.

I know of no other program in all of government that has produced a greater return on the taxpayers' dollar (please see the attached graphics.) While proposals to enhance the crop insurance program are working their way through Congress, RMA

is requesting $3.7 million more in discretionary funding. This funding level is essential if RMA's infrastructure is to support and leverage the necessary initiatives and demands for continued maintenance, growth, and expansion of the program. Even at full funding, RMA will only be able to maintain products and services at the current level, while slightly increasing activities aimed at increasing the participation of women and minorities and assuring that underserved and socially-disadvantaged producers and ranchers have full access to all RMA programs. In addition, RMA would be able to support the Presidential Biobased Products/Bioenergy Initiative. Personnel ceilings will continue to hold at fiscal year 1999 levels. Mr. Chairman, this concludes my testimony. I will be pleased to answer any questions.




Payments to Farmers Increase
(Dollars in Millions)
$2,500
$2,000
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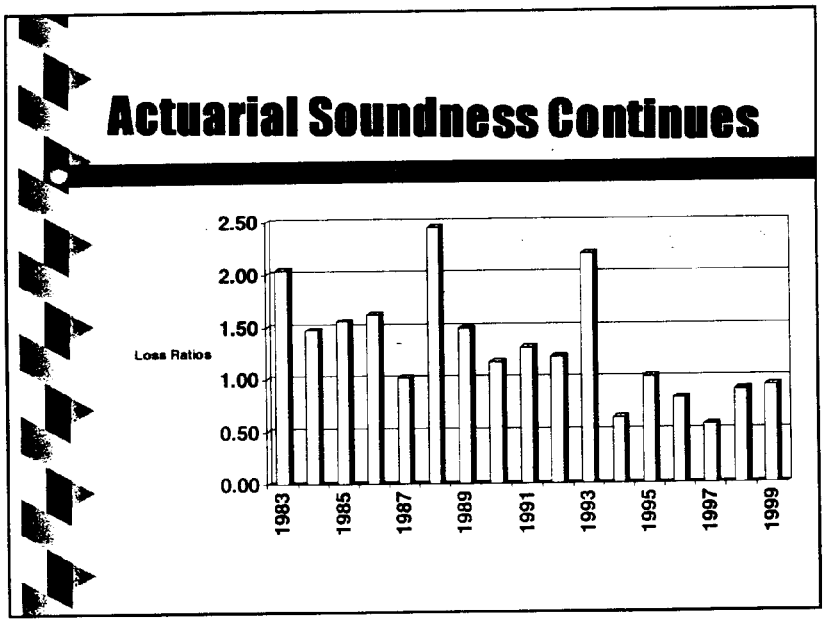
Actuarial Soundness Continues
Loss Ratios
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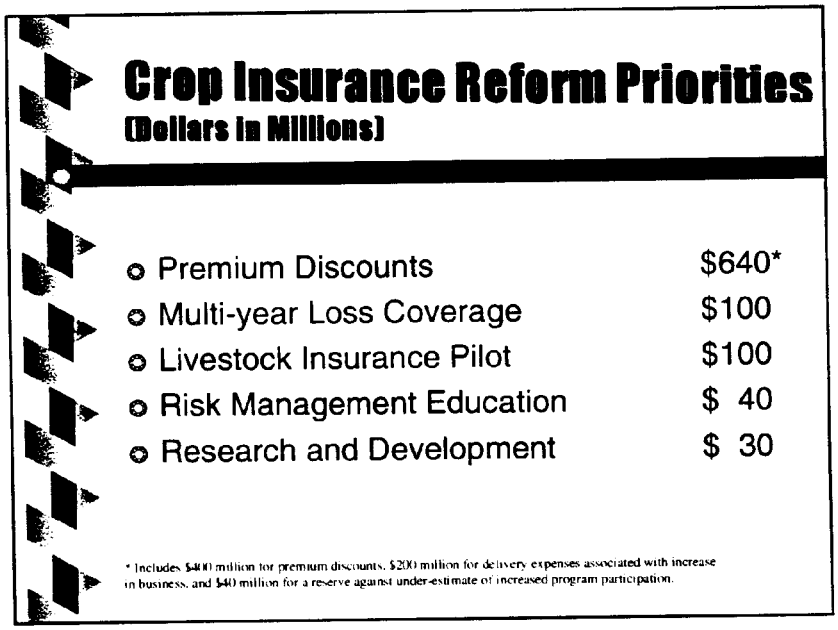


Senator KOHL. So you are saying the program will terminate or it will not terminate?

Mr. ACKERMAN. The program will have a Round Two later this year, but the overall authority for the program I believe, had a limit in terms of the number of years that it was available. It does phase out, but we are not terminating it at this point. Again, we have a Round Two of the Dairy Options Pilot Program that we will be rolling out later this year, but it will have these limitations on States and counties.

CONSERVATION TECHNICAL ASSISTANCE

Senator KOHL. When Secretary Glickman and Deputy Secretary Rominger were before this subcommittee, I raised the question about the shortfall in technical assistance for the Conservation Reserve Program and the Wetlands Reserve Program due to the so-called Section 11 cap. Mr. Rominger indicated that despite the supplemental appropriation provided by this committee for fiscal year 2000, USDA would still be short of necessary funding to deliver technical assistance for these important programs this year.

He stated on the record that a request for additional funding would be included in the Administration's supplemental request. And so I was dismayed last week to see that the Administration's request does not ask for funding to deal with this very serious problem. The result could be, Secretary Schumacher, that USDA will not be able to deliver these important programs.

So, how do you account for the lack of conservation technical assistance funding in the Administration's supplemental request?

Mr. SCHUMACHER. I am going to ask Dennis if he could address that.

Mr. KAPLAN. That, like the FSA problem, is still being looked at within the Administration, and they will hopefully have an answer very soon.

FFAS FUNDING ISSUES

Mr. SCHUMACHER. I indicated on the record just a few minutes ago, Senator, we are working through some additional issues. I received a request from the Farm Service Agency. That has been passed through, and we hope to get that up to Congress. Not only the Farm Service Agency, but what we are finding is that, in the Foreign Agricultural Service and in the Risk Management Agency, this crisis that is upon us more and more is being overtaken by events, whether it is the additional money for the consent agreement or the need—if we can put that other chart up there on Risk Management, Ken—we have gone from $14 billion, Senator, to $30 billion in liability coverage, yet the Risk Management Agency has been basically straight-lined.

And similarly in our export programs. So in all three agencies we are having some difficulties on the staffing side. And included among our concerns is the computer side, because the legacy systems have been overused. I heard a figure this morning, Senator, that really stunned me at my staff meeting. Ken, someone told me you had something like 1.3 billion in terms of the numbers of requests, computer transactions, you handle in crop insurance on an annualized basis. It was absolutely stunning.

Mr. ACKERMAN. The number of actual transactions is in the billions every year in crop insurance. In the past half a dozen years, the program, as Mr. Schumacher points out, has expanded by two to three times. We have literally gone from about 20,000 county crop programs to 35,000 county crop programs. We have gone from insuring about 70 crops in the mid-nineties to now having 138 different crop insurance programs that we administer during a time when our budget has stayed constant.

So, yes, we, like the Farm Service Agency, are hitting the wall in terms of our staffing and our ability to continue to expand and grow.

CONSERVATION RESERVE PROGRAM

Senator KOHL. Just in connection with that, we have got many farmers in Wisconsin trying to prepare for this growing season, and they do not know whether or not they have land under CRP contract or not. So when do you expect these farmers will receive a decision on their CRP cases from the FSA?

Mr. SCHUMACHER. Parks Shackelford is with us, as well. He is working very hard on the CRP and also the CREP. Maybe he could take just a minute to present that to you.

Mr. SHACKELFORD. I think there is a misunderstanding, because all the contracts eligible for renewal during the signup that is going on now are in effect until September 30th of this year. So land that is under contract will continue to be under contract for this growing season. The new contracts for the signup that we have just completed will become effective on October 1st. We will notify producers, hopefully, I believe, in the month of April about the lands that will be under contract starting in October.

Senator KOHL. But there are nine case, I understand, that the Wisconsin State FSA office has sent on to headquarters here in October and November of last year. And they have not yet been specifically addressed.

Mr. SHACKELFORD. I will have to follow up on those.

Senator KOHL. Can you follow up on those?

Mr. SHACKELFORD. I am not familiar with the specific nine cases, but we will certainly get you an answer.

Senator KOHL. Can we do that?

Mr. SHACKELFORD. Yes, sir.

Senator KOHL. Excellent. That would be appreciated.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Kohl.

When Senator Gorton was here, he mentioned the agriculture trade office in Singapore and the plans to close it. The FAS has cited budgetary constraints as the reason. And I note that in the fiscal year 2001 budget request, additional appropriations for FAS to open three new agriculture trade offices in Mexico, Canada and the Philippines are included. Why are these three new offices of higher priority than retaining the agriculture trade office in Singapore? Did FAS consider requesting additional resources to retain the office in Singapore. And if not, why not?

CLOSING ATO SINGAPORE

Mr. SCHUMACHER. I am going to ask Tim to expand on that. We looked at that pretty hard, Senator, on Singapore. Not only Senator Gorton raised that question, but Senator Bond and others are raising the issue of Singapore. That is probably one of the highest cost cities we have. We looked at the available funding and what we could save by closing Singapore and moving the local people to Kuala Lumpur. That gave us additional resources for more critical offices, where our trade is growing.

But on the broader budget issue, I would like to have Mr. Galvin comment. Again, I do not want this to be just staffing issue hearing, because we have many more issues to discuss. But I am concerned as well about the Foreign Agricultural Service, on the overall budgetary issue, in terms of how we can work together on that issue.

Mr. GALVIN. Thank you, Mr. Chairman. As Mr. Schumacher pointed out, that agriculture trade office in Singapore is one of our highest cost operations, about $900,000 a year. We felt that if Singapore were to close, we could continue to provide marketing services in that region from our other attache offices throughout that part of the world. Then, we looked to the future and sought budget increases for additional ATO's, that would offer us an increased return in terms of market development and increased export sales.

PREPARED STATEMENT

I might say that the closure in Singapore was not the only action we took. And I can tell you that we took that action very reluctantly. But actually, over the past year, we have closed offices or reduced our presence in about half a dozen locations, including office closures in Milan, in Berne, and Jeddah, as well as reducing

our presence in Hamburg and Tokyo. All together, those actions saved us about $1 million in the current year. And as we follow through on our plans to close Singapore this year, as I mentioned, that should bring us about $900,000 in savings in the coming year.

[The statement follows:]

PREPARED STATEMENT OF TIMOTHY J. GALVIN

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to review the work of the Foreign Agricultural Service (FAS) and to present the President's budget request for FAS programs for fiscal year 2001.

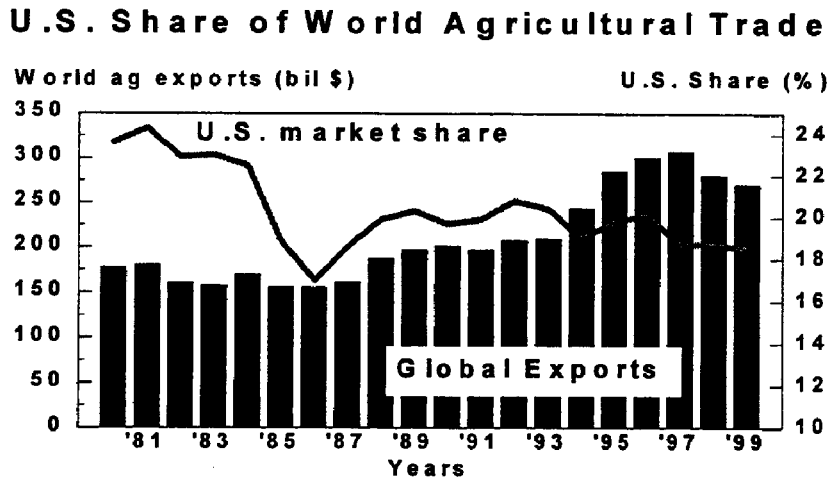
U.S. TRADE PROSPECTS

Fiscal 1999 was a mixed year for U.S. agricultural trade. Exports reached $49 billion—down almost 20 percent from the $60 billion record of 4 years ago, and we project that U.S. exports will remain flat at $49 billion again this year.

This past year, we actually saw a gain in export volume of about 15 percent. However, 4 consecutive years of bumper crops worldwide and the slow pace of economic recovery in Asia continue to weigh down prices. As a result, much lower prices caused export value to decline this past year, and they explain why export value will remain flat this year.

Also troubling is the steady erosion in U.S. market share of global agricultural trade over the past two decades. This could culminate in the United States losing out to the European Union (EU) as the world's top agricultural exporter sometime in 2000.

From fiscal year 1981 until the global economic crisis in fiscal year 1998, worldwide trade in food and agricultural products nearly doubled. While U.S. agricultural exports also grew during this period—especially over the past decade—the fact is that U.S. export growth lagged behind that of its major competitors, resulting in a loss of U.S. market share, from 24 percent in 1981 to its current level of 18 percent.



The decline in market share seems to defy what we know about the strength of the U.S. food production system. After all, the United States has the world's most efficient producers, processors, and distributors of agricultural products. We have one of the safest food supplies in the world. We have an abundance of high-quality bulk commodities and world class high-value and consumer-ready food products, and we have consistently shared our bounty with less fortunate nations through food aid and related assistance.

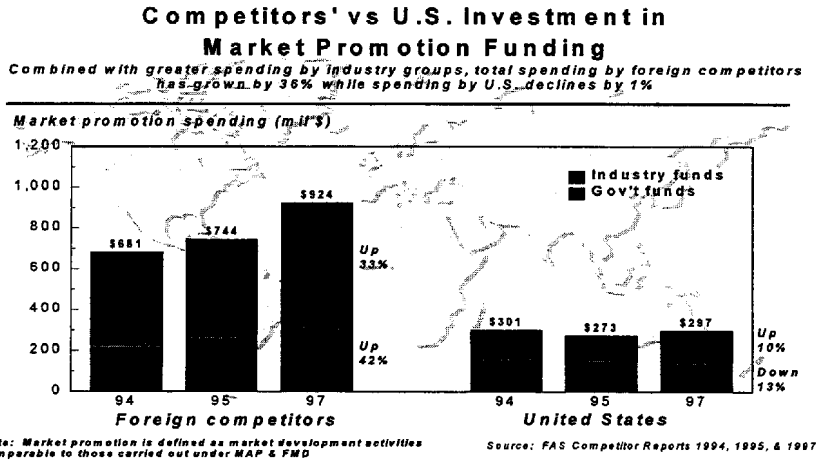
However, over the past few years, several factors have contributed to the drop in U.S. agricultural export levels and market share.

First, while U.S. agricultural exports have declined, so has global trade in agricultural commodities. The value of global agricultural trade shrunk from $302 billion in 1997 to an estimated level of $270 billion in 1999. The Asian financial crisis and

higher production of basic commodities worldwide resulted in soft world market prices for many agricultural products.

Second, the U.S. dollar remained strong, making U.S. products more expensive relative to competitor countries' products.

Third, our major competitors—the European Union (EU) and the Cairns Group—have outspent the United States in both public and private sector market promotion funding by a wide margin. Market promotion activities were not disciplined in the Uruguay Round. Our competitors were quick to take advantage, increasing spending by 35 percent, or nearly $1 billion, in the past 3 years. Meanwhile, U.S. spending remained flat. Notably, our competitors have directed this increase almost exclusively to the high-value and consumer-ready product trade, where global import demand is growing fastest.



Fourth, direct export subsidies, though disciplined under the Uruguay Round, are still at formidable levels. The EU was by far the largest user of this form of assistance, spending $7.5 billion in 1997, the latest year data are available. U.S. direct export subsidies contrast sharply with the EU's—$121 million, or 1.6 percent of the EU total, in 1997.

FAS EFFORTS TO SUPPORT FARM INCOME

One can only imagine how much worse the situation would be, especially for U.S. exports, if we had not continued the vigorous use of our long-standing export programs. With large surpluses and rock-bottom prices here at home, we have actively used food aid to move commodities out of the U.S. marketplace to needy areas around the world. Under fiscal year 1999 food aid programs, USDA programmed nearly 8 million metric tons of U.S. commodities—close to five times the previous year's shipments and the largest tonnage in many, many years.

American commodities went to around 50 countries last year—from the unprecedented assistance package for Russia to food relief for Kosovo refugees, famine victims in North Korea, and hurricane victims in Central America and the Caribbean. Under the authority of Section 416(b) of the Agricultural Act of 1949, as amended (Section 416), CCC donated nearly $800 million worth of commodities, including 5.2 million tons of wheat and wheat products, 274,000 tons of corn, and about 23,000 tons of dry milk. These U.S. surpluses were taken off the market and put to good use, helping to relieve hunger and suffering abroad.

Our export credit guarantee programs facilitated sales of more than $3 billion in U.S. agricultural products. Our GSM–102 program helped U.S. exporters overcome disadvantages in Turkey, and make record sales of over $1.2 billion in Mexico. The program helped U.S. oilseed exporters sell more than $19 million worth of oilseeds to Uzbekistan, traditionally a buyer of South American oilseeds. Our GSM–103 program helped U.S. exporters sell over $14 million worth of wheat to Jordan. The Supplier Credit Guarantee Program was used for the first time by importers in the Baltic Region, Georgia, and Turkey, resulting in sales of nearly $1 million worth of meat products to buyers in the Baltic Region, and about $2.9 million worth of poultry products and $57,000 worth of hides and skins to buyers in Georgia and Turkey.

With the aid of the Dairy Export Incentive Program (DEIP), U.S. exporters sold more than 136,000 tons of dairy products valued at $337 million. USDA awarded more than $145 million in bonuses to help U.S. dairy exporters meet prevailing world prices and develop foreign markets. The Export Enhancement Program was used only sparingly in 1999 because of market conditions, with bonuses of about $1.4 million awarded for sales of more than 2,000 tons of frozen poultry.

We continue to stress the importance of market development. In 1999, we allocated $90 million to 65 U.S. trade organizations, State regional groups, and cooperatives for export promotion activities under the Market Access Program (MAP), and approved marketing plans of $33.5 million for 26 trade organizations under the Foreign Market Development (FMD) program.

FAS introduced record numbers of agricultural policymakers to U.S. products and policies in 1999, and plans to meet and exceed that record this year. Nearly 800 Cochran Fellows from 70 emerging markets participated in short-term courses that introduced them to U.S. products, ranging from wheat to wine. The Cochran Program provides USDA with a unique opportunity educate foreign governments and private sectors not only about U.S. products, but also about U.S. regulations and policies on critical issues such as food safety and biotechnology.

On the trade policy front, USDA worked successfully to open, expand, and maintain markets for U.S. agriculture. For example, after years of negotiations and technical exchanges, Japan lifted its ban on several previously unapproved varieties of U.S. tomatoes. We estimate that Japan could purchase up to $10 million worth of U.S. tomatoes annually as a result.

FAS played a key role in defending the U.S. position against the EU's ban on growth-promoting hormones. FAS directed the interagency effort to calculate and then defend before a WTO Arbitration Panel, the loss of U.S. beef exports caused by the EU's refusal to remove its WTO-inconsistent ban on imports of beef produced with growth-promoting hormones. The Arbitration Panel awarded the United States $116.8 million in damages and the United States suspended trade concessions to the EU of equal value.

The 1999 meeting of the U.S.-Mexico Binational Commission (BNC) succeeded in achieving additional market access for U.S. exports while enhancing long-term market development objectives. Mexico committed to improve market access for exports of U.S. wheat, dry beans and slaughter hogs, and to reduce costly preclearance inspection for U.S. apples and stone fruit. Mexico represents one of the strongest and fastest growing markets for these five commodities, with total U.S. sales estimated at approximately $400 million in 1998.

Last April, the United States and China signed the Agreement on U.S.-China Agricultural Cooperation, an unprecedented step in U.S.-China agricultural trade relations. With this agreement, China finally removes the longstanding bans on exports of U.S. wheat, citrus, and meat and poultry to China. The agreement also calls for China's commitment to the application of sound science, a key principle of the WTO Sanitary and Phytosanitary (SPS) Agreement. The agreement confirms a U.S.-China agricultural partnership in achieving some key objectives: resolving trade barriers, increasing technical cooperation and scientific exchanges and further developing our agricultural sectors.

FAS worked to ensure the successful implementation of the U.S.-Taiwan WTO bilateral market access agreement that was signed in 1998. This agreement, which falls under the Taiwan WTO accession negotiations, provided immediate access for U.S. pork, poultry and variety meat exports. During fiscal year 1999, the United States shipped poultry, which had previously been subject to a ban, worth about $16 million and pork and beef worth an estimated $60 million. These shipments mark the successful implementation of the "down payment" quotas provided for by the WTO Bilateral Agreement signed by Taiwan and the United States. Under the agreement Taiwan also modified its administration of the potato quota. This modification led to the importation of an estimated $10 million in fresh potatoes.

In 1999, FAS negotiators helped to conclude important bilateral agreements that paved the way for Estonia and the Republic of Georgia to join the WTO as full members. The market access agreements require Estonia and Georgia to reduce import tariffs on important U.S. farm products, which will create greater market opportunities for U.S. farmers and ranchers. Both countries agreed to bind tariffs at or below 10 percent on U.S. priority products and committed to not use export subsidies. U.S. agricultural exports to these two countries are expected to grow approximately $3–4 million annually following their accession into the WTO. FAS negotiators also concluded agricultural bilateral accession agreements, worth approximately another $4 million, with Albania, Croatia, Oman and Jordan, and continued to work on two dozen other accessions including Russia, Saudi Arabia, and Ukraine.

FAS continues to monitor aggressively foreign countries' compliance with Uruguay Round Agreement commitments. For example, at the request of the United States, a WTO dispute settlement panel is examining Korea's import and domestic support programs for beef. As part of its Uruguay Round commitments, Korea agreed to liberalize its beef market by January 1, 2001. However, after Korea failed to meet its minimum import quotas in 1997 and 1998, it became clear that numerous market access barriers exist that are inconsistent with Korea's WTO commitments and threaten to inhibit full market liberalization. These impediments include restricted sales of imported beef at the retail level, a government "mark-up" on imported beef, excessive support payments to domestic producers, and limitations on import authority. Korea's imports of U.S. beef reached $319 million in 1995, before dropping to only $140 million in 1998.

At 1999's meetings of the Committee on Agriculture, FAS analysts reviewed and raised questions on over 250 WTO notifications. The value of trade addressed through U.S. vigilance of commitments is over $500 million. This was achieved through questioning member's domestic grain purchasing policies that appeared to violate export subsidy commitments; challenging the discriminatory issuance of import licenses for dairy products, pork and poultry; questioning the WTO-inconsistent execution of a preferential trade arrangement that harmed U.S. apple exports; and questioning low tariff rate quota (TRQ) application for a range of commodities. These efforts contributed to several members halting implementation of or modifying WTO inconsistent practices.

PRIORITIES FOR 2001

Faced with continuing budget constraints, a strong U.S. dollar and continued aggressive spending on market promotion by our competitors, we must redouble our efforts to improve the outlook for U.S. agricultural exports. We are closely examining why the United States is losing market share in certain markets, and intend to take actions to remedy the situation, consistent with our budget resources. For example, we plan to continue to:

—pinpoint constraints to U.S. agricultural, fish, and forest products;
—work to remove trade barriers and trade-distorting practices;
—safeguard U.S. agricultural interests by advocating U.S. policies in the international community;
—help producers, processors, and exporters to strengthen their export knowledge and skills;
—ensure that the U.S. farm, forest and fishery sectors and our research community have timely and complete intelligence about emerging market opportunities;
—inform foreign buyers about the superior quality and reliable quantities offered by U.S. agricultural producers, and educate them about how to locate U.S. products;
—use our export credit guarantee programs to reach new customers for U.S. agriculture;
—use our food aid authorities to help needy people overseas and farmers here at home;
—use USDA export assistance programs such as the Foreign Market Development Program and Market Access Program to the maximum extent reasonable to pursue export opportunities; and
—work with emerging markets and developing countries to promote economic development to help meet the U.S. commitment to reduce by half the number of food insecure persons by 2015.

As we forge ahead, it is obvious that we need to look at new ways of doing business to reduce costs, streamline programs and tap into new technologies. In 1999, FAS received two prestigious Hammer Awards from the Vice President's office for improving the operational efficiency of its programs.

One was awarded for FAS's development and implementation of a "Unified Export Strategy" (UES). This process reinvented the planning and application process for the MAP and the FMD program, dramatically reducing paperwork requirements and improving operational efficiency for both programs. The UES encourages our strategic partners to formulate market-specific strategies for developing or expanding export markets. This approach facilitates a more effective use of FAS' full arsenal of market development programs.

The other was awarded for FAS's streamlining of the process for advancing funds to Private Voluntary Organizations (PVO) for humanitarian food distribution. The streamlined process helped private sector partners initiate Food for Progress program activities with much greater cost effectiveness and time efficiency. The

streamlined process resulted in a reduction in average cycle time of transferring funds to a PVO from 41 to 7 business days—an 83-percent improvement in the delivery of this service.

These efforts grew out of our strategic planning process that integrates all the marketing, credit, and trade policy tools that we have available to maximize the market for agricultural products. This process lets us review the competition and all FAS-sponsored efforts in a given market to determine whether we have the optimal mix of programs and funding, given that market's potential as a buyer of U.S. agricultural products. It also allows us to step back and review our efforts regionally as well as globally.

I would like to take a few moments to outline our priorities for fiscal year 2000.

GLOBAL PRIORITIES

At the top of our list is moving forward in the WTO trade negotiations on agriculture. Although agreement on the framework for a new round of negotiations was not achieved at the Seattle Ministerial, the Seattle meeting is not the end to further negotiations on agricultural trade. Because of the "built-in agenda" for agricultural reform in the Uruguay Round Agreement, work on the new agricultural negotiations is continuing. It is clear that we are on the threshold of a major new opportunity to advance open markets around the world. And as President Clinton has said many times, agriculture is at the center of the next round.

We have been doing a number of things to prepare for the negotiations, including 13 public hearings around the country; numerous meetings with representatives of the broad agricultural sector; periodic sessions of our Agricultural Policy Advisory Committee and our several commodity specific Agricultural Trade Advisory Committees; and of course regular consultations with Congress.

We have heard from the agricultural community and members of Congress, on a bi-partisan basis, that they are supportive of the goals that we have established for the next round: abolishing export subsidies, disciplining State Trading Enterprises, increasing market access through lower tariffs, reducing trade distorting domestic subsidies, defending the sanitary and phytosanitary agreement against those who want to weaken it, and opening the door for new technologies, such as biotechnology.

There are very few calls at this point for turning back the clock or closing our borders. I believe producers recognize that by and large we made progress in the Uruguay Round to begin the process of reducing export subsidies, reducing import tariffs, increasing quotas, and disciplining domestic subsidies. But because the formula chosen to achieve much of this progress relied on percentage adjustments, it left those countries—such as the EU—which began the process with higher levels of protection or more generous farm support budgets in a better position as the end of the Uruguay Round implementation period draws to a close. Our farmers clearly understand that reality and, as a consequence, I think most of them will judge the outcome of the next round on whether we have been successful in bringing greater uniformity to the levels of support provided to farmers globally.

Another priority on the trade policy front is how we deal with the issues surrounding products produced through biotechnology. There is a lot to say about what is happening in the biotechnology field and how it is affecting trade, and I could go on at length to describe our efforts at USDA to try to stay on top of the issue or to ensure that government actions on labeling and product approval in the EU, Japan, Korea, Australia, New Zealand, and elsewhere, do not irrationally reduce market access for U.S. commodities.

But I believe that the past few months have made clear that developments in the marketplace are running ahead of where various governments are at this point. The result is that the environment for biotech products is as unsettled as it has ever been during the short commercial life of this new technology. The demand by some users for non-biotech commodities only, the resulting calls for segregation by some handlers, and the indications that premiums and discounts may be appearing for non-biotech vs. biotech commodities are bound to have an effect on farmers' decisions regarding what to plant next year.

The next few months will likely determine whether biotech acreage continues to increase in the United States, or whether there is some retrenchment. Either way, this issue is likely to be a dominant one for U.S. agriculture in the immediate years ahead, whether in the WTO or in our bilateral relationships with customer and competitor nations alike. That is why we have said that when it comes to biotech and the next trade round, our focus will be in making sure that biotech approval regimes, wherever they exist, are transparent, timely, predictable, and science-based.

We also will be working to improve the way we carry out our market development programs. We have had some notable successes in these programs in the past year. For example, last January, the first container of U.S. mohair was shipped to Peru, and the Mohair Council of America (MCA) expects an additional $400,000 worth of mohair to be shipped this year. This initial shipment resulted from a series of FAS and MCA activities, funded partly by the MAP.

A study by the Northwest cherry growers found that for every dollar spent in MAP funds for Northwest cherries, there was a $5.54 return per 20-pound case in terms of state and federal tax revenues in 1998. Northwest cherry export sales for 1998 were valued at $75 million with an impact on the local community of $330 million in tax revenues. In addition, over 18,000 jobs were associated with Northwest cherry exports.

A San Diego-based company used MAP funds to reach out to Mexican consumers. This company saw its export sales grow by 60 percent in 1998 and by 34 percent in 1999. To handle the increased workload created by additional export sales, the business hired two new employees. In addition, local warehouses added employees to keep pace with this higher volume. The company averages 25 truckloads of product to Mexico daily (half by U.S. truckers). These shipments keep a minimum of three truck drivers and three warehouse workers employed yearly.

As part of an extensive trade servicing effort in Latin America, the USA Rice Federation successfully expanded U.S. rice exports to Colombia and Ecuador. Using FMD funds, the federation sponsored visits by Ecuadorian and Colombian rice trade delegations to the United States. The delegations included importers who had not purchased U.S. rice in the past and were not familiar with the U.S. industry. Several importers purchased U.S. rice for the first time. With these new sales, U.S. rice exports to Colombia and Ecuador rose to $74.0 million and $28.0 million, respectively.

These are just some of the successes we have seen through our market development programs. During the next 18 months, we hope to build on these successes by completing the Unified Export Strategy system. The next step is to implement a standardized evaluation process to measure program performance and effectiveness. This will help ensure that program allocations will have the greatest impact. We also will incorporate into the UES data base all FAS and private sector (including universities, profit, and non-profit enterprises) market development efforts and results including those under the Emerging Markets, Section 108 and Quality Samples programs. Together, these steps will provide a comprehensive view of all market development activities funded by FAS and provide a means to evaluate them.

We also expect to review the effectiveness of our first efforts under the Quality Samples Program. We announced the Quality Samples Program (QSP) last November and, to date, CCC has accepted proposals totaling $1.2 million for this pilot program. The QSP provides funds to private sector recipients so they can showcase the quality of U.S. agricultural products to foreign buyers.

We also will continue work on a Clean Wheat Initiative. Under this effort, we asked for public comment on a question first posed by U.S. wheat producers—whether CCC should finance the installation of grain cleaners at certain elevators around the country. At a January 28th public hearing, testifiers included U.S. wheat growers and exporters—and more importantly, buyers of U.S. wheat from Brazil, Colombia, and Nigeria.

The hearing was a sobering one, especially as we heard our customers describe the noticeably cleaner wheat offered by some of our major competitors, including countries that clean their wheat at export as a matter of policy.

Just 10 years ago, less than 25 percent of the world's wheat was purchased by private buyers; today that percentage has jumped to nearly 60 percent, or about 25 million more tons than a decade ago. Private buyers tend to have tighter quality and cleanliness specifications on the wheat they purchase, so the question is, are we in the United States going to respond to the apparent demand by our customers?

A number of interesting options were aired at the hearing, including:

(1) whether CCC should specify cleaner wheat in making purchases for our humanitarian donations overseas; that could help to set an industry standard;

(2) whether the CCC should develop, for the first time, a standard, comparable to that established by Canada and Australia, for the amount of dockage in our wheat;

(3) whether CCC should offer, under the EEP program, bonuses for those who deliver cleaner U.S. wheat; and

(4) whether CCC should carry out the original proposal to finance the installation of grain cleaning facilities.

These are the options that we will be reviewing as we work toward a final decision.

To further increase our chances of expanding market share, we will continue to seek new partners through our outreach efforts to state government officials, small and minority businesses, and first-time exporters. We must increase the awareness, at all levels, of the importance of trade and increased exports to the health of U.S. agriculture. For example, FAS has encouraged the four State Regional Trade Groups (SRTGs) to increase the number of small companies exporting. Last year, the state groups worked with over 400 MAP participants, educating them about the growth potential of export markets and how to take advantage of the opportunities. By providing export education and sponsoring trade shows and missions, the SRTGs have played a significant role in increasing the number of small firms participating in the MAP branded program. The resulting increases in sales generated by these new exporters have contributed to local revenues and employment.

Together our outreach efforts and the MAP were instrumental in making FOODEX '99, the major food trade show in Japan, a success for the Intertribal Agriculture Council. Five American Indian tribes were represented at the show—Quinault Pride Enterprise representing traditional smoked seafood products, Seminole Indians of Florida with food seasoning, Gila River Far Board displaying grapefruit and tangelos, Navajo Agricultural Products Industry (NAPI) with pelletized alfalfa and pinto beans, and Yakima Land enterprises showcasing cherries and fresh vegetables. Quinault Pride Enterprise confirmed sales of nearly $200,000 of fresh seafood products and established a new market outlet for a smoked shellfish product with a Tokyo retailer operating 33 upscale sushi restaurants. The Seminole Tribe met with two food distributors who made offers to distribute "Seminole Swamp Seasoning" in their respective supermarket chains.

REGIONAL PRIORITIES

Asia

With the conclusion of bilateral negotiations with China over its WTO accession, our work will shift toward implementation of the agreements and establishing permanent normal trade relations with China. This is our top priority in this region and we will be working tirelessly on this effort. Chinese concessions will be important for improved access opportunities, but we must remain vigilant and work with Chinese officials to ensure market opening.

With more than 1.2 billion people or one-fifth of the world's population, China's accession to the WTO will give U.S. agriculture access to the world's second largest economy in terms of domestic purchasing power. This could result in at least $2 billion in additional U.S. agricultural exports by 2005.

China's WTO accession will strengthen the global trading system, slash barriers to U.S. agriculture, give U.S. farmers and agribusinesses stronger protection against unfair trade practices and import surges, and create a more level and consistent playing field in this market.

In order to realize these gains, we will be vigilant to ensure that China lives up to its WTO commitments, effectively administers tariff-rate quotas, eliminates discriminatory licensing, and fully implements last April's Agricultural Cooperation Agreement reducing phytosanitary barriers for citrus, wheat, and meat.

The full impact of the China accession agreement will be significant for U.S. agriculture by accelerating some of the policy changes apparently already underway in China. If our experience of the past few years has made one thing clear, it is that China is an important factor in the world trading picture. China's relative presence as an importer or exporter has a very direct impact on U.S. sales and on the bottom line of American producers.

China seems to have recognized that the policy of self-sufficiency that it had embarked on for the past many years was costly, wasteful, and not in its own best interests. The result of this new agreement, hopefully, will be a more market-based system and greater opportunities for efficient exporters, including the United States.

The U.S.-China Scientific Cooperation Program continues to be a strong element in our relationship with China, since this program focuses on research issues of mutual benefit to both countries. Among priorities identified at the January 2000 U.S.-China Joint Commission and Science and Technology Meetings were dryland agriculture, water and soil conservation and management, germplasm exchange, and plant and animal disease resistance.

Also in this region, our efforts to monitor and enforce our trading rights continue, especially in markets such as Korea, Japan and Taiwan where we continue to work to prevent the erosion of previous trade concessions.

Finally, our participation in the Asia Pacific Economic Cooperation (APEC) forum supports trade liberalization efforts in this region. While APEC itself is not a nego-

tiation structure, it allows us to work with other members to advance our goals in the WTO and other fora.

RUSSIA AND THE NEW INDEPENDENT STATES

Our top priority in this region is the implementation of food aid agreements with Russia. As negotiated, last year's final package totaled 3.7 million tons of U.S. commodities valued at $1.2 billion, including transportation costs. We donated more than half the aid, and once completed, Russia will have purchased more than 1.8 million tons under Public Law 480, Title I. We are also undertaking a 500,000-ton humanitarian food aid initiative in Russia this year.

USDA staff continues to closely monitor the final stages of implementation. We also have received a formal request from the Russia government for another substantial food assistance package for this year; this is separate from the humanitarian program mentioned above. A number of considerations have come into play in reviewing this request.

Our assessment of Russian food needs and our experiences with the current program are key. If an agreement is reached on additional aid, we will insist on similar monitoring measures. There are a number of other considerations as well. For example, we have to be careful not to reduce incentives for Russian farmers. We also have an obligation to other trading nations to avoid actions that would disrupt international markets, and we would consult closely with the EU and other major food exporters.

Our trade policy focus in this region is to help a number of these countries join the WTO. While membership in the WTO is a high priority, we will continue to insist that these accessions be made on commercially viable terms that provide trade and investment opportunities for U.S. agriculture. This means that the acceding countries will need to continue the transition from centrally planned to full market economies by implementing new trade policies and regulations that are fully consistent with WTO rules and obligations.

FAS will continue to work with officials in these countries to help them make the necessary changes in their countries' trading regimes. We plan to do this through bilateral and multilateral discussions, as well as direct technical assistance programs. For example, FAS is presently providing assistance to the Ministry of Agriculture in Turkmenistan to encourage that country to move toward open market policies. FAS will place a high priority on compliance with the WTO SPS measures and Technical Barriers to Trade (TBT) Agreements given the growing number of bilateral issues in this area. While we anticipate that these reforms will create new market opportunities for U.S. exporters, we will also emphasize to officials in these countries the importance of the changes in terms of revitalizing their economies, attracting foreign investment, and using international trade as an engine for economic growth.

A more long-term FAS goal is our continued participation in international agricultural research studies to expand and improve crop-assessment resources for estimating wheat production in Russia and Kazakstan.

Europe

Within Europe, maintaining market access and trade policy issues dominate our list of priorities. We will continue to monitor the reforms to the EU's Common Agricultural Policy (CAP), evaluating how the current set of reforms will affect U.S. agricultural competitiveness not only inside the EU, but also in third countries. In addition, we are closely monitoring the EU's implementation of bilateral agreements on rice and oilseeds.

After 6 years of difficult negotiations, the United States and the EU signed the Veterinary Equivalency Agreement in July 1999. The Agreement went into force in August. We expect to have the first meetings of the joint management committee later in 2000. The first issue we expect to be addressed will be the equivalency of the U.S. and EU residue testing programs.

At the request of the EU, a WTO panel was formed in 1999 to investigate the procedures used in establishing the safeguard action protecting the U.S. wheat gluten industry. We are working closely with the U.S. Trade Representative's office to defend this action. In addition, we are evaluating options identified by the International Trade Commission in its mid-quota review that will maintain and increase the effectiveness of the quotas operation.

We continue to work with the European Commission and member state governments on the bilateral market access issues regarding agricultural products produced with biotechnology. Current issues include proposed EU labeling regulations, amendments to the EU approval process, and identification of options to re-open the EU corn market to U.S. exports. Furthermore, we are currently engaged in a pilot

project with the EU and member states to compare data requirements for biotech product approvals.

FAS, in cooperation with the Agricultural Marketing Service, will continue to work with the EU and member state governments to fully implement an International Standards Organization (ISO) accreditation program developed by USDA in 1999. This program allows qualified U.S. exporters of organic products to maintain and expand their estimated $200 million in annual exports to the EU.

After opening negotiations in 1999, we continue to work towards negotiating a new bilateral wine agreement with the EU. In addition, we are working closely with other wine exporting countries to maximize opportunities in global market access for wine exports.

In the Baltics, we will continue to deliver an agriculture improvement and agribusiness program under the President's Northern Europe Initiative. We will follow up on our dairy sector improvement seminar with continuing links between participating U.S. universities and the Baltics dairy industry. Additional programs will enhance agribusiness investment and trade opportunities, particularly in the forestry and pork sectors.

FAS will continue to monitor developments as several countries proceed with plans to join the EU. While we support this next round of accessions, the change could have a significant effect on U.S. agricultural exports to the region. The EU is already putting increasing pressure on the candidate countries to adopt EU regulations, particularly in the area of SPS measures and technical barriers to trade (TBT). In response, FAS will continue to work to ensure that the acceding countries do not adopt SPS/TBT policies or regulations that will disadvantage U.S. exporters during the transition period leading to full EU membership. In addition, FAS will focus particular attention on areas where the United States would be entitled to compensation from the EU for market losses attributable to higher border protection resulting from EU accession. We will also look for opportunities during the new round of WTO negotiations to maintain or improve market access for U.S. agriculture in this region.

Americas

We are active in negotiations to establish a free trade zone in the Western Hemisphere, under the proposed Free Trade Area of the Americas. The FTAA negotiators are meeting regularly with the goal of achieving a new hemispheric trade agreement by 2005.

Also in this region are two of our three largest agricultural markets—our neighbors and partners in the North American Free Trade Agreement (NAFTA), Mexico and Canada. Trade into these countries often faces a plethora of policies and programs potentially detrimental to continued access. We will continue to monitor and enforce our rights under the NAFTA and various side agreements as well as coordinate compliance with our obligations under these accords.

Other trade policy activities will include monitoring the tendency of several countries in the region to introduce "price bands" on primary commodities (a form of a variable levy), as well as unjustified phytosanitary restrictions on our wheat in Brazil. We will use the Cochran Fellowship Program to reinforce the U.S. position on these issues to senior level Latin American agricultural policy makers.

We also will continue to alert exporters to the potential of the Latin American market, the fastest growing region for U.S. agricultural exports, by stepping up our marketing activities. Efforts by our offices in this region last year met with great success and high praise from participants.

FAS will continue to build relationships in the Caribbean through its Cochran Fellowship Program, which offers technical assistance and training activities for potential foreign buyers. Following a Cochran training activity in 1999, the U.S. Meat Export Federation reported sales of U.S. lamb to Barbados, a market that has been essentially closed to U.S. food and agricultural products because of its close ties to France.

In Central America, FAS is monitoring reconstruction and agricultural production in the aftermath of Hurricane Mitch. We will improve our monitoring of the reconstruction of the agricultural sectors, which affects regional food security. We will also be providing critical food safety improvement assistance to help these countries build their food distribution and processing centers so that they agree with U.S. standards.

Last year, FAS administered CCC donations of wheat under Section 416(b) totaling 200,000 metric tons and valued at $31 million to the Governments of Honduras, Nicaragua, El Salvador, and Guatemala. An additional 45,000 metric tons of corn valued at $6 million also was donated to the region under Section 416(b). Sales proceeds are being used by the governments for post-hurricane reconstruction efforts.

In Brazil, USDA will monitor and report on the expansion of crop areas into the Cerrados region of Brazil's Center West. Farmers in this region are rapidly expanding soybean area, which will have a substantial effect on U.S. soybean production, prices and trade.

Africa

FAS will continue to encourage economic reform, market liberalization, and infrastructure development in the African countries, emphasizing to African officials the importance of meeting their current WTO obligations and commitments. We will also look for common interests during the new round of WTO negotiations and work together to improve global market access for agriculture.

In particular, FAS will address the growing number of sanitary and phytosanitary (SPS) issues with our African trading partners, stressing the important difference between justifiable science-based food safety measures and protectionist non-tariff barriers. Efforts will be made to demonstrate how science-based measures can protect human, animal, and plant health with minimal trade disruption. In addition, we will offer technical assistance on understanding and complying with the WTO SPS Agreement to enable these countries to have improved access to world markets.

FAS will also continue to engage African countries in a dialog on the important advantages of biotechnology in agriculture. We will encourage discussions at several levels, from broad high-level reviews to detailed working-level scientific exchanges.

Of all of the regions of the world, Africa remains the most threatened by food insecurity. FAS has, with USAID and the Department of State, developed a three pronged approach to implement the U.S. Action Plan on Food Security, released in 1999. FAS will initiate a pilot project on food security in Sub-Saharan Africa. This will include providing U.S. technical and policy assistance to Ethiopia/Eritrea to expand the United Nation's Food and Agriculture Organization (FAO) Special Program on Food Security. FAS will also be helping local governments create national food security plans to promote long-term rural development, improve trade, and reduce malnutrition.

On the market development side, FAS plans to expand the Cochran Fellowship Program to three new countries in the Sub-Saharan Region, bringing the total number of Sub-Saharan participants to11. The goals are to develop agricultural systems to help these nations meet domestic food needs, and to strengthen trade linkages with the United States.

These endeavors are paying off in terms of U.S. trade. For the first time in 1999, a Senegalese company imported U.S. frozen chicken and meat. The participant intends to purchase two containers per month, the value of which is estimated at over $200,000 per year.

In Africa, USDA will increase its monitoring of agricultural sectors to enhance the USAID's Famine Early Warning System. This will help us assist these countries make the transition form subsistence to market economies. And we will continue to coordinate our food aid programs with USAID's Public Law 480, Title II programs.

We will continue to foster research and scientific exchanges in this region. Both the United States and countries in Africa benefitted last year from 24 research and scientific exchanges under the FAS-administered Scientific Cooperation Research Program involving U.S. scientists and 11 African countries. Projects include providing alternatives for small farmers; improving seedless mandarins for new domestic and international markets; using natural enemies for biological control of stemborers, which cause more than $1 billion in damages to U.S. crops each year; and preventing introduction of exotic pathogens on the Protea flower in a multi-million dollar industry with tremendous growth potential for farmers in both the United States and Africa.

BUDGET REQUEST

There is no question that today's budget environment requires us to prioritize our activities. Adjusted for the ICASS base transfer, which was implemented in fiscal year 1998, the level of funding available to FAS has essentially remained unchanged from fiscal year 1997, forcing FAS to again absorb unavoidable wage and price increases in fiscal year 2000. The combined impact of the fiscal year 2000 Federal pay raise and higher overseas costs resulted in a $5.6 million shortfall in the FAS operating budget. Addressing this shortfall required FAS to adopt the following stringent fiscal measures:

—Savings of $1.0 million from closing or downsizing six overseas offices. (Closing Bern and Agricultural Trade Offices (ATOs) Milan and Jeddah, and downsizing Ukraine and ATOs Hamburg and Tokyo. Additionally, ATO Singapore will be closed at the end of this fiscal year which will save $.9 million in fiscal year 2001);

—Savings of $1.6 million from a 50-percent reduction in marketing activities conducted through FAS offices overseas;
—Savings of $2.0 million from a 25-percent reduction in domestic discretionary spending such as travel, training, supplies and equipment; and
—Savings of $1.0 million from up to a 5 percent reduction in current U.S. employment levels to be achieved by continuing a hiring freeze and offering an early retirement opportunity.

Mr. Chairman, the fiscal year 2001 budget proposes a funding level of $117.9 million for FAS, excluding $27.5 million for the Cooperator Program, which is now funded through CCC. In addition to partially funding the fiscal year 2001 pay raise, the budget proposes a modest increase to support several agency initiatives including:

—$750,000 and 8 staff years for market access compliance and negotiation activities. U.S. agriculture made groundbreaking progress in the Uruguay Round of multilateral trade negotiations, improving world market opportunities for U.S. agricultural products by an estimated $5.17 billion during the implementation period. However, this has led to a sharp increase in FAS' trade compliance workload including monitoring implementation of numerous trade liberalization provisions by other countries and ensuring their compliance, negotiating agreements with countries seeking to accede to the World Trade Organization, and developing harmonized rules of origin for customs purposes. The onset of new multilateral negotiations on agricultural trade is expected to increase our current market access workload even further.

The requested funds will support additional staffing needed to meet this heavier workload and to fund technical expert participation from other USDA agencies in international consultations, particularly related to food safety and biotechnology issues, and to contract for technical expertise as needed to work effectively with foreign regulators.

—$1,500,000 and 12 staff years to open three new ATOs in priority markets that offer significant growth for U.S. exporters over the next 5 to 10 years. These markets include:
  —Mexico (a new ATO in Monterrey and an ATO satellite office in Guadalajara $400,000) Increased FAS representation in the banking and northern trade center of Mexico will allow the United States to take advantage of U.S. exporters' proximity and the market access provisions of NAFTA. A presence in western Mexico will allow the United States to take advantage of the expanding hotel, restaurant, and institutional trade in the region and in Mexico's second largest city. Mexico is currently the third largest, single country market for U.S. agricultural exports.
  —Canada (new ATO in Toronto $550,000): Significant trade opportunities exist for small-to medium-sized U.S. exporters in our second largest, single country market. This new office would form the hub for an enhanced market development effort targeting new exporters in the United States.
  —Philippines (new ATO in Manila—$550,000): The Philippines is the 9th largest foreign market for U.S. agricultural goods, importing $730 million of U.S. agricultural products in fiscal year 1999. An ATO in Manila will make further inroads into this major market and protect U.S. interests from major nearby competitors such as Australia.
—$618,000 for funding of the FAS attache office in the American Institute in Taiwan (AIT). Citing budgetary pressures, AIT is proposing to shift the funding responsibility for direct and indirect costs to resident agencies that historically have been funded through the AIT contract with the Department of State (DOS). The AIT contract is funded through appropriations made to DOS. Because DOS will no longer fund the costs of other agencies through its contract with AIT, an additional $618,000 will be needed to maintain the FAS Agricultural Attache Office at the AIT.

Responding to conference report language directing the Department to develop a plan for establishing an account to manage overseas currency fluctuations, the budget proposes the establishment of an overseas buying power maintenance account. Under this proposal, up to $2 million of the FAS annual appropriation shall remain available until expended solely to offset fluctuations in international currency exchange rates.

EXPORT PROGRAMS

Mr. Chairman, the export promotion, food assistance and foreign market development programs administered by FAS are key to expanding global market opportuni-

ties for U.S. agricultural producers. Our program proposals provide the tools to meet these new sales opportunities.

Export Credit Guarantee Programs.—The budget includes a projected overall program level of $3.8 billion for CCC export credit guarantees in fiscal year 2001. As in previous years, the budget estimates reflect actual levels of sales expected to be registered under the programs rather than authorized program levels. Of the total program level, $3.5 billion will be made available under the GSM–102 program and $101 million will be made available under the GSM–103 program. For supplier credit guarantees, the budget includes an estimated program level of $150 million and an estimated program level of $40 million for facility financing guarantees.

Foreign Market Development.—The budget includes $27.5 million for the Foreign Market Development (Cooperator) Program, unchanged from last year. As a means of providing stability for future program activities, funding for the Cooperator Program is now provided through CCC rather than the FAS appropriation.

The budget also proposes $2.5 million in funding from CCC for the Quality Samples Program. Under this program, samples of U.S. agricultural products are provided to foreign importers in order to promote a better understanding and appreciation of their high quality. The Quality Samples Program is carried out through private sector organizations.

Market Access Program (MAP).—The budget provides funding for MAP in fiscal year 2001 at the maximum authorized level of $90 million, unchanged from fiscal year 2000.

Public Law 480.—For fiscal year 2001, the budget includes a total program level for all titles of Public Law 480 food assistance activities of $1.017 billion, which is expected to provide approximately 2.9 million metric tons of commodity assistance. As was the case last year, the budget requests no specific level of funding for Title III grants; however, current authorities provide that up to 15 percent of the funds of any title of Public Law 480 may be transferred to carry out any other title.

Export Enhancement Program (EEP).—World supply and demand conditions have limited EEP programming in recent years. However, the fiscal year 2001 budget does include a program level of $478 million for EEP, the maximum level authorized by the Agricultural Trade Act of 1978. In addition, proposed legislation will be submitted in conjunction with the budget that will authorize the Secretary of Agriculture, in the last quarter of the fiscal year, to reallocate unobligated EEP funding for use in carrying out U.S. foreign food assistance activities, including Public Law 480 and Food for Progress programs, and for purchasing commodities to replenish the Food Security Commodity Reserve, and to assist the CCC in conducting market development activities.

Dairy Export Incentive Program (DEIP).—The budget assumes a DEIP program level of $66 million for fiscal year 2001, below the current estimate for fiscal year 2000 of $119 million. The projected decline in DEIP programming is the result of two factors: full implementation of the Uruguay Round export subsidy reduction commitments and the phase out in June 2000 of the so-called "rollover authority" that allows countries under certain conditions to exceed their annual export subsidy commitments by drawing on unused subsidy authority from previous years.

This concludes my statement, Mr. Chairman. I will be glad to answer any questions.

COCHRAN FELLOWSHIP PROGRAM

Senator COCHRAN. I appreciate your comments on that issue. While you are at the table, I noticed in your prepared statement, which we have included in the record now, you talked about introducing record numbers of agricultural policymakers around the world to U.S. products and policies during this last fiscal year, and you plan to meet and exceed that record this year. You mentioned the Cochran Fellowship Program. And I must say that I had an opportunity to meet with agriculture consuls or attaches in two North African countries, where I travelled with Senator Stevens and other members of the Appropriations Committee recently.

They were telling us how effective that program has become. It was a new program in those areas and they were very excited about the prospects for developing new relationships and using that as a way to improve cooperation in a number of different areas

of interest with those countries and people and businesses in those countries.

You point out that 800 Cochran fellows from 70 emerging markets participated in courses that introduced them to U.S. products. And I assume that is an annual figure, is it not? And that was just in 1999?

Mr. GALVIN. Yes, sir, just in 1999. That was a record year. You are correct, it has been a very successful program for about 15 years now. It has led, I think, to a lot of examples where we have seen increased U.S. exports and benefits in the area of trade policy. One thing that we have seen in the last couple of years is that we have really been able to use the program in an effort to help us address some of the pressing trade policy problems that we face today. And I think, in particular, of the biotech issue that continues to cause us great problems.

To give a specific example there, we used the Cochran program last year to bring in 15 technical specialists, scientists and policymakers, from Eastern Europe, to educate them on our system here in the U.S. for ensuring that biotech products are safe and offer substantial benefits and that sort of thing. We currently have in the planning stage a similar type effort directed toward Southeast Asia. That part of the world is still somewhat open to biotech, and we want to make sure that we meet with the appropriate policymakers there to ensure that the door remains open to biotech products.

I should also mention that one of the other current major topics that we face right now is in the area of food safety, not just in the U.S. but of course worldwide as well. We currently have in this country a Cochran team of 15 or 20 individuals from more than seven countries. They are here to learn about the U.S. food safety system, learning about things such as the HACCP approach to inspection and that sort of thing. That delegation arrived here about a week ago, and they will be here through much of March, learning about the U.S. food safety system and hopefully taking those lessons back to their own countries.

Senator COCHRAN. That is interesting. And I wonder if you could, for the record, give us a report, over the period of time that the program has been in operation, what the figures are in kind of a summary form. I do not want to put anybody to any extra trouble, but if you have those in your computers and can press a button and gin them up without too much difficulty, that would be helpful to have in the record.

Mr. GALVIN. Yes, sir, we would be glad to try to do that.

[The information follows:]

COCHRAN FELLOWSHIP PROGRAM

The Cochran Fellowship Program has received funding from three sources: direct appropriations, funds from FAS' Emerging Market Program for specific countries, and funding from USAID for activities in the New Independent States. The following table provides the number of participants by country and by funding source since the program started in 1984.

PARTICIPANT LEVELS BY COUNTRY AND BY FUNDING SOURCE, 1984–1999

	Appropriations	Emerging market program	USAID Freedom Support Act	Total
Asia:				
China	283	4	.....	287
Hong Kong	47	.....	.....	47
Indonesia	68	.....	.....	68
Korea	211	.....	.....	211
Malaysia	191	.....	.....	191
Philippines	88	.....	.....	88
Singapore	113	.....	.....	113
Taiwan	99	.....	.....	99
Thailand	171	.....	.....	171
Vietnam	2	68	.....	70
Subtotal	1,273	72	.....	1,345
Non-EU Europe:				
Albania	.....	54	.....	54
Bosnia	6	.....	.....	6
Bulgaria	54	64	81	199
Croatia	22	22	.....	44
Czech Republic	56	57	119	232
Estonia	27	19	.....	46
Hungary	85	41	34	160
Latvia	24	21	.....	45
Lithuania	21	20	.....	41
Malta	2	.....	.....	2
Macedonia	3	.....	.....	3
Poland	212	137	200	549
Romania	31	26	.....	57
Slovakia	45	64	.....	109
Slovenia	36	37	.....	73
Turkey	359	.....	.....	359
Yugoslavia	94	.....	.....	94
Subtotal	1,077	562	434	2,073
Latin America and Caribbean:				
Brazil	.....	13	.....	13
Caribbean Islands	68	.....	.....	68
Colombia	130	.....	.....	130
Costa Rica	12	.....	.....	12
Chile	16	.....	.....	16
El Salvador	2	.....	.....	2
Guatemala	8	.....	.....	8
Mexico	639	.....	.....	639
Nicaragua	5	.....	.....	5
Panama	57	.....	.....	57
Trinidad/Tobago	96	.....	.....	96
Venezuela	283	.....	.....	283
Other LA Countries	2	.....	.....	2
Subtotal	1,318	13	.....	1,331
Africa and Middle East:				
Algeria	82	.....	.....	82
Cote d'Ivoire	162	2	.....	164

PARTICIPANT LEVELS BY COUNTRY AND BY FUNDING SOURCE, 1984–1999—Continued

	Appropriations	Emerging market program	USAID Freedom Support Act	Total
Ghana	5	1		6
Iraq	78			78
Kenya	17	3		20
Morocco	1			1
Namibia		6		6
Nigeria	2	3		5
Oman	4			4
Senegal	14	3		17
South Africa	5	104		109
Tanzania	3	2		5
Tunisia	46			46
Uganda	11	3		14
Other Africa Countries		17		3
Subtotal	430	144	2	560
NIS:				
Armenia		25	55	80
Azerbaijan			33	33
Belarus		20	20	40
Georgia		16	38	54
Kazakstan		60	88	148
Kyrgyzstan		24	69	93
Moldova		11	87	98
Russia	3	297	245	545
Tajikistan		2	42	44
Turkmenistan		15	50	65
Ukraine		114	121	235
Uzbekistan		20	83	103
Subtotal	3	604	931	1,538
Total	4,101	1,379	1,367	6,847
Percent of total	60	20	20	

Mr. GALVIN. I should mention that the total funding for the program is about $5 million. About half of that comes from direct appropriations, another million or so comes from our emerging markets program. That is, I think, an example of where we have really married the two programs in a very positive way. The balance comes from AID funding.

Mr. SCHUMACHER. If I may, Tim.

Senator COCHRAN. Mr. Secretary?

Mr. SCHUMACHER. Since 1984, nearly 7,000 mid- and senior-level people have participated in this program from over 70 countries. And of course, as I travel around, I see the extraordinary benefit.

But I want to emphasize again what Tim said on the biotechnology and food safety issues, which are going to be so important in the future for our trade. More and more of these have been coming in. And studying our HACCP systems, studying how the biotechnology is benefitting not only our country but how it could benefit their countries' food needs, as Senator Durbin so eloquently put it, they are going to be ratcheting up in many of these coun-

tries, they need to adapt and adopt some of these new technologies for the future. Coming here, with the Cochran program, has worked really well—7,000 have benefitted.

Senator COCHRAN. I have received word from some other members of Congress, who have been in these countries who are participating in the program, how some have formed what they call Cochran clubs. And they bring together on a regular basis the alumni who have participated in the program and they talk about their experiences and also just stay in touch. And they are serving as catalysts for better communication and understanding of the U.S. and its market economic system and our democracy and food production techniques that can help improve trade for us and also benefits that are widely shared because of the program throughout the world.

Well, I appreciate your work on the program and your continued support for looking for ways to use it to benefit our interests as well as the interests of the countries that are participating.

CAPACITY BUILDING

Mr. GALVIN. If I may, Mr. Chairman, just one other example, because this is an issue that we hear a lot about from developing countries. And that is the whole issue of capacity building. It is an issue that we hear quite often in the WTO context, when developing countries say they are a little bit leery of trade liberalization because they just do not have the capacity to implement TRQ's and tariff reduction schedules and that sort of thing.

Last year, we also had a very good program in Africa on the WTO and the Codex system and how these developing countries can come to have a better understanding of how to implement their obligations as WTO members or as Codex members. And it was extremely successful and one that we would like to continue as well.

COTTONSEED ASSISTANCE PROGRAM

Senator COCHRAN. Thank you very much.

Mr. Secretary, I was pleased with your announcement that you are going forward with the cottonseed assistance program. You mentioned that just before the hearing began. Could you tell us how the Department intends for the program to work and when the signup will occur and what the payments are that can be expected?

Mr. SCHUMACHER. Yes. I would ask Parks if he could come to the table. He has worked very hard, with Keith Kelly, to get this up and running in a timely fashion. And maybe he could just take us through briefly how the program is going to operate.

Mr. SHACKELFORD. Well, sir, as the release carefully states, until we have the regulations out, this is not final. However, I can at least talk about what we propose to do.

This year is somewhat unique in that virtually all of the cotton gin in the U.S. was classed by the AMS. So we hope to be able to run this program in a much simpler manner than some of the programs where we have to go through major signups. We hope to take the AMS data, which is provided in specific form, use that to determine basically a list of the bales, provide that data in letter form to the gins, get them to verify it, and then make the payments based on that data. So it should be very simple, and we

should not have to go through the whole signup process and much of the trouble we have had before.

We will estimate a seed-to-lint ratio to basically determine the tons of seed per bale and probably just make those payments based on the number of bales ginned by each particular gin. The payments will go to the gins, to the first handlers, with the understanding that they will be shared with the producers where it is appropriate, where ginning charges were increased, for example.

Senator COCHRAN. We appreciate that information, and we hope you will let us know if you encounter any problems, just like we will let you know if we hear of any problems.

Mr. SHACKELFORD. Yes, sir, you will. Thank you.

EMERGENCY ASSISTANCE PAYMENTS

Senator COCHRAN. Mr. Secretary, as you know, we had a $9 billion emergency assistance package last year, signed by the President. What are the expectations on when the final payments are going to be made and whether progress is being made as you envisioned in getting the funds out to the producers and those who are beneficiaries of this program?

Mr. SCHUMACHER. I am going to ask Keith to comment. But I think what I would like to do is just summarize very briefly. And if I may, I will give you a written report tomorrow or the next day, because we have 22 programs and it would take a fair bit of time to go through all of them.

Senator COCHRAN. That is fine.

[The information follows:]

FSA IMPLEMENTS NEW AND AD HOC ASSISTANCE FOR FARMERS

NEW PROGRAMS IN 2000

Supplemental PFC	Tobacco Warehouse Disaster Comp.
Crop Disaster Program (CDP)	LIP for Contract Growers (CG–LIP)
Rice LDP	NAP Non-Trigger Areas
1 Year Honey Recourse Loan Program	Harney County, Oregon Flood Comp.
1 Year Mohair Recourse Loan Program	Florida Citrus Canker
Mich. Peaches	Cottonseed
Peanut Program	Oilseed
Tobacco Program	Pasture Restoration Program (PRP)
Livestock Assistance Program (LAP)	Farm Storage Facility Loan Program
Livestock Indemnity Program (LIP)	Commodity Certificates
Dairy Market Loss Assistance Program II	Lamb Program

Mr. SCHUMACHER. Of course, the AMTA payments went out very, very quickly last fall. We have closed the signup now on the disaster payments. We will be uploading those in the next few weeks. Advance payments are going out on the disaster programs for that. And let me just look at my notes.

Senator COCHRAN. When do you expect those payments would go out?

Mr. SCHUMACHER. In about 3 or 4 weeks, I hope. As soon as we can get the upload done and we get the factor, we can get those payments out. Farmers have received, according to my notes here, advance disaster payments of about $170 million so far. But that does not reflect a lot of the late signups. So when we go through the register I expect that will be much more as we process the last

filers, the people who registered last Friday. We will finalize their paperwork this week.

I think honey and mohair have gone very well. We are working well on the tobacco and peanuts. And tobacco in Kentucky is 96 percent paid out. In the livestock assistance program, we have got 80,000 farmers that have applied for $141 million, as of January 18th. So that is working reasonably well.

In the livestock indemnity program, the dairy market loss, we hope to get that out in mid-March. Those are the major ones. We have just discussed cottonseed. The oilseed program, that is a difficult one. Signup is now under way. The postcards have gone out already and we have got the training done. That is moving forward.

I have talked about the farm storage and the pasture restoration. So, by and large, I think we are reasonably well on schedule. I think oilseeds will be the one that will be most difficult to administer. We have done the training. The staff are going to be working on that. The farmers will be coming in to get signed up.

Senator COCHRAN. Can you provide an estimate of the percentage of qualifying losses that will be covered by the crop loss portion of this package?

Mr. SCHUMACHER. Not at this time, sir.

IMPACT OF DISASTER ASSISTANCE

Senator COCHRAN. Dr. Collins, I know you are the prognosticator here. Where would our farm economy be if these funds had not been made available to producers?

Mr. COLLINS. Well, over the past 2 years we have made available a total of some $15 billion, which represents a tremendous portion of what people had as net farm income. Without that—kind of the obvious—we would have had a credit crisis.

Senator COCHRAN. A lot of bankrupt producers?

Mr. COLLINS. Absolutely. In fact, we saw a surprising thing over the last couple of years. We have seen the number of farms in the United States actually go up, in 1998 and 1999. I do not think we would have seen that. And I think particularly among the commercial operations, we would have seen a sizable decline.

It is hard to correlate credit stress with declines in farm numbers, because sometimes it takes several years, because people will pay out of their savings account, they will sell off assets, and so on. But I think, if not in 1999 or 2000, certainly in 2001 or 2002 we would have seen a sharp drop in farm numbers had we not made the kind of payments that were made over the last 2 years. There is no doubt that a lot of people would not have been able to extend their loans or qualify for credit, particularly in 1999, had we not made these payments.

Senator COCHRAN. Yes, sir, Mr. Secretary, go ahead.

Mr. SCHUMACHER. A lot of those payments, of course, went out to program crops. But if I may add, Senator Gorton mentioned the apple industry. For example, in a number of Eastern States, there were difficulties in 1998 with pollination, and farmers have written me personal letters indicating that if it was not for the disaster program passed by your committee and Congress in 1998, tens of those family apple orchards would have gone out of business, and were basically saved by the disaster program that was put in place.

Senator COCHRAN. You were maybe both here when Secretary Glickman discussed whether the countercyclical payments proposed by the Administration as part of this budget would be beneficial as the disaster programs that we already passed. Dr. Collins specifically testified that no analysis had been conducted on whether there would be any geographical bias in the distribution of payments. That was a concern that I had at the time.

I wonder if you have had an opportunity to look further at that question. I was suggesting that with the payment limitations specifically that cotton and rice producers were going to be treated unfairly under this Administration's proposal. Have you had a chance to look at that and do any analysis of it?

Mr. SCHUMACHER. I have not done a geographic analysis but I have done a commodity analysis and a farm size analysis. And I would say that probably I would not use the word bias, I would say that the distributions would be different than they would be under an AMTA payment payout, for example. Your sense about cotton and rice I think is accurate. One of the things that we reported under our supplementary assistance proposal was that there are about 30,000 entities, persons, in the United States that would not be eligible for payments under that proposal because of the $30,000 payment limit. That is about 2 percent of all the persons in the United States.

However, for cotton, it would be about 7 percent of all the cotton persons, of which there are over 100,000. And for rice, it would be about 22 percent of all the rice persons who would not be eligible because they already get $30,000 or more in payments. So it certainly hits differentially cotton and rice, a problem that regular payment limits would have for cotton and rice, as well.

Secondly, I would say that if you compare the distribution of payments under the supplementary assistance proposal to that under AMTA payments, you would find that proportionally more payments would go to wheat, slightly more to rice, and fewer payments would go to feed grains and cotton under the Administration's proposal as opposed to AMTA payments. That reflects the changes in farm income from one crop to another crop, and with wheat and rice having sharper drops in farm income, that triggers a little bit higher proportion of the payments going to them.

Senator COCHRAN. Has there been any analysis of farm size and efficiencies and whether or not that ought to be considered when a program of this kind is developed? Are you going to legislate some sort of government policy on farm size by imposing a limitation as suggested by this program?

Mr. COLLINS. I do not see how this legislates a farm size. I think we have payment limits now for AMTA payments, for marketing loan gains and LDP's. We have had payment limits for other programs as well. This simply is another payment limit in the longstanding tradition of payment limits on payment programs. The difference here is that this one tends to be a little bit tighter.

That means that large producers that were receiving fairly large payments would not be eligible. I do not know that that mandates a particular farm size. It turns out, if you look at the data, those producers that get the largest payments also tend to have the highest farm incomes. And so, to some extent, they have deeper pockets

for dealing with a downturn in the farm economy than some of the medium-sized producers.

I think the issue here was that there was a finite amount of money to spread around. And for that reason, a little bit tighter payment limit was advocated.

PRICE IMPACT OF CONSERVATION PROGRAMS

Senator COCHRAN. The Administration's proposal includes expansion of a number of different reserve programs, like the conservation reserve, wetlands reserve, other environmental and conservation programs, all of which are good programs, and some of which I authored. The WHIP program, for example, was authorized by Congress based on legislation that I had introduced. So I am in favor of these programs.

My question is: What impact would you predict the expansion of these programs in the way the Administration requests would have on commodity prices, if any?

Mr. SCHUMACHER. Can I address part of that, and then perhaps Keith Kelly and Keith Collins can expand.

There are five programs that we have asked for, and I will walk through them very quickly. Concerning the farmland protection program, we have asked for $65 million to cost-share. Many parts of the country are really pushing very, very hard. Whether it is California or some of the mid-Atlantic States or the Northeast, they were putting in substantial amounts. And they would like some cost-share, in a modest sense, for farmland protection. I do not see that having any major impact on commodity prices. It will most certainly help family farmers stay in business during tough times.

Neither the WHIP nor the EQIP would have a significant impact on commodity prices. Perhaps, Parks, you can assist me on the wetlands reserve, a modest program; and, Keith, on the 4-million-acre expansion of CRP, a fairly modest impact, I would think, if any.

Mr. COLLINS. Probably about half of that acreage, half of the 4 million, would compete with the principal eight program crops. And so you might be talking about a reduction in plantings of a million or two acres at the most. And, that would be phased in over a multi-year period as well. So I think the impact of that is quite small. There would be some, but it would be pretty small.

Mr. SCHUMACHER. And the additional one, of course, is the conservation security program that we propose for $600 million in this budget. And that I think is a very important issue that we would like to continue to work with you on. Because I think that, as I indicated earlier, would not only help heartland agriculture, including rice and cotton, but also help dairy farmers as they try and deal with plunging prices, in terms of giving them some support for runoff control. It would help livestock operators as well. So I would hope you would consider that as you do your markup, Senator.

Senator COCHRAN. So the benefits would be in spending that would go to farmers or landowners that are controlled in these conservation programs? They would not get any benefit from increased commodity prices, then, would they?

Mr. COLLINS. I think the price effects would be quite small. I think the main benefits would be to help producers be better stewards of the land, to promote sustainable agriculture objectives, and

to lower their costs of production in doing so. And in the case of the conservation security program, probably provide producers some benefit over and above and beyond the mitigation costs of environmental problems. So there would be some direct income effect from the conservation security program, cost-reducing effects from the other programs, and a very, very limited effect on prices from the CRP program.

PROPOSED CROP INSURANCE LEGISLATION

Senator COCHRAN. Let me ask you about crop insurance. I know Mr. Ackerman was up a little while ago answering questions from Senator Kohl and maybe others. But the Agriculture Committee here in the Senate is going to consider legislation regarding crop insurance. We have a number of bills pending before the committee. I have cosponsored a couple of them, so I have got two bases covered anyway.

What have you concluded with respect to the legislation that we are going to be considering? And do you have any favorites among the three? I guess there are three major bills, the Lugar bill, then there is the Kerrey-Roberts bill, and there is the Cochran-Blanche Lincoln bill. And I am sponsoring also the Lugar bill. I do not want to get crossed up with the chairman here right off the bat.

Mr. ACKERMAN. Well, Senator, it has been a little hard to keep score of all of them, and they have been changing a lot the last couple of days. We have seen some drafts that have come out just within the last day on some of these different proposals. I understand there will be meetings going on up until the 11th hour before the markup.

Generally what we would like to see is certain basic objectives accomplished in a crop insurance bill. We put our proposals on the table, because after the last couple of years, there have been problems with crop insurance. I have been at farmer town meetings in about 20 different States, and you hear certain problems repeated time and time again about the crop insurance program—that the buy-up policies are too expensive, that we do not cover enough crops, that there is a problem when farmers have multi-year losses, that we do not cover enough of the specialty crops, that farmers do not have enough information to make good decisions, that there are problems with the NAP program.

Those half dozen themes get repeated time and time again on crop insurance, even with the gains we have made. What we would like to see is a bill come out of this process. I should say that, number one, we would like to see a bill come out of this process that will actually deal with the issues. And number two, for that bill to deal with those half dozen key problems with crop insurance—making it more affordable, dealing with the multi-year issue, providing more funding for research and development for specialty crops and new programs, risk management education, fixing the NAP program, and so on.

In the different bills before the committee, some deal with these problems more than others—some have different focuses. We have tried to avoid getting too hung up on which vehicle the committee is going to mark up because there are a lot of factors the committee

is looking at. But we are looking at something that will accomplish these objectives.

IMPACT OF LEGISLATION ON BUDGET

Senator COCHRAN. What impact would the passage of any of these bills have on the budget request for the Risk Management Agency and the Farm Service Agency?

Mr. ACKERMAN. I could tell you that for the Risk Management Agency, it would have a very significant impact. For example, just taking one provision by itself, the research and development for specialty crops—and all of the bills are very similar on this one point—the vision is to make available $10 million, $20 million, or $30 million for researching new programs. All of those programs, once they are developed and they come in, will have to be processed by RMA. They will have to be reviewed, will have to be added into our computer systems and we will have to develop accounting systems for them.

That will create need for more administrative budget. What the exact numbers are, we have not calculated because the bills are a moving target. But clearly it will have an impact.

Mr. SCHUMACHER. The same thing on FSA. I think some of the language we have seen has some requirements for the Farm Service Agency and I understand, Dennis, there has been no provision made for assisting on the staffing for that either. So on both RMA and FSA, in the language I have seen so far, there has been no provision to assist in any implementation of this.

ADMINISTRATIVE CONVERGENCE

Senator COCHRAN. Let me ask about the issue of administrative convergence of the Farm Service Agency, Rural Development, and the Natural Resources Conservation Service. In your written statement to the committee, you state that by streamlining the administrative services for these three agencies, the Department will be able to conserve resources. In what dollar amounts are these savings going to be realized? Do you expect to achieve predictable or concrete savings by this convergence?

Mr. SCHUMACHER. Certainly in the longer term. And Dennis, maybe you and Keith can outline where we are on the support services. In the effort we have been making to get savings, for example, in Iowa or Alabama, where we have some procurement of vehicles, we can share vehicles among all three agencies, and it would be very helpful indeed. Just saving the procurement costs would be of great benefit. That will take some time to work through. We think there will be some significant savings over time through administrative convergence.

And perhaps, Keith, you can expand on that.

Mr. KELLY. Senator, since FSA has been right up against a wall with employment, we have been a strong advocate of administrative convergence all along because we have been struggling for the last couple of years to deliver programs. And what we saw, and we still see, is the advantages of administrative convergence to do all of the back room type things. It is hard to understand why we and RD and Natural Resources cannot use the same documents for procurement and for some of these other things. That has to have

some major cost savings, especially with regard to a common computing environment. I think the CCE would be the most obvious example of that.

And those efficiencies have to get translated back into savings, with the idea that they are going to free up resources and give us some help to do a better job in the struggle that we have had on the program side. So, yes, I clearly do think that there would be some cost savings all the way through on this.

Senator COCHRAN. But has anybody quantified it?

Mr. KELLY. Senator, there were efforts to quantify it during the development of the Support Services Bureau, in the report that was brought up here last year. It was quantified at the same time we were doing the downsizing. The quantification really was showing us trying to stay within the employment targets. As far as an exact dollar estimate, we would have to get that for you if there was one, because I do not know if there were any specific dollar figures for that.

Senator COCHRAN. What is the status of the initiative? Where are we? What have you done?

Mr. KELLY. As you can see in the statement that I have presented for the record, we are still supportive of moving forward with this. And we are asking the committee to take a look at that language and work with USDA, again, across all three mission areas, to try and see if we cannot join the modern world. And again, the IT, the computer information technology, is clearly our biggest concern because we do not have a very good common computing or a current computing environment out there at all.

And the lack of that is very costly and inefficient for us in whatever we do. I think that was discussed in some hearings up here last year, the idea of e-commerce and e-trade and e-mail and things like this that we can do over the computer network—we are a long ways from that.

Mr. SCHUMACHER. We were disappointed, quite honestly, Mr. Chairman, that it was taken out of the budget last year. It was not authorized and appropriated. We just think it is good business practice, when you have people serving the same farmers, to be in the same offices and to have some cost savings just by merging the administrative units there. There was some opposition to that. You and I both know where the opposition was. There was opposition in a number of areas.

But I think we just have to move forward and, in the 21st century, look at these new management techniques for keeping costs down.

DONATIONS OF SURPLUS COMMODITIES

Senator COCHRAN. With more than a third of the fiscal year gone, why is USDA not moving more aggressively to exercise its authority under the CCC Charter Act to provide donations of surplus commodities to countries in need? With commodity prices still as low as last year and financial difficulty for farmers as severe as ever, why should USDA hold back or be reluctant to act? Will USDA reach last year's Section 416(b) levels?

Mr. SCHUMACHER. We have worked very hard on that. I am the chairman of the Food Aid Policy Council. We have had a number

of interagency meetings to move this agenda. We announced a month or so ago the 3 million ton 416(b) allocations. I outlined those earlier in my testimony.

If we have additional demands on the 416(b), where we can place the humanitarian need, we will certainly do that. And I have outlined, for example, that Mozambique may be one area. We are going to monitor that very, very carefully. We will come back to meetings of the Food Aid Policy Council when we see additional demands being made and to utilize the 416(b) effectively and efficiently.

PUBLIC LAW 480

Senator COCHRAN. This is a question that relates to the $1 billion appropriations level for Public Law 480 Title II. Current year funding is estimated to be $967 million, and the average amount disbursed for Title II since fiscal year 1993 is $906 million. Section 416 cannot be relied upon to make up the difference, since the types and levels of commodities vary year to year and often are not available at all. Yet the Administration is requesting only $837 million for Title II for fiscal year 2001.

How will the U.S. maintain its commitments and be prepared to meet emergency needs without higher Title II appropriations?

Mr. SCHUMACHER. Well, as we indicated earlier, we used quite a bit of 416(b) this last year for wheat, and that diminished the need for a call on the Public Law 480. So we have some rollover. Maybe, Mr. Fritz, you could expand further on how we see that in the future.

Mr. FRITZ. If I may, Mr. Chairman, going back to your earlier question, I will tell you that we are in the process of negotiations with recipient countries and the World Food Program on the 416(b) programs that were approved recently. Some of those agreements will be signed very soon. Others, of course, will take further negotiations and stretch out into the spring and summer. But that process has actually begun with a number of countries and organizations, as well as the PVO's.

With regard to Title I and Title II of Public Law 480, as Mr. Schumacher pointed out, we have used 416 in place of Title I, especially to meet our needs. For Title II, which is administered by AID, there is sufficient money to meet this year's obligations. There is also the ability to transfer some money between Titles, including Title III which was zeroed out within the budget. But we feel we are sufficient for this year and, if need be, would come back and, with the further indulgence of the Congress, look at funding levels for outyears when 416 is not available.

ADDITIONAL COMMITTEE QUESTIONS

Senator COCHRAN. I appreciate very much your cooperation with our committee. We have been here a couple of hours now and we thank you for your patience and your handling of all of our questions. I know there will be additional questions we will submit. We hope you can respond to them in a timely way.

[The following questions were not asked at the hearing, but were submitted to the Agencies for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO THE FARM SERVICE AGENCY

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

CONSERVATION PROGRAMS

Question. The Department will propose legislation to expand the Wetlands Reserve Program (WRP), the Wildlife Habitat Incentives Program (WHIP), the Environmental Quality Incentives Program (EQIP), the Farmland Protection Program (FPP) and the Conservation Reserve Program (CRP). This proposed "Farm Safety Net Initiative" includes an additional $1 billion in mandatory spending over authorized levels to enhance these conservation programs. Currently Commodity Credit Corporation (CCC) funds for administrative support services is capped at the 1995 level of total allotments and transfers to Federal and State agencies (the so-called Section 11 "cap"). This limitation affects the amount of dollars used for conservation technical assistance. How does this limitation affect the conservation technical assistance currently available for each of the mandatory conservation programs?

Answer. The Section 11 cap severely restricts CCC's ability to fund technical assistance for conservation programs. Proposals in the Farm Safety Net Initiative reflected in the fiscal year 2001 President's Budget total nearly $1.3 billion in fiscal year 2001. Funds for technical assistance are included in most program levels and would not be subject to the Section 11 cap, such as for EQIP and the Conservation Security Program. As part of this legislative proposal, funds for Conservation Reserve Program, Farmland Protection Program, and Wetlands Reserve Program technical assistance, to be exempt from the CCC Charter Act Section 11 cap, in the amount of $75 million, are requested for fiscal year 2001.

EMERGENCY LOANS

Question. The President's fiscal year 2001 budget request for emergency loans is $150 million. According to the U.S. Department of Agriculture's 2001 Budget Summary, this proposal reflects funding to accommodate the expansion of eligibility to larger farms through Treasury loans, and to close the eligibility gap with the Small Business Administration (SBA) emergency loans. What is the current gap in eligibility for emergency loans between the USDA and SBA programs?

Answer. Existing statutes prohibit the SBA from providing disaster loans to any agricultural enterprise. The FSA emergency loan program is presently limited to family farms. The net result is that larger than family farms (those farms which require substantial labor beyond that required by the family and exceed the size of a typical farm in the community) and certain agricultural-related businesses cannot receive a disaster benefit that smaller farms receive.

Question. Does this legislative proposal have a related cost?

Answer. A major component of the program cost is the subsidizing of the difference between the interest rate charged to the borrower and the Government's cost to borrow. All borrowers in the current program pay a subsidized interest rate of 3.75 percent. Under the proposed legislation an estimated 30 percent of borrowers (large farmers) would pay an interest rate equal to the Government's cost of borrowing, and small farmers (70 percent of borrowers) would continue to pay a subsidized interest rate of 3.75 percent. As a result, the subsidy cost of the program would be reduced by a small amount.

FARM LOANS

Question. Mr. Secretary, in your opening statement, you mention that USDA has streamlined its guaranteed loan making regulations in order to encourage more private lenders to participate in the program. What is the difficulty that private lenders have had with participating in the guaranteed loan program?

Answer. In the past, lenders have been hesitant to participate in FSA's guaranteed loan program because of the perception that the program was cost prohibitive due to the time and paperwork required to apply.

Question. What changes did the Department make in the regulations that will encourage increased private lender participation?

Answer. The streamlined guaranteed loan regulations give lenders increased flexibility and make the rules more consistent with standard procedures in the banking industry. The new regulation reduces requirements for loans of $50,000 or less. For these applications, FSA requires limited supporting documentation and historical data. The only forms needed to apply are an FSA application, balance sheet, and cash flow statement.

We also implemented a Preferred Lender Program (PLP) for lenders experienced with the FSA guaranteed loan program. Under PLP, FSA approves the lender's sys-

tem of credit management, and the lender is then able to obtain a guarantee under a simplified process tailored to each lender's own policies. To apply for an FSA guarantee, the PLP lender submits only a one-page signed form and a narrative addressing certain credit criteria. The guarantee is automatically approved if FSA does not take any action within 14 days of receiving a complete application.

We also increased flexibility in our collateral and servicing requirements. We now permit the subordination of direct loan security in favor of a guaranteed loan when specific indicators, such as cash flow and equity, are at a level that indicates sufficient financial strength. In addition, we allow the subordination, exchange, or release of collateral when in the borrower's and Government's best interest.

QUESTIONS SUBMITTED BY SENATOR SLADE GORTON

Question. Apples were mentioned specifically in the $1.2 billion disaster package of last year, but unfortunately for many, the loan program instigated and proposed by the USDA did not provide the kind of aid some apple producers sought. In most cases, Washington growers were facing a surplus of commodity and therefore a surplus purchase by USDA would have proved beneficial. Instead, the Department imposed a "one-size-fits-all" loan program to all producers nationwide who experienced disaster. Unfortunately, it was brought to my attention recently that USDA is not honoring loan applications submitted by apple growers for "quality loss", although that provision was stipulated in the law. Can you respond to the concern by orchardists that this is the case?

Answer. The 1999 Crop Disaster Program compensated producers for crop losses due to adverse weather conditions. The program did not authorize payments to producers in compensation for low prices due to "flooded" markets. The 1999 program is a "production and quality" loss program as opposed to a "market loss" disaster program.

FSA pays apple producers for quality losses under the 1999 Crop Disaster Program (both insured producers and those without apple insurance). Producers who market apples in the lower priced "processed" market receive credit for the difference in price. Quality losses count toward the minimum 35 percent loss threshold under the disaster program.

In Washington State, the disaster payments are based on prices for fresh apples of $4.25 per box and for processed apples of $1.19 per box. The prices used under the 1999 Crop Disaster Program are historical averages and may not always be reflective of current market prices.

Question. Also included in the disaster package last year was a specific call to the Farm Service Agency to review all loan programs that could be utilized by apple growers and report back to Congress what, if any, changes needed to be made in order to assist these producers. How is that review coming and when should we receive a response?

Answer. We have created an interagency team to review the Department's programs for the apple industry. As soon as this review is completed, we will provide you the results.

QUESTIONS SUBMITTED BY SENATOR CONRAD BURNS

Question. Projections are dismal at best for the vast majority of America's farmers and ranchers. The Supplemental Income Assistance Program appears to take a heavy amount of analysis. Is this a long-term program, and will it go away when prices return?

Answer. The supplemental income assistance program, by its design, is a long-term program that only provides benefits when revenues are low. When prices are relatively high, there would be less need for the program, unless widespread crop losses reduced revenues beyond the proposed threshold of 92 percent of the 5-year average.

Question. When producers seem to prefer the Marketing Loan Assistance programs, why isn't that a viable option?

Answer. The supplementary payments were designed to supplement the marketing loan assistance program.

Question. You have likened your proposal to a chair with four solid legs. I don't think this counter-cyclical income support plan has a leg to stand on. It provides only $6 billion over the next 3 years. Last year alone, the emergency package totaled $8.5 billion. Prices are not expected to go up. How do you expect $6 billion to help all the farmers in this country?

Answer. I am willing to work with Congress on funding levels given current budget constraints.

Question. This plan is not designed to replace AMTA. It's a good thing. With the $40,000 payment limit in effect already, many of my Montana farmers are not eligible. I know my State is not alone in that problem. When 18 percent of farmers in this country account for 85 percent of production, you simply cannot cut them out of the plan. I realize this plan is designed to help the small farmer. I am all for that. But don't eliminate the agricultural producers who are producing the lion's share of commodities. How did USDA arrive at the assumption that only 8 percent of producers in this country would not be eligible for this program?

Answer. The Administration's $30,000 payment limit proposal would limit supplemental assistance to some very large family and non-family farms. We estimate that the payment limit would make about 2 percent of all producers ineligible to receive supplemental assistance under the Administration proposal and an additional 6 percent of producers would have their supplemental assistance reduced. By reducing payments to the very largest producers, more payments can be targeted to smaller producers that are generally more financially vulnerable and have lower incomes. The Administration's payment limit proposal could increase the amount of supplemental assistance going to small- and medium-size family farmers by more than 20 percent.

Question. USDA's new farm income proposal is supposed to be designed to help small farmers, saying the majority will be eligible for payments up to $30,000. The majority of farmers in Montana are NOT going to be eligible for that payment. Why is the Administration trying to push out the medium-sized farmer?

Answer. The Administration's proposal is targeted at both small- and medium-size farms. Most producers in Montana will receive supplemental payments, even though farms tend to be large in this State.

Question. You say in your testimony that government farm policy cannot keep lurching from one expensive bailout to another. I agree with you 100 percent. However, I fail to see how this proposal prevents another bailout. What assurances do farmers have that this proposal will protect their income and keep them farming?

Answer. No proposal can offer farmers a guarantee that they will remain in business. This proposal does offer farmers the assurance that, on average, payments will be made when gross revenue falls below 92 percent of historical levels.

Question. This proposal increases CRP acres from 36.5 million acres to 40 million acres, meaning there will be more contracts to administer. The staff levels allocated will not be able to handle that increased workload. How does USDA intend to cover the shortage in staff?

Answer. Expansion to 40 million acres would require some additional workload requirements at county offices. However, using the projected end-of-year acreage enrollments under the proposal, annual acreage increments do not reflect large signups in any one year, and FSA staffing impacts would likely be minimal, or could be absorbed. The Administration has proposed increased NRCS technical assistance funding to administer the higher CRP enrollments.

Question. It appears that the Administration is putting a heavier emphasis on the conservation side of their proposal, when we more truthfully have an economic emergency across the countryside. Why is this emphasis so heavy when we need to spend our time and money on trade and economic issues?

Answer. An enhanced conservation initiative, which proposes to increase conservation spending by $1.3 billion in fiscal year 2001, is included as part of the Administration's proposal to strengthen the farm safety net. This represents 23 percent of total farm safety net spending proposed by the Administration for fiscal year 2001. The Administration believes this to be a crucial part of achieving the dual objectives of protecting this country's precious resources for our future generations, while improving the income security of farmers during these troubling economic times. Through these USDA programs, farmers and ranchers can receive cost-share assistance, technical assistance, and annual payments for installing and maintaining high-priority conservation activities, such as soil and water quality protection, wetland restoration, wildlife habitat enhancement, farmland protection, and comprehensive nutrient management.

Question. You have said that this proposal contains a plan for stabilizing the crucial USDA workforce that has become over-stressed the last 3 years. I haven't seen any evidence that it will lessen workloads or increase staffing levels. How does it stabilize the workforce?

Answer. The budget provides for maintenance of current levels of permanent full-time staff in FSA for 2001, with some reduction in temporary staff. Funds for continued modernization of our information systems and business processes are also requested to improve program delivery productivity in the long term. Fluctuations in

workload due to emergency conditions and new programs will require adjustments in the level of temporary staffing, however.

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

Question. The high capital costs of farming coupled with the current low market prices is creating extreme difficulty for young people wishing to enter farming. In addition, census information has shown that the average age of today's farmers is rapidly approaching that of retirement. Please describe the activities of the Department, including loan programs, to assist beginning farmers.

Answer. FSA is providing substantial financing to beginning farmers. In fiscal year 1999, the number of direct and guaranteed loans provided to beginning farmers increased by 25 percent compared to fiscal year 1998. FSA assisted over 8,400 beginning farmers with loans and loan guarantees in fiscal year 1999. Between fiscal years 1994 and 1999, FSA provided loans totaling $2.5 billion to more than 34,000 beginning farmers.

In addition, the Secretary has established an Advisory Committee on Beginning Farmers and Ranchers which will provide counsel to the Secretary on ways to coordinate financial assistance (Federal and State programs) to beginning farmers, encourage State participation, and maximize the number of new farming and ranching opportunities.

Question. To what extent and in what way do these programs work to encourage non-traditional farming activities?

Answer. FSA encourages family farmers to utilize all available resources to maximize their farm income. An example of this was the policy decision to allow FSA loans to be made for the production of ratites. FSA does not preclude the financing of other enterprises for which a reliable market exists and the farm customer has the necessary training, experience, or educational background to ensure a reasonable prospect of success.

Question. Do demographic indicators suggest that introduction of new farmers to farming is keeping pace with the number of farmers who are either retiring or simply leaving the occupation and if not, in what ways do you think this condition will alter the structure of U.S. agriculture?

Answer. Despite the achievements of FSA in assisting beginning farmers with loan assistance to purchase and maintain farming operations, regrettably, the number of new entrants into farming is falling over time. This shrinkage is attributable to the depressed economic conditions in the farm economy, increased productivity of farmers that requires fewer producers to maintain the same production, and better employment opportunities in today's strong general economy. Still, the typical path to farming is entry through the family farming business.

As you know, the Secretary has expressed strong concern about the need for strong, diverse family farm agriculture. Current economic conditions and trends combined with governmental policies appear to be driving the industry in the opposite direction, toward fewer, larger farms. The result has significant implications for the farm economy, rural America, and the Nation's food supply. These implications are too extensive to discuss here, but I would hope as the authorizing committees review the Secretary's proposals and conduct hearings, a policy consensus will emerge. Hopefully, these policies will encourage and promote entry into farming by young people.

STATE MEDIATION GRANTS

Question. The budget includes an increase for the State Mediation Program. Please provide information that suggests the level of savings to both the public and private sector that has been achieved through the use of this program.

Answer. The majority of cases handled by mediation would have gone directly to the appeals process or civil courts if certified mediation had not been available. Savings to the Federal Government is apparent when mediation results in a restructured loan which offers a greater return than net recovery buyout. Mediation also saves staff time and effort by quickly resolving the dispute outside of the appeals or court system. The National Appeals Division (NAD) published its 1999 budget to be $13.363 million to administer its typical 3,500 cases. Those figures suggest that NAD's cost per case is approximately $3,817. The average cost of a mediation case is $500.

The Marketing and Economics Division at the Alabama Department of Agriculture and Industries reported in its annual report that their benefit-to-cost ratio for agricultural mediation is estimated to be $8 in benefits for every $1.00 of mediation costs. The Oregon Department of Agriculture reported in its annual report

that the benefit-to-cost ratio was estimated at $2.56 to $1.00 for mediation program expenditures. The annual funding for mediation has been $2 million to $3 million for the State Mediation Program. A high range of annual Federal savings, using the Alabama benefit-to-cost of 8 to 1, is $21 million. A low range of annual Federal savings, using the Oregon benefit-to-cost of 2.56 to 1, is $3.12 million.

Legal fees and costs for administering or selling a property through foreclosure or bankruptcy and the added costs of maintaining a non-performing asset on the books that are often avoided by mediation are difficult to estimate and are not included in these estimates. The Nebraska Department of Agriculture Farm Mediation Program reported in its annual report that "A significant amount of money is saved by the parties using mediation (the attorney fees, alone, for a person in bankruptcy average between $3,500 and $7,500)". The Iowa Mediation Service (IMS) reported in its annual report that savings for other creditors can also be presented in terms of legal savings. Using a cost projected at $75 per hour for legal fees, IMS reported that the savings on each case exceed $350. Similarly, IMS reported that farmers are not using lawyers for many of these cases and the savings can be applied to debt service.

Question. Given the current state of the farm economy, can you quantify an increase in the demand for this program?

Answer. In fiscal year 1999, 22 States requested $3,703,508 in matching mediation grant funds. Only $2 million was available and qualifying States received a pro-rated share, or about 60 percent of their request. This fiscal year, 24 States requested $4,106,526 and received 79 percent of their request from the $3 million appropriated. State mediation programs continue to be bare-bones operations that depend on the mediation grants to operate. Adding to the financial restrictions is an increased case load for the program. The additional case load will place a greater burden on existing funds and the ability of the States to effectively and efficiently provide mediation services to USDA.

FSA has received inquiries from new States interested in obtaining USDA certification and funding, including Pennsylvania, New Jersey, Kentucky, Louisiana, Mississippi and Montana. We anticipate certifying at least five additional State mediation programs if funds are available. Because of the potential and need for new certified State mediation programs and the additional case load USDA is experiencing, the demand can be estimated at $4.95 million. That figure is based on the following:

[In millions of dollars]

Existing State requests	4.10
New State mediation programs	.85
Total	4.95

Question. The budget request for fiscal year 2001 calls for a substantial decrease in the program level of USDA farm credit programs. Although part of the loan levels for fiscal year 2000 were included as part of an emergency farm package, the farm economy has not recovered and it is reasonable to assume that credit needs are no less than they were a year ago. Please provide information, by type of farm loan activity, on the backlog of credit applications on hand.

Answer. Supplemental appropriations for fiscal year 1999 and fiscal year 2000 have allowed FSA to fund all viable applications and to fund new requests as they are received. There is no backlog of approved applications awaiting funding. Since FSA anticipates entering fiscal year 2001 without a backlog of applications, the budget request is expected to be sufficient.

Question. Please provide a projection of the actual farm credit needs for which USDA programs could be utilized in fiscal year 2001.

Answer. The following table provides farm loan program needs and proposed funding in the President's Budget for fiscal year 2001.

[The information follows:]

Direct Farm Ownership	$128,000,000
Guaranteed Farm Ownership	1,000,000,000
Direct Farm Operating	700,000,000
Guaranteed Farm Operating	3,000,000,000
Emergency Disaster	150,000,000
Indian Land Acquisition	2,000,000
Boll Weevil Eradication	100,000,000

SHARED APPRECIATION AGREEMENTS

Question. Farmers in Wisconsin are concerned that certain Shared Asset Appreciation (SAA) agreements which they entered into as a condition of credit relief during the farm crisis of the 1980's may be especially burdensome now during the current price downturn. I understand that an extension has been granted in some of these cases until 2002 and that a further rule on the subject is nearing publication. Please provide an overview of the status of SAA claims.

Answer. Currently, over 10,600 debt writedowns with Shared Appreciation Agreements (SAA) have been processed since 1989. Of this total amount, over 4,200 agreements have been triggered or matured. The debt to be recaptured from SAAs must be suspended, amortized, or repaid at maturity if other factors have not previously made the recapture amount due. Approximately 1,200 SAAs will mature in 2000 and approximately 388 will mature in 2001. Regulations are in effect that permit a 1- to 3-year deferral of SAA obligations. Further, proposed regulations permitting non-program loans to repay SAA obligations at concessional interest rates were published in November 1999.

Question. If the soon-to-be-published rule includes an elimination of capital improvements from the calculation of appreciation, will such a provision be retroactive for capital improvements that were incurred since execution of the original SAA agreement?

Answer. Yes the provisions will be retroactive for capital improvements made since the original SAA agreement was entered into. However, the new rule will apply only to SAA's which are currently suspended or not yet due. The new rule will not apply to SAA's which have already been repaid.

Question. When do you expect publication of the final rule?

Answer. It is in the Agency and Departmental clearance process and will be published on or about May 31, 2000.

Question. What is USDA doing in anticipation of the expiration of the current extension in the event the farm economy has not properly recovered or that enforcement of the agreements then would place an undue hardship on farmers?

Answer. SAAs maturing in the year 2000 may be suspended for up to 3 years if necessary because of the borrower's inability to make the payments due to low commodity prices or natural disasters. Also, the balance owed may be amortized over a period of 25 years. The rate of interest equal to 25 basis points above the cost of money to the Government (also known as the Homestead Protection Rate) will be used once the new rule is published.

USDA/SBA EMERGENCY "ELIGIBILITY" GAP

Question. Secretary Schumacher's statement mentions a proposal by USDA to close the "eligibility" gap between USDA and SBA emergency programs. Please provide details of this proposal and your definition of the "eligibility" gap.

Answer. In recent years agriculture has experienced significant consolidation, with a net result of fewer, larger farmers. Most of these farms are family owned, even though the operation has grown beyond the point that the family can operate the farm by themselves. Current statutes require that FSA lend to only family size farmers. Therefore, when natural disasters occur, these larger operations are precluded from receiving FSA loan assistance. The Small Business Administration (SBA) is statutorily prohibited from lending to agricultural enterprises in disaster areas. Thus, larger than family size farms (those farms which require substantial labor beyond that required by the family and exceed the size of a typical farm in the community) are unable to receive disaster benefits that smaller farms receive. Most of these larger farms would receive SBA disaster loans if they were any other kind of business. Additionally, SBA classifies any business with a Standard Industrial Classification (SIC) code of agriculture as ineligible for SBA disaster loans. Any business dealing with animals including tropical fish, dog kennels, and horse boarding and riding operations are currently ineligible under SBA guidelines and FSA does not consider them to be eligible operations either. There are a large number of businesses which are not farming operations but have a SIC code of agriculture and therefore no disaster assistance is available to them. For the two reasons cited above, a gap exists between the eligibility requirements of the two programs.

FSA has drafted legislation which would allow emergency loans to larger than family size farms and certain agriculture-related businesses. Financing non-agricultural businesses even if animals are involved, such as dog kennels or production of lab animals, is being refused on both legal and programmatic grounds by SBA. Congress could aid this process resolving this issue explicitly in the law once it is proposed.

Question. Is the provision in the Administration's fiscal year 2000 supplemental request which calls for language to allow Emergency Conservation Program funds to be used for farm structure repair fall into that category since that has been a discrepancy between USDA and SBA programs?

Answer. The Administration proposed language allowing ECP to be used to repair farm structures and equipment to address the unmet needs of farmers that suffered damages from Hurricanes Floyd, Dennis, and Irene. Many of the producers affected by these natural disasters are low-income and lack sufficient financial resources to purchase insurance on farm structures and equipment. Most farm structures and equipment are covered by USDA loans (damage to non-agricultural equipment and buildings are covered by SBA loans), but many of the affected producers run small operations or are low income and cannot assume additional debt in addition to the losses they already have sustained.

Question. Why does the supplemental request to allow ECP funds for structure repair apply only to damages relating to Hurricanes Dennis, Floyd, or Irene and not other similar needs resulting from other natural disasters that have occurred since these hurricanes?

Answer. No other recent natural disaster has affected as many producers and caused as much damage as Hurricanes Dennis, Floyd, and Irene. These hurricanes created an enormous need for many different types of assistance, including financial assistance to repair structures and equipment. Because many producers were already facing significant crop and livestock losses, the Administration believes that additional assistance to repair structures and equipment is necessary to protect these farms' viability, many of which are small, family operations.

Question. The President's budget request includes $11.5 billion in new farm spending through 2002 of which a sizable portion is identified for obligation in the current fiscal year. Has legislative language for this initiative been forwarded to the Congress and if not, when do you expect to propose it?

Answer. Our target was to get a first draft of the legislative language by March 1st. We were able to accomplish that, and now the language is in final clearance within the Department. I cannot specifically say when you will receive the language, but I can tell you that you will have the language in time to act on our proposal. Our overriding goal is to provide Congress with a useful document and to get this legislation in your hands in a timely fashion.

Question. Since fiscal year 2000 is nearly half over, what strategy do you intend to employ to see that farm benefits related to the Farm Safety Net Initiative will be available to farmers yet this year?

Answer. If the necessary legislation is enacted timely for the Supplemental Income Assistance Program, we will begin to make payments this summer.

GRAIN STORAGE LOAN PROGRAM

Question. Earlier this month Secretary Glickman announced a Grain Storage Loan Program. However, I understand publication of the final rule for this program is some time away even though harvests are not far off. How soon does USDA plan to have this program implemented?

Answer. Our target implementation date is June 1, 2000.

Question. In order to make this program available in a timely fashion, is it anticipated that it may be made retroactive in order to cover construction of storage facilities that may occur between now and publication of the final rule?

Answer. We are publishing an interim rule with a request for comments. We cannot make the program retroactive to cover any storage structure that has been started before publication of the interim rule.

Question. If the program is made retroactive, how will farmers be informed of the opportunity?

Answer. The program will not be retroactive.

DAIRY ASSISTANCE PAYMENTS

Question. $125 million was provided as emergency payments to dairy producers in the Fiscal Year 2000 Apropriations Act. I understand that these payments are to be distributed in a manner similar to payments for dairy producers last year. However, I am aware of certain instances in which the program, as announced by USDA for fiscal year 2000, presents some inequitable results.

For example, I am aware of a farmer in Wisconsin who began milking cows in the last few weeks of 1998. Therefore, USDA does not view him as a new farmer in 1999. However, as a result of this determination, his production for 1999 will be based only on what he produced in 1998. In other words, USDA will not consider him a new farmer in 1999 (and therefore eligible for special treatment under this

program for purposes of his actual 1999 production) but will instead consider his production for all of 1999 to be the same as the previous year. In this case, he will be given credit for production in 1999 of only a few weeks of production when, in fact, he has been in production all 52 weeks. Does USDA have plans to provide relief for a farmer in situations as the one I described above and if so, what form of relief and in what fashion?

Answer. USDA has become aware of what appears to be an inequitable circumstance with regard to the Wisconsin dairy farmer who began production in December 1998. The affected farmer's case is under review and a decision will be made shortly.

FSA OFFICE SPACE

Question. As the USDA field structure continues to reorganize, the relocation of office space is inevitable. I am aware of an instance in Winnebago County, Wisconsin, in which a previous contract for relocation of USDA offices had been executed with local authorities which was going to result in savings for all agencies involved. However, I understand a subsequent ruling was made by the Department regarding a limitation of space within an office which would disqualify the arrangement already made between FSA and others in the county. Consequently, higher costs, disruption of services, and frustration with federal agencies by the community will all result.

In addition, the square footage requirements for USDA Service Centers also do not account for the space needs of temporary employees. This is an increasing concern given the growing importance of temporary employees as permanent service center staff are reduced just as program demand is growing. Please explain if the physical space limitation is purely arbitrary or if there are allowances for exceptions in special cases.

Answer. USDA space standards (DR–1620–2) are mandated by the Department and are an attempt by the Department to ensure a consistent policy for all USDA agencies. Due to feedback from our field offices, FSA has been working with the Department and other USDA Agencies to amend DR–1620–2 and develop USDA space requirements that are more realistic. Until the Department publishes these revised guidelines, FSA has developed an interim policy to offer immediate relief to the current overcrowding in field offices. FSA has delegated authority to its State Offices allowing them to grant individual county offices an exception to the current USDA space standards.

Question. Has USDA considered allowing flexibility in square footage requirements under lease agreements to account for space requirements for temporary employees?

Answer. FSA does allow flexibility and changes within their space. FSA space standards for county offices allow each office to acquire office space for temporary and part-time employees.

COUNTY OFFICE STAFFING

Question. For fiscal year 2000, Congress provided the budget request for FSA salaries and expenses and provided up to an additional $56 million to assist in the delivery of the farm emergency package approved last year. Please describe the current needs of FSA staffing in completing the fiscal year 2000 activities including both those of permanent and temporary employees.

Answer. FSA funding for fiscal year 2000 is sufficient to maintain all Federal employees and county level non-Federal permanent staff. However, in an effort to provide timely delivery of programs and to handle producer requests, FSA will likely spend most funding available for temporary staff years in the first 6 months of the fiscal year, and a majority of these employees will be off the rolls by mid-March. Although these temporary employees have allowed the Agency to remain current on most workload, we expect continued high program and payment workload during the last 6 months of the fiscal year. FSA is working with the Department to review additional fiscal year 2000 supplemental funding. Supplemental funding would permit the Agency to pay for more temporary staff years to assist in implementing over 20 new emergency disaster provisions and also to possibly increase the speed in which producer payments, including loan deficiency payments, are made timely in coming months.

Question. To what extent is the need for improved information technology essential to the delivery of farmer services at the county level and how does that need compare to that of retaining personnel?

Answer. Improved technology is essential to improving and speeding the delivery of farmer services at the county level. FSA currently spends about $35 million per

year operating and maintaining its "legacy" A/36 computers. These computers were a sound investment which have served America's ranchers and farmers well over the years, but are unable to meet today's program requirements. These machines were designed before the Internet and before databases were common in mid-range computers. As a result, the data on these computers are isolated. They are not directly available to the Service Center partner agencies, other USDA, Federal or State agencies and they are not available to the public. As a result, these computers will not support E-commerce and are not capable of otherwise taking advantage of the common computing environment investments already made and those to be made soon. These operating system concerns are as critical as our need to retain FSA personnel to carry out ongoing and ad hoc workload associated with the continued farm crisis.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

CATTLE FARMER AMENDMENTS

Question. An $8.7 billion emergency assistance package was attached to the Fiscal Year 2000 Agriculture Appropriations bill. A portion of these funds were intended for a Livestock Assistance Program, a Livestock Indemnity Program, a Dairy Indemnity Program, and a pasture revegetation program. When can farmers expect to receive assistance from these programs?

Answer. LAP and LIP payments have been distributed with a payment factor established at .46 of the eligible payment amount. Original funding for LIP would have been adequate to pay all claims. LAP funding was insufficient to cover all claims and pooling of LIP and LAP resulted in the payment factor of .46 for all claims under both programs.

The Pasture Recovery Program signup period is March 20–April 14. Payments can be made upon certification of completion of reseeding which must take place after signup. No payments will be made until it is determined if a payment factor will need to be applied. Signup reports are expected to be received on April 21. Funding would cover maximum allowable payments to about half of the eligible producers.

The 2000 Dairy Market Loss Assistance Program is an extension of a similar program from fiscal year 1999. Additional signup was taken through February 28, 2000, with participants of last year's program automatically included in the extension of the program. Determination of a payment factor should be in process and payment distribution should begin soon.

Question. Has a sufficient sum of money been provided for these programs to ensure that farmers will receive the full amount that they are eligible to receive under these programs?

Answer. LIP had sufficient funding. LAP did not. PRP and DMLA funding adequacy is not known yet.

Question. Does the amount of funding for these programs meet the need for these programs?

Answer. Funding for the LAP program does not appear to have been adequate to compensate for the feeding needs to make up for large losses of grazing forage due to drought. LIP funding was adequate because much of the livestock lost was owned by contract production firms that do not meet the gross annual income limitation for program eligibility.

DROUGHT

Question. In 1999, all 55 counties in West Virginia were declared disaster areas due to losses caused by drought. Nationwide, 1,942 counties have been declared disaster areas due to losses by drought, with the most recent declarations occurring in Kansas and Texas. What progress is the U.S. Department of Agriculture Farm Service Agency making to update national drought loss estimates?

Answer. FSA does not formally estimate future crop year losses by disaster program. FSA does monitor drought conditions and attempts to anticipate funding needs for Emergency Conservation Program and Emergency (EM) loans plus human resource needs to staff service centers and perform crop loss appraisals in impacted areas.

Question. When will updated drought loss estimates be made available to Congress?

Answer. FSA does not formally estimate future crop year losses by disaster program. FSA does monitor drought conditions and attempts to anticipate funding needs for Emergency Conservation Program and Emergency (EM) loans plus human

resource needs to staff service centers and perform crop loss appraisals in impacted areas.

Question. Will the U.S. Department of Agriculture be submitting a request for additional emergency assistance for farmers suffering drought-related losses?

Answer. It is premature to address this issue. Only if a drought develops during the growing season and as the extent of losses become more apparent can this question be answered.

Question. What preparations are being made should there be a drought again this year?

Answer. Standing FSA-administered programs are available and currently being utilized by producers in geographic areas with recently planted or maturing crops impacted by drought. Available programs include: Emergency Conservation Program, Emergency Haying and Grazing of CRP lands, Noninsured Crop Disaster Assistance Program, American Indian Livestock Feed Program and Emergency Loans. We would also expect prudent farmers to practice good risk management by buying crop insurance and planting drought resistant varieties.

The National Drought Policy Commission (Commission), chaired by Secretary Glickman, will be submitting a report to the President and Congress to provide advice and recommendations on the creation of an integrated, coordinated Federal policy designed to prepare for and respond to serious drought emergencies. The Commission's draft report is currently available on the Commission's website, *http://www.fsa.usda.gov/drought,* for public review and comment. The comment period will close on March 31. The final report will be submitted in May to give this Congress the opportunity to propose meaningful legislation that will help to reduce and mitigate the impacts of drought.

Question. Farming in the Northeast (USDA's definition of Northeast includes West Virginia) accounts for 6 percent of U.S. farm numbers and 8 percent of rural agricultural production values but receives just 1 percent of direct payments and Federal crop insurance payments to producers. I am concerned that the hard-working West Virginia farmer is not receiving a fair portion of assistance provided by the U.S. Department of Agriculture. What factors contribute to the discrepancy between amount produced and assistance received?

Answer. As you indicated, West Virginia receives a relatively small portion of Federal assistance payments to farmers compared with other States based on the total value of agricultural output. Over the previous 5 years, the total value of agricultural output has averaged $504 million, which is 0.23 percent of the national total. For the value of crop production, the relative total is only 0.07 percent of the U.S. total because the crop portion of total agricultural output in West Virginia averaged 14 percent, compared with the U.S. average of 42 percent. However, because most of the direct payments made to producers are made to crop commodities, West Virginia's share will be relatively low. Further, crop insurance participation in West Virginia is low relative to the rest of the country. In 1999, only 51 percent of eligible acres were insured.

Historically, direct payments to producers in West Virginia have reflected the relative value of crop production. That is, West Virginia crop producers have received 0.07 percent of the direct payments which mirrors the relative proportion of the crop value output indicated above. Further, the 1997 to 1999 history of loan deficiency payments, marketing loan gains, production flexibility contract payments and market loss assistance payments shows that the payments made on eligible acres in West Virginia are commensurate with the national level. (See Tables 2 and 3, attached.) For instance, in 1998, West Virginia had LDP's paid on 0.023 percent of the national total LDP payment acres for wheat, corn, barley, oats and soybeans. Meanwhile, it received 0.025 percent of the total national LDP payments (Table 2). Likewise, in both 1998 and 1999, West Virginia had PFC payments made on .042 percent of total U.S. PFC payment acres and received .039 percent of the total national PFC payment (Table 3). In other words, given the amount of acreage that qualifies for these government benefits, West Virginia is, in fact, receiving a proportionate share of the payment pie.

[The information follows:]

TABLE 2.—A COMPARISON OF LDP AND MLG QUANTITIES AND PAYMENTS BETWEEN WEST VIRGINIA AND THE UNITED STATES TOTAL

[In thousands]

	1997 LDPs		1997 MLGs		1998 LDPs		1998 MLGs		1999 LDPs		1999 MLGs	
	Total Quantity	Total Payment	Total Quantity	Total Payment	Total Quantity	Total Payment	Total Quantity	Total Payment	Total Quantity	Total Payment	Total Quantity	Total Payment
West Virginia:												
Wheat	.....	.....	9.27	$0.74	281.95	$114.89	62.46	$35.78	298.17	$191.96	12.85	$4.89
Corn	.....	.....	230.69	66.28	1486.73	331.19	372.17	41.06	2180.90	523.80	4.00	0.12
Barley	.....	.....	.....	.....	98.94	17.23	34.14	7.34	134.65	27.87	19.95	1.38
Oats	.....	.....	.....	.....	117.49	52.29	.....	.....	48.74	23.93	.....	.....
Soybeans	.....	.....	29.12	12.23	232.73	85.60	98.67	87.53	348.63	347.45	.....	.....
Total West Virginia	.....	.....	269.08	79.25	2,217.84	601.20	567.44	171.71	3,011.09	1,115.01	36.80	6.39
Total United States:												
Wheat	94.70	$23.78	56,888.04	15,662.08	1,412,674.31	413,951.80	229,846.76	62,220.62	1,881,256.17	881,392.23	42,263.75	19,808.97
Corn	5.16	1.39	420,455.66	97,927.04	5,692,310.65	1,001,809.02	1,424,442.93	378,573.46	7,104,468.61	1,956,919.37	192,474.22	35,358.93
Barley	63.09	6.53	12,810.41	2,062.86	258,999.21	78,609.63	20,274.65	3,920.56	198,190.97	36,208.97	4,183.76	595.60
Oats	4.86	0.58	443.85	69.84	105,149.07	19,096.87	3,198.84	489.66	119,547.54	27,653.09	615.87	138.53
Soybeans	0.43	0.18	53,031.06	15,804.35	2,130,748.35	882,537.48	317,066.37	336,878.17	2,233,327.99	2,053,857.98	57,655.11	54,372.89
Subtotal	168.24	32.46	543,629.02	131,526.17	9,599,881.59	2,396,004.80	1,994,829.55	782,082.47	11,536,791.28	4,956,031.64	297,192.71	110,274.92
Other	153,426.29	2,781.07	1,200,619.45	28,049.09	4,141,428.17	404,105.40	2,329,044.18	259,274.20	3,746,484.29	1,125,797.24	3,961,569.96	896,831.31
Total United States	.....	2,813.53	.....	159,575.26	.....	2,800,110.20	.....	1,041,356.67	.....	6,081,828.88	.....	1,007,106.23
Percent, West Virginia/Total United States for Wheat, Corn, Barley, Oats, Soybeans	.....	.....	0.049	0.060	0.023	0.025	0.028	0.022	0.026	0.022	0.012	0.006

TABLE 3.—A COMPARISON OF PRODUCTION FLEXIBILITY CONTRACT (PFC) ACRES AND PAYMENTS AND MARKET LOSS ASSISTANCE (MLA) PAYMENTS BETWEEN WEST VIRGINIA AND THE U.S. TOTAL

[In thousands]

	1997 PFC		1998 PFC		1998 MLA Total Payment	1999 PFC	
	Total Quantity	Total Payment	Total Quantity	Total Payment		Total Quantity	Total Payment
West Virginia	76	$2,813	76	$2,229	$1,107	75	$2,117
Total United States	176,612	$6,288,268	180,872	$5,661,756	$2,811,280	180,988	$5,477,290
Percent West Virginia/ United States	0.043	0.045	0.042	0.039	0.039	0.042	0.039

Question. What can be done to ensure that a farmer who does not live in a larger "farm-state" receives an equitable portion of the assistance available to his fellow farmers?

Answer. West Virginia appears to be receiving a proportionate share of Federal payments to producers based upon current program availability. Communicating program availability through media, mail, and outreach programs appears to have been equally effective in West Virginia compared with the national results. Efforts by FSA will continue in all State and county offices to inform all producers of Federal agricultural assistance programs.

Federal assistance to livestock producers has historically been based on the occurrence of disasters. As a result, relatively few Federal dollars are paid to West Virginia farmers because the livestock sector is the predominant source of agricultural output in West Virginia. Further, livestock producer groups in the past have preferred not to have major price and income support programs which helps explain why livestock producers nationally receive relatively few Federal payments.

QUESTIONS SUBMITTED TO THE FOREIGN AGRICULTURAL SERVICE

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

Question. Secretary Schumacher, you recently submitted a letter to me, dated February 17, 2000, on Public Law 480 Title I and Title II unobligated balances. That letter explains only the reasons for the unobligated balances carried over from fiscal year 1999 to fiscal year 2000. Please explain the reasons for the Title I unobligated balances carried over from each of the fiscal years 1996, 1997, and 1998, and projected to be carried over at the end of fiscal year 2000.

Answer. The Title I unobligated balance carried into 1996 was $9.5 million; into 1997, $6.8 million; into 1998, $68.4 million and into 1999, $58.3 million. The unobligated balances carried into 1996 and 1997 were the result of allocations being withdrawn at the end of the fiscal year without adequate time to reprogram the funds. The unobligated balances carried into 1998 were due to the following: a $10 million Title I allocation was withdrawn from Angola because reporting responsibilities relating to previous Title I shipments were unresolved; the $5 million allocation to the Congo was withdrawn due to the civil war and subsequent government disarray; the $5 million allocation to Guatemala was withdrawn when the Guatemalan government ministries did not come to agreement among themselves on commodities to be included in the program and on whether to exempt Title I importers from a newly-levied import tax before the signature deadline for the agreement; in Moldova the $10 million allocation was withdrawn due to lack of interest among government ministry officials caused by a change in focus, within the Government of Moldova, on the use of proceeds from the sale of program commodities; in the Philippines the $10 million allocation was withdrawn because the Government of the Philippines was unable to complete the agreement before the signature deadline due to internal disagreements on administrative matters; and the $5 million allocation to Suriname was withdrawn because the Government of Suriname decided not to purchase commodities through Public Law 480.

In addition to allocations that were withdrawn, some countries did not purchase all the commodities allocated in their agreements. For example, Jamaica was allocated $10 million to purchase rice but only used $5.3 million. Lithuania was allocated $10 million to purchase soybean meal but only purchased only $7.6 million. Some of these unused allocations were offset by increased allocations to other coun-

tries such as Pakistan. However, the end result was a rather large carryover of funds into fiscal 1998.

Unobligated balances carried into fiscal 1999 were also primarily due to countries deciding not to purchase commodities through Public Law 480 Title I and other countries not purchasing all of the commodities allocated in their agreements. For example, Cote d'Ivoire and Pakistan decided not to purchase commodities and Albania, Angola, Bangladesh, Bolivia, Bosnia-Herzegovina, El Salvador, Guyana, Kyrgyzstan, Moldova, Mozambique, and Tajikistan did not purchase all of the commodities allocated in their agreements. In addition, approximately $20 million was allocated to develop private trade agreements. These agreements did not materialize and it was too late in the fiscal year to reprogram the funds. Some of these unused allocations were offset by increased allocations to other countries such as Nicaragua. However, the end result was a rather large carryover of funds into fiscal 1999.

At the current time, we are not projecting any significant carryover of fiscal year 2000 unobligated balances into fiscal year 2001.

FAS HOUSES

Question. I understand that in the mid-1950's the Department of Agriculture purchased residences for FAS Agriculture Attaches with the proceeds of Public Law 480 purchases in approximately 12 countries. While USDA purchased the property, by law it could not hold legal title for the property so the Department of State took title to these homes. I am told that now the Department of State is in the process of selling these homes and retaining the proceeds, forcing FAS to incur the cost of providing housing for attaches in these countries. Is this accurate? What is USDA doing to resolve this situation and what additional costs is FAS facing if it is not resolved? What legislative solution might be appropriate to ensure that the USDA either receives the proceeds from the sale of this property or is provided with comparable housing at the same cost?

Answer. Through the foresight of the Congressional Agriculture Committees, legislation was included in various DOS appropriations authorizing the acquisition of residences for Agricultural Attaches. Seventeen properties were purchased by the Department of State (DOS) during the years from 1957 to 1979 to provide housing for Agricultural Attaches in specific countries.

Congressional testimony by State's Office of Foreign Buildings Operations (FBO) during those years reflects their intent to acquire pieces of property for the use of these Attaches. Both DOS appropriated funds and excess Public Law 480 currencies were used to acquire the specific properties. The DOS's use of funds to acquire these properties was based on priorities in agreement with USDA for acquisition of a number of residences for occupancy by the senior Attache of the agency.

In the early 1990's, FBO claimed that it could sell some of those residences although they had been occupied by Agricultural Attaches since their purchase, in some cases for more than 40 years. Although FAS contested this view, FBO has subsequently sold four of these residences (in Lima, Peru; Quito, Equador; Santiago, Chile; and Rabat, Morocco) and retained the proceeds for its own purposes. FAS no longer has an Attache in Quito and was granted another government-owned house in Rabat; however, FAS now pays over $85,000 annually for leased housing for Lima and Santiago. In addition, two FAS residences have been put into embassy housing pools, thus requiring FAS to pay for leased housing. These are in Nairobi, Kenya (annual leasing cost in excess of $26,000) and Warsaw, Poland ($43,000).

In total, the impact of the loss of these residences has been additional costs of $680,000 to the FAS budget over the past 5 years. Since the FAS administrative budget has been frozen during the past 3 years, these increased costs have had to come from other FAS programs and activities.

During the past 2 years, FBO has announced that it intends to sell two additional FAS occupied houses, in Vienna, Austria and Stockholm, Sweden. If FBO succeeds in this, FAS will face annual leased housing costs estimated at $70,000 for these two posts. Finally, FBO now claims that FAS has no rights for continued assignment to two long-term FAS houses, in Bangkok, Thailand and Cairo, Egypt. If FAS is forced out of these residences, leased housing costs for the two posts are estimated at over $120,000 annually.

Although FAS has contested this FBO policy for nearly 10 years, we have been unable to deter the plan to sell off FAS houses. Most recently, on December 7, 1999, Secretary Glickman wrote a letter to Secretary Albright regarding the sale of the house in Vienna. The Secretary asked that the proceeds of the sale be used to purchase replacement housing for the FAS officer. In addition, Secretary Glickman asked that he be advised of any actions which State might take for other dedicated FAS housing. On February 18, 2000, Patrick Kennedy, Assistant Secretary of State

for Management, responded to Secretary Glickman's letter, noting that State had no record that Department of Agriculture funds were used to purchase or maintain the residence in Vienna.

BUYING POWER MAINTENANCE ACCOUNT

Question. The FAS is requesting authority in fiscal year 2001 to establish a Buying Power Maintenance Account to manage overseas currency fluctuations. Please detail for each of the past 5 fiscal years what impact overseas currency fluctuations have had on FAS' direct appropriation as compared to the amount budgeted for these costs in each of these years.

Answer. The information below compares the amount estimated at the beginning of the fiscal year and the actual annual costs of maintaining FAS overseas offices for the last 5 fiscal years. While not all the differences can be attributed to just exchange rate movement, the data is representative of general currency fluctuation trends.

Fiscal year	Budget	Actual	Difference
1995	$22,963	$23,842	($879)
1996	25,354	24,605	749
1997	24,912	24,915	3
1998	25,841	24,092	1,749
1999	25,678	24,240	1,438

PAY COSTS

Question. The fiscal year 2001 request includes a total $1,533,000 increase to partially offset the fiscal year 2001 pay raise. What increases in mandatory pay costs does the budget assume FAS will absorb in fiscal year 2001 and how will FAS meet these costs?

Answer. The fiscal year 2001 budget request for pay costs reflects half the amount actually estimated to be needed. Absorbing the $1.5 million balance could require the elimination of up 20 staff years.

AGRICULTURAL TRADE OFFICE

Question. FAS has cited budgetary constraints as the reason for having to close its Agricultural Trade Office (ATO) in Singapore at the end of the year. I note that the fiscal year 2001 budget requests additional appropriations for FAS to open three new ATOs in Mexico, Canada and the Philippines. Why are these three new offices of highest priority? Why establish ATOs in Mexico and Canada which are currently our largest agricultural markets and are in close geographic proximity to the United States, rather than in countries/regions with market access/expansion potential?

Answer. The three proposed ATOs were chosen on the basis of their market potential. The Philippines, with a population of 80 million, has a rapidly growing economy which has largely escaped the financial downturn suffered by many other Asian economies over the past 2 years. While Philippine consumers often favor U.S. products, they also have ready access to products from China and Australia, which are very active in that market. ATO Manila should be able to provide a showcase for a wide range of products in this growing market with major potential.

Mexico is the third largest market for U.S. agricultural products, and while nearby, it is not an easy one for U.S. exporters. The proposed ATO in Monterey would provide support for exporters in developing markets in the border region of Northern Mexico, which has had the most dynamic economy in the country. With higher incomes, this region has expanded demand beyond the traditional bulk commodities and is taking increasing quantities of processed and consumer ready goods. Besides working with U.S. suppliers of these products, ATO Monterey would also focus on the problems of moving goods across the border. Such problems often require some U.S. government intervention in resolving issues of food inspection or safety.

Canada, the second largest destination for U.S. agricultural products, has provided a particularly strong, consistent and growing market for high value and processed foods. Although Canada is often viewed as an easy nearby market, there are significant hurdles for first-time exporters. The proposed ATO Toronto would focus on the thousands of U.S. food producers who have never exported and who should view Canada as a good "starter" market. In this context, the ATO would provide specialized services for new exporters, providing them with a higher level of support than would normally be offered. The ATO would also play an active role in outreach

in the Upper Midwest, encouraging companies in the region to get involved in the Canadian market.

Question. Did the Department consider retaining the Singapore ATO, despite the higher cost of this office, given Singapore's strategic prominence in the Southeast Asia region?

Answer. When the Agricultural Trade Office (ATO) was opened in Singapore 21 years ago, the city was the major transshipment point for agricultural trade with Southeast Asian countries, particularly nearby Malaysia and Indonesia. Since that time, however, the city's share of trade tonnage for the region has been eroding, a trend that is likely to accelerate in the future. In Malaysia, for example, the opening of Port Klang in 1996 (the first in the country which could handle the larger, Panamax-sized vessels) and of the new Kuala Lumpur International Airport in 1998 have stepped up the trend in displacing transhipments that previously went through Singapore. Upgrades in port and transportation facilities in Indonesia are also displacing trade through Singapore. Indeed, the governments of both Malaysia and Indonesia are pursuing policies which will further favor the use of their own transportation facilities.

FAS has also made substantial gains in its staffing in Southeast Asia during the past few years, opening an Attache Office in Hanoi, Viet Nam in 1996, an ATO in Jakarta, Indonesia in 1997, and an office in Ho Chi Min City, Viet Nam in 1997. Two additional Malaysians were added to staff of the Agricultural Attache's Office in Kuala Lumpur in 1997. Consequently, many of the services previously offered by the ATO in Singapore to these countries are now handled in-country by local staff.

FAS recognizes the continuing importance of Singapore as a regional financial and commodity trading center and will continue to maintain an office with a staff of two Singaporeans to cover these issues as well as trade servicing for this city of 4 million. This office will be supervised by the Agricultural Attache in nearby Kuala Lumpur. In addition, FSN staff from Kuala Lumpur will travel to Singapore to support major events, such as regional trade shows.

With an annual budget of $900,000, ATO Singapore is the sixth most expensive FAS office in the world. Its annual cost is higher than that of several of our most critical posts, including the Minister Counselor's offices in Beijing and in Mexico City. With a budget for administrative costs frozen for the past 3 fiscal years, FAS has been forced to absorb rising costs and to close posts whose cost exceed their contribution to the agency's mission. For the reasons stated above, we believe that Singapore is one of these posts and that the resources expended there can be better used to support critical needs in other areas.

Question. Mr. Galvin, in the prepared statement you submitted to the Committee, you indicate that the ATO in Singapore will be closed at the end of this fiscal year and you will save $0.9 million in fiscal year 2001. For what specific purposes will the $0.9 million in saving from the Singapore ATO be utilized in fiscal year 2001?

Answer. Savings from closing ATO Singapore will be utilized to offset unavoidable wage and price increases. As a result of straight-lined budgets for the past 3 fiscal years, FAS has been closing and downsizing overseas offices and reducing marketing activities as the means of offsetting these unavoidable cost increases. The fiscal year 2001 budget again requires FAS to absorb a significant portion of these estimated costs.

COOPERATOR PROGRAM

Question. Beginning in fiscal year 2000, the Cooperator Program is being funded through the Commodity Credit Corporation rather than through FAS's direct appropriation. In shifting funding to the CCC, $500,000 was retained in FAS's direct appropriation for fiscal year 2000 to cover the costs of administering the program. What was the cost to FAS of administering the Cooperator Program in fiscal year 1999 and is the full $500,000 being used for this purpose for fiscal year 2000. Can CCC funds be used to administer the Cooperator Program. What level of funding is included in the fiscal year 2001 appropriations request to administer the Cooperator Program.

Answer. The cost of administering the Cooperator Program in fiscal year 1999 was approximately $2.1 million. For fiscal year 2000, the full $500,000 retained in the FAS appropriation will be used for this purpose. For fiscal year 2001, the budget includes approximately $2.3 million for administration of the Cooperator Program.

While the program costs of the Cooperator program have shifted to the CCC, CCC funds cannot be used to finance the costs of administering the program.

SCIENTIFIC COOPERATION RESEARCH PROGRAM

Question. Please describe briefly each of the research and scientific exchanges being carried out under the FAS administered Scientific Cooperation Research Program in fiscal years 1999 and 2000 and the sources of funding for each. Does the fiscal year 2001 FAS request include funding for this program? If so, what level of funding is requested?

Answer. The FAS Scientific Cooperation Research Program is funded from the annual appropriation made available to FAS. In fiscal year 1999, the program level totaled $1.8 million. The budgets for fiscal years 2000 and 2001 include $1.9 million annually for these activities. We will provide Research and Exchange Project Abstracts by Country for both fiscal years 1999 and 2000 for the record.

[The information follows:]

U. S. DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service
International Cooperation and Development
Research and Scientific Exchanges Division
Scientific Cooperation Program

The Scientific Cooperation Program supports international cooperative research efforts focused on practical uses of science to help solve critical problems affecting U.S. agriculture and forestry, such as trade barriers and phytosanitary issues, food safety, and exotic diseases and pests. This competitive program provides links to world resources in both developed and developing countries, and enhances research and technical efforts in the U.S. agricultural scientific community.

In fiscal year 1999, Foreign Agricultural Service appropriations were leveraged to provide less than 30% of cost of supporting 145 mutually beneficial international research and exchange activities. A diverse group of U.S. institutions collaborated in research partnerships with 52 countries in scientific cooperation, which is a vital component of the sustainable agricultural development necessary for domestic and global food security.

New scientific cooperative research activities selected for funding in 1999 promote the safe and appropriate development and application of biotechnology and other tools for food safety, improving the nutritive value and resistance of crops and livestock, environmental sustainability, and other priority food and agriculture issues affecting needs of limited resource and small farmers. Collaborative research and scientific exchanges also help increase the technical and scientific capabilities of both U.S. and foreign scientists, including the increasing participation of women and minorities.

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Scientific Cooperation Research Program Guidelines
Internet Address: http://www.fas.usda.gov/icd/grants/scrp.htm

December 1999

1999 Scientific Cooperation Program
37 Research Projects Selected for Funding

Argentina

AR40
Judith K. Brown University of Arizona

Distribution of Prospective Whitefly Vector/Parasitoid Complexes by Morphological and/or Molecular Analysis

University of Arizona and scientists in Argentina are using biotechnology and other techniques to more accurately map the identity and distribution in Argentina of costly whitefly crop pests and the viruses they transmit that could pose a threat to US agriculture by their accidental introduction on imported plants and plant products.

AR43		$30,000
Maria Gallo-Meagher	University of Florida	Florida
Luis Mroginski	Instituto de Botanica del Nordeste	**Argentina**

In Vitro Conservation of Arachis spp. (Leguminosae) Germplasm

University of Florida and Argentine scientists would collaborate to adapt and apply in vitro techniques such as bud and tissue culture to preserve of the germplasm of valuable wild peanut species, many of which are currently maintained as costly and risky field or greenhouse collections.

Australia

AS75		$30,000
Gail A. Wicks	University of Nebraska	Nebraska
Warwick L. Felton	New South Wales Dept. of Agriculture	**Australia**

Use of Reflectance Technology to Identify Weed Competitive Wheat Cultivars

University of Nebraska and Australian scientists would collaborate on research to develop and test near-infrared/red reflectance sensor technology using a crop-canopy analysis to provide information on weeds to wheat growers during the growing season to improve integrated pest management systems and minimize use of costly agricultural chemicals.

AS 80		$30,000
Frederick J. Crowe	Oregon State University	Oregon
Jason Dennis	Tasmania Dept. of Primary Industries & Fisheries	**Australia**

Using Soil-Applied Dehydrated Garlic and/or Onion Products to Reduce Populations of Sclerotium cepivorum, as the Basis for Integrated Control of Allium White Rot and Sustained Production of Onions and Garlic in Infested Fields

Oregon State University and Australian scientists would collaborate on research to use food-grade and waste onion and garlic products to provide more reliable and sustained control of the white rot disease which severely limits onion and garlic production.

Chile

CI25		$29,997
Robert I. Gara	University of Washington	Washington
Dolly Lanfranco	Universidad Austral de Chile	**Chile**

Harvesting, Transporting & Storing of Radiata Pine Logs in Chile to Minimize Movement of the Scolytids, Hylastes ater & Hylurgus Ligniperds to Ports of Embarkation

University of Washington and Chilean scientists would collaborate on research to develop a successful integrated pest management program for preventing the importation of pine bark beetles into the United States on logs from Chile.

China

CH291		$30,000
David H. Byrne	Texas A&M University	Texas
Lirong Wang	Chinese Academy of Agricultural Sciences	**China**

Low Chill Prunus Germplasm Development and Analysis

Texas A&M University and Chinese scientists would collaborate on research to expand the diversity of peach germplasm and introduce new sources of of traits such as unique flesh type with better post harvest characteristics; adaptation to humid and mild winter conditions; and greater resistances to a wide range of diseases and insects.

CH297
Edward J. Garvey USDA/ARS

Collection, Documentation, and Preservation of Hemlock (Tsuga spp.) from Central China

USDA Agricultural Research Service, the Universities of Pennsylvania, Maine, and Tennessee and the Chinese Academy of Agricultural Sciences are collaborating on research to develop genetic resistance to the Asian hemlock woolly adelgid, a serious pest of native forests and cultivated hemlocks important to the timber and landscape industries.

CH300		$30,000
Thomas D. Bunch	Utah State University	Utah
Ya-ping Zhang	Chinese Academy of Science	**China**

Characterization and Preservation of Germplasm from the Argaliform Wild Sheep (Ovis ammon spp.) and Selected Breeds of Domestic Sheep (Ovis aries) within P.R. China

Utah State University and Chinese scientists would collaborate on research to preserve genes from wild sheep important for survival on open ranges which are valuable for improving domestic sheep.

CH304
Warren A. Dick Ohio State University

Integration of No-Tillage and Organic Amendments for Creation of Sustainable Agroecosystems

Ohio State University, the Chinese Academy of Agricultural Sciences and Canada's University of Saskatchewan are collaborating on research to determine the effects of applying organic amendments on the physical, chemical and biological properties of the soil and on the growth of crops in no-tillage soils of sustainable agricultural systems.

CH324
Hongwei Xin Iowa State University

Evaluation and Demonstration of Livestock Waste Pollution Reduction Strategies and Practices

Iowa State University and Chinese Academy of Agricultural Sciences are collaborating on research to identify cost-effective, practical manure systems and management practices that can be used by both American and Chinese animal producers to reduce environmental pollution while maintaining production efficiency.

CH328
Zhi-Yong Huang Michigan State University

Infertility of Varroa on Apis cerana Worker Brood: Physiological and Genetic Mechanisms

University of Illinois and Chinese Academy of Agricultural Sciences are collaborating on research to help develop techniques for alternative control measures against the biggest threat to European honey bees, varroa mites, and minimize the use of chemicals in honey bee colonies.

Denmark

DA10		$27,500
Thomas H. Terrill	**Fort Valley State University (HBCU)**	Georgia
Michael Larsen	The Royal Veterinary and Agricultural Univ.	**Denmark**

Biological Control (BC) of Gastrointestinal Nematodes in Goats Using Nematode-Trapping Fungi

Fort Valley State University and Danish scientists would collaborate on research to determine effective biological control of the internal parasites which are a major obstacle in limiting growth of the goat industry in the Southeast and other areas of the U.S.

Ghana

GH13		$30,000
Claude McGowan	**Florida A&M University (HBCU)**	Florida
Bawa Awumbilla	University of Legon	**Ghana**

Stabilization and Utilization of Seafood Processing Waste as a Feed Supplement for Small Ruminants, and as Slow Release Fertilizer for Crop Production

Florida A&M University and Ghanian scientists would collaborate on research to develop products and alternative methods to recycle waste from the seafood industry, reduce feed costs for small ruminants, and produce a slow release nitrogen fertilizer.

Guyana

GY02		$30,000
James O. Garner	**Mississippi State University**	**Mississippi**
Natasha Floy	Partners of the Americas	**Guyana**
	Guyana School of Agriculture	

Germplasm Evaluation for Drought Tolerant Sweet Potatoes in Mississippi and in Guyana

Mississippi State University researchers would collaborate with scientists in Guyana to identify genes for drought tolerance, yield, and root storage quality for improving the sweet potato, Mississippi's top cash crop.

Indonesia

ID14		$30,000
Buford M. Shepard	Clemson University	SouthCarolina
	International Potato Center **(CIP)**	**Indonesia**

Biological Control of Liriomyza Huidobrensis: An Exotic Leafminer Destructive to Food Crops in the United States and Indonesia"

Clemson University, University of Hawaii, International Potato Center, Food and Agriculture Organization, and Indonesian scientists would collaborate on the development of biological control programs for the leafminer, a devastating pest of food and ornamental crops.

Ireland

EI 114

Samuel A. Palumbo	USDA/Agricultural Research Service

Risk-Based Determination of Animal Slaughter and Food Processing Critical Control Points to Provide the Scientific Basis of HAACP

USDA Agricultural Research Service and Ireland's National Food Centre are collaborating on joint research using microbiological criteria to evaluate the steps in meat animal slaughter and dressing and where controls or interventions can be determined to allow Hazard Analysis Critical Control Point Analysis plans to be validated and adjusted as needed.

EI 115
Frank L. Brewer Michigan State University

Examination of the Role of the Effective U.S. Practitioner in Community Development with Particular Reference to Rural Development in Ireland

Michigan State University and Ireland's University College Dublin are collaborating to quantify information using Action Research methodology useful in the development of agricultural policy and promotion of economic and community development.

EI 116
Thomas E. Besser Washington State University

Escherichia coli O157:H7: Epidemiology and Control in Cattle Production and Beef Processing

Washington State University and Ireland's University College Dublin are collaborating on joint food safety research using bacteriological and biotechnological procedures to identify on-farm factors that influence the prevalence of E. coli in cattle on infected farms.

Jamaica

JM10		$30,000
Samuel Scott	**Alcorn State University (HBCU)**	**Mississippi**
Aston Wood	Ministry of Agriculture Agriculture Agribusiness Council of Jamaica	**Jamaica**

An Analysis of Consumer Acceptance and Optimal Market Strategy for Exporting Goat Meat From Mississippi and Other Southern States into Jamaica

Alcorn State University researchers would collaborate with Jamaica to develop international linkages for the export of goat meat from Mississippi and other Southern States, as an alternative profitable enterprise for small-scale farmers.

Mexico

MX84	$30,000	
John J. Ellington	**New Mexico State University (HACU)**	New Mexico
		Mexico

The Density and Diversity of Parasitic Hymenoptera as Bio-indicators of Habitat Disturbance in a Cotton Producing Region of Tropical Mexico

New Mexico State University and Mexican scientists would collaborate on research assess the impact of insecticides use on target and non-target natural enemies of cotton.

MX87 $20,000

John T. Moraghan	North Dakota State University	North Dakota
Jorge D. Etchevers-Barra	Institucion de Ensenanza e Investigacion En Ciencias Agricolas	**Mexico**

Comparison of the Calcium, Iron, Zinc, and Magnesium Contents of Bean (Phaseolus vulgaris) Seed of Mexican and American Origin

North Dakota State University and Mexican scientists would collaborate on research to develop cultivars of beans with higher levels of minerals essential for human nutrition.

MX93

John D. Bailey	Northern Arizona University

Managing Fragmented Douglas-Fir (Pseudotsuga spp.) Ecosystems in Southwestern North America for Long-Term Sustainability

Northern Arizona University and Mexico's National Institute of Forestry and Agricultural Research are collaborating on research to conserve the unique ecosystems of high-elevation forest resources by providing information useful in management strategies such as fire suppression and harvesting of one of our most important forest species, the Douglas-fir, at the southern-most extent of its range.

MX96 $30,000

Norman C. Ellstrand	University of California	California
Dulce Ma. Arias Ataide	Universidad Autonoma del Estado	**Mexico**

Population Genetic Characterization of Naturally Sympatric and Allopatric Populations of Teosinte with Maize in Mexico: Implications for the Risk of Extinction by Hybridization

University of California and Mexican scientists would collaborate on research to preserve teosinte, the closest wild relative of corn, for the future improvement of cultivated corn.

Morocco

MO13 $29,997

Carol J. Lovatt	University of California	California
Mohamed El-Otmani	Institut Agronomique et Veterinaire Hassan II	**Morocco**

USA Production of Seedless Mandarins for Foreign Markets: Solutions to the Problems of Low Fruit Set, Small Fruit Size, and Poor Color

University of California and Moroccan scientists would collaborate on essential research to test the reliability of the best strategies for improving seedless mandarins for new domestic and international markets.

Mozambique

MZ01		$30,000
James P. Muir	Texas A&M University	Texas
Inacia Calvino Maposse	Universidade Eduardo Mondlane **with ILRI**	**Mozambique**

Legume Forage Germplasm from Mozambique

Scientists at Texas A&M University would collaborate with researchers in Mozambique and the International Livestock Research Institute to identify much needed forage legumes suitable for in southern U.S. pastures

New Zealand

NZ54		$30,000
Frederick A. Kamke	Virginia Polytechnic Institute & State U	Virginia
Shusheng Pang	Forest Research Institute	**New Zealand**

Lumber Quality Improvement in High-Temperature Drying

Virginia Polytechnic Institute & State University and New Zealand scientists would collaborate on research to develop and apply improved methods of using high temperature drying to improve lumber quality and greatly reduce processing time and lower energy consumption than used in conventional kiln drying.

NZ57		$29,490
James R. Russell	Iowa State University	Iowa
Keith Betteridge	Pastoral Agriculture Research Institute	**New Zealand**

Cattle Treading Effects on Soil Quality, Crop Productivity, and Pasture Health

Iowa State University researchers would collaborate with scientists in New Zealand an on innovative approach to reduce the use of stored feed through grazing corn crop residues remaining after harvest to maximizing the efficiency of forage use and the number of days that cattle graze, which could save cattle producers in Iowa alone over $140 million each year.

Nigeria

NI10		$30,000
Edward J. Smith	**Tuskegee University (HBCU)**	**Alabama**
L. K. Ayorinde	University of Ilorin	**Nigeria**

A Search for Novel Mutations in Genes that Significantly Impact Productivity and Profitability of Chickens in Alabama and West Africa

Tuskegee University researchers would collaborate with scientists in Nigeria and Senegal to identify genes with economically important traits for poultry including disease resistance.

Peru

PE11
David M. Spooner USDA/ARS

Core Collection Characterization of the World Collection of Cultivated Potatoes (Solanum sect. Petota)

USDA Agricultural Research Service and International Potato Center scientists are collaboratively researching the wild relatives of the potato, the most important vegetable in US agriculture, focusing on important traits such as resistance to heat, frost, diseases and pests.

Philippines

RP20 $30,000
Judy D. Ribaya-Mercado Agricultural Research Service; Tufts University Massachusetts
Florentino S. Solon Nutrition Center of the Philippines **Philippines**

Vitamin A Requirements in the Elderly: Feasibility Studies

USDA Agricultural Research Service scientists at Tufts University in Massachusetts would collaborate with researchers in the Philippines on studies of the Vitamin A status of elderly people to provide information necessary for making appropriate dietary recommendation a large segment of the U.S. population.

Poland

PL33 $30,000
Hilary Koprowski Thomas Jefferson University Pennsylvania
Agnieszka Sirko Polish Academy of Sciences **Poland**

Development of Techniques for Agriculturally Valuable Crops to Create Edible Vaccines

Scientists at Pennsylvania's Thomas Jefferson University and Poland would collaborate on research using transgenic plants to develop safe and inexpensive edible vaccines against the Helicobacter pylori bacteria which causes suffering from gastric ulcers and cancer.

South Africa

*** Research to Exchange - SF37**
Freddie L. Richards Prairie View A&M University

Agriculture Products & Processing Trade -- Texas-South Africa

Prairie View University and the University of Zimbabwe are conducting a scientific exchange on the agribusiness concerns of small and limited resource farmers, including the use and marketing of small ruminants for meat and other by-products.

Spain

SP33		$30,000
Ann M.. Donoghue	Agricultural Research Service	Maryland
Juan Manuel Blanco	Centro de Estudios de Rapaces Ibericas	**Spain**

Comparative Semen Cryopreservation of Poultry and Non-Domestic Avian Species: Characterization of Sperm Freeze Damage and Development of Applicable Semen Preservation Procedures

USDA Agricultural Research Service and U.S. wildlife and conservation centers would collaborate with Spanish scientists to develop simple, practical methods of freezing poultry and non-domestic avian semen which could be adapted for on farm and in field use in artificial insemination.

Sweden

SW10		$30,000
Daniel Cullen	Forest Service	Wisconsin
Tuula T. Teeri	Royal Institute of Technology	**Sweden**
T. Alwyn Jones	Uppsala University	

Enzyme Discovery for Pulp Fiber Modification

USDA Forest Service and Swedish scientists would collaborate on research using recently developed experimental techniques (genetic and protein engineering) to identify new enzymes for improving pulp and paper processing, particularly for recycled fibers.

Syria

SY02		$30,000
Jan Dvorak	University of California	California
Jan Valkoun	International Center for Agricultural Research in Dry Areas **(ICARDA)**	**Syria**

Acquisition and Characterization of Germplasm of Triticum Urartu and Aegilops Tauschii, Ancestors of Bread Wheat

University of California and International Center for Agricultural Research in Dry Areas scientists would collaborate on research on wild ancestors of wheat to maximize usefulness of the currently inadequately represented U.S. collections.

Uruguay

UR08		$30,000
Douglas C. Sanders	North Carolina State University	North Carolina
Juan Carlos Gilsanz	National Research Institute of Agriculture	**Uruguay**
Jorge Arboleya		

Impact of Vegetable Rotation Systems on Yield and the Environment

North Carolina State University researchers would collaborate with scientists in Uruguay to provide the cost and benefits to the farmer and the environment of seven rotational systems by evaluating the impact on the economics of vegetable crop production, pest populations and environmental consequences for vegetable crops in the two countries which share similar climate, soils, and producer needs.

Viet Nam

VM13		$30,000
Dennis A. Shannon	Auburn University	Alabama
Tran Duc Vien	Hanoi Agricultural University	**Vietnam**

Environmentally Sustainable Alley Cropping Systems in the Uplands of Northern Vietnam

Auburn University and Vietnamese scientists would conduct joint research on alley cropping which could provide Alabama and other southeastern farmers short-term income from annual crops while waiting for trees such as pine planted to protect highly erosive soils mature for harvesting several years later.

1999 Scientific Cooperation Program
18 New Exchange Visits Selected for Funding

Australia

AS70		$3,670
Lori M. Carris	Washington State University	Washington
Gordon M. Murray	Wagga Wagga Agricultural Institute	**Australia**

Detection and Characterization of Smut Fungi Infecting Australian Perennial Ryegrass

Washington State University, USDA and Australian scientists would collaborate on accurate and timely identification of smut fungi similar to Karnal bunt found in ryegrass from Oregon and the southeastern U.S. for use by regulatory agencies and seed certification laboratories for the continued free movement of seed.

AS79		$4,950
Roger A. Coulombe, Jr.,	Utah State University	Utah
Steven M. Colegate	CSIRO Australian Animal Health Laboratory	**Australia**

Immunological Detection of Pyrrolizidine Alkaloids in Animal Products

Utah State University and Australian scientists would initiate collaboration to develop a reliable and rapid method for screening animals and animal products for exposure and contamination from natural toxins in plants the animals have grazed on.

China

CH298		$4,950
Richard A. Casagrande	University of Rhode Island	Rhode Island
Hong-Zhang Zou	Academia Sinica	**China**

Taxonomic Confirmation and Natural Enemy Exploration for the Lily Leaf Beetle, Lilioceris lilii

University of Rhode Island and Chinese scientists would collaborate on biological control of the lily leaf beetle, an increasingly serious horticultural pest established in the U.S. since 1992.

Costa Rica

CS17		$5,000
Julio S. Bernal	Texas A&M University	Texas
Victor Cartin Leivas	Universidad Nacional	**Costa Rica**

Exploration for Natural Enemies of Fall Armyworm in Central America

Texas A&M University and Costa Rican scientists would seek in Central America, natural enemies of the costly fall army worm, an important pest of several U.S. crops, including corn, cotton and sorghum.

Egypt

EG14		$3,700
Steve Comfort	University of Nebraska	Nebraska
Hesham M. Gaber	University of Alexandria	**Egypt**

Permeable Zero-Valent Iron Barriers for In-Situ Containment and Remediation of Pesticide Contamination in Unsaturated Soils

University of Nebraska and Egyptian scientists would collaborate on an innovative, inexpensive, low tech and easily adaptable approach to dealing with on-site contamination problems from chemical spills.

Finland

FI09		$2,400
William E.Jokela,	University of Vermont	Vermont
Martti Esala	Agricultural Research Center of Finland	**Finland**

Manure Management Methods to Improve Nutrient Utilization and Reduce Losses to the Environment

University of Vermont would collaborate with Finland, England, Sweden and the Netherlands where innovative approaches are used in research and extension to address environmental impacts of manure application.

Republic of Georgia

GG03		$5,000
Fernando E. Vega	Agricultural Research Service	Montpellier, France
Cisia Chkuhubianishvili	Georgia Academy of Agricultural Sciences	**Republic of Georgia**

Insecticide Use Reduction in U.S. Agriculture Through Biological Control

USDA Agricultural Research Service and scientists in the Republic of Georgia would collaborate on biological control of the codling moth, one of the most serious pests of apples, pears, and walnuts in the United States.

Greece

GR06		$5,000
Kent M. Esridge	University of Nebraska	Nebraska
Stamatis Stamatiadis	General Secretariat for Research and Technology	**Greece**
	Goulandris Natural History Museum and Fisheries	

Evaluation of a Constructed Wetland for Wastewater Treatment and Crop Irrigation Travel of U.S. Scientists

University of Nebraska would collaborate with Greek scientists on a unique opportunity to evaluate the performance, sustainability, and suitability of using reclaimed wastewater for irrigation at a prototype constructed wetland established in Greece, which would be applicable to agricultural use in the US.

Guatemala

GT04		$5,000
Ronald T. Riley	Agricultural Research Service	Georgia
Olga R. Torres	Insituto de Nutricion de Centro America	**Guatemala**

Exposure to Fusarium Toxins at Two Different Geographical Locations in Guatemala - Improved Food Safety at a Minimum Cost

USDA Agricultural Research Service and Guatemalan scientists would collaborate in validating a valid health risk assessment procedure for fungal toxins found on corn that can be life-threatening, as well as economically devastating to U.S. agricultural exports.

Hungary

HU32		$4,400
Theodore T. Kramer	Iowa State University	Iowa
Bela Nagy	Hungarian Academy of Sciences	**Hungary**

Poultry Vaccines Against Salmonella for Food Safety

Iowa State University would collaborate on a food safety program testing new live vaccines against salmonella in poultry in Hungary for application in the US if successful.

Japan

JA34		$4,750
Renee M. Wagner	Agricultural Research Service	Missouri
Takashi Okuda	Ministry of Agriculture, Forestry and Fisheries	**Japan**

Corpora Allata Activity as an Indicator of Reproductive Capacity in the Locust

USDA Agricultural Research Service and Japanese scientists would collaborate on one of the major obstacles to using beneficial insects, the mass rearing of weed-feeding insects for the biological control of noxious, invasive, exotic weeds such as the spotted knapweed, which has invaded millions of acres of grazing land in the US.

New Zealand

NZ52		$4,010
Henry A. Fribourg	University of Tennessee	Tennessee
John Hay; Gary Latch; Syd Easton	AgResearch	**New Zealand**

Continuation and Coordination of a Joint Tall Fescue Toxicosis/Beef Cattle Research Program Between the Agricultural Experiment Station and the New Zealand Pastoral Agriculture Research Institute Limited

University of Tennessee and New Zealand scientists would collaborate on improved forages for cattle consuming fungus infected tall fescue, a major grass in the eastern US, have reduced growth, lowered conception, reduced milk production and intolerance to heat, with annual losses nationwide estimated at over $850 million.

Nigeria

NI09		$5,000
Robert L. Brown	Agricultural Research Service	Louisiana
Abebe Menkir	International Institute for Tropical Agriculture **(IITA)**	**Nigeria**

Identification and Characterization of Corn Germplasm with Resistance to Aflatoxin Contamination by Aspergillus Flavus

USDA Agricultural Research Service and International Institute for Tropical Agriculture scientists in Nigeria would collaborate on developing corn resistant to aflatoxins, a food safety problem that is also important as a trade barrier for US corn export.

Russia

RS76		$5,000
Albert E. Percival	Agricultural Research Service	Texas
Albert Kassianenco	N.I. Vavilov Institute for Research	**Russia**

Cotton (Gossypium spp.) Germplasm Exchange

USDA Agricultural Research Service and Russian scientists would collaborate to greatly increase the US seed collection of a major US crop, cotton, with seed from Russia while helping to preserve the valuable genetic resources in the Russian collection.

RS83		$4,000
Barbara Illman	Forest Service	Wisconsin
Valentina P. Vetrova	Sukachev Institute of Forest and Wood Russian Academy of Sciences	**Russia**

Collection and Characterization of Fungi Associated with Xylophagous Insects Attacking Spruce and Pine Trees Worldwide

USDA Forest Service and Russian scientists would collaborate on the most efficient method of identifying predicting potential import of pathogens on timber into the U.S. and spread of disease outbreaks worldwide.

Scotland

UK55		$4,953
Sophien Kamoun	Ohio State University	Ohio
Paul Birch; David Cook	Scottish Crop Research Institute	**Scotland**

Comparative Analyses of Gene Expression Profiles in Economically Important Phytophthora-Plant Pathosystems

Ohio State University and Scottish scientists would collaborate on development of novel alternative and durable methods for biotechnological and chemical control strategies of some of the most devastating reemerging plant pathogens which cause diseases in potatoes, tomatoes, strawberries and soybeans.

South Africa

SF35		$3,000
Norman W. Schaad	Agricultural Research Service	Maryland
J. L. Serfontein	ARC Plant Protection Research Inst.	**South Africa**

Collection of Germplasm and Information on the Exotic Causal Agent of Bacterial Blight of Grape

USDA Agricultural Research Service and South African scientists would collaborate to develop on-site, effective detection techniques for the easily misdiagnosed, very destructive bacterial blight disease of grapes which has a high potential for introduction into the United States.

SF40		$5,000
Arthur L. Goetsch	**Langston University (HBCU)**	**Oklahoma**
Merida Smuts	Agricultural Research Council	**South Africa**

South African Boer Goat Research and Production Systems

Langston University and South African scientists would collaborate on effective use of the Boer goat breed for meat goat production, in the most rapidly growing livestock industry in the U.S.

2000 Scientific Cooperation Research Program
Research Projects and Scientific Exchanges Selected for Funding

	U.S. Institution	Amount Requested State
Argentina		
AR49 **Seal**	USDA Agricultural Research Service	$7,000 Georgia

Improved Methods for Detection of Newcastle Disease Virus which limits poultry exports.

Armenia		
AM87 **Gibson**		$42,000

Plant Cell Biotechnology for the Production of Hypericin and Hyperforin to identify superior germplasm for cell culture to optimize production of the medicinal plant St. John's Wort.

Australia		
AS87 **Gadoury**	Cornell University	$45,000 New York

Ontogenic Resistance to Powdery Mildew in Grapes for a solution to this important agricultural pest.

AS90 **Peterson**	USDA Agricultural Research Service	$33,000 Maryland

Development of an International Pest Risk Assessment for Karnal Bunt of Wheat to prevent regulatory actions which could cause losses to the US $5 billion wheat export market.

Brazil		
BR58 **Hester**	Purdue University	$45,000 Indiana

The Use of Bone Densitometry as a Diagnostic Tool for Monitoring the Incidence of Osteoporosis in Live Layer Breeders evaluating birds before they are finished laying and for alternative uses of spent hens.

Chile		
CI27 **Torres**	Oregon State University	$44,370 Oregon

Microbiologically Safe Foods by Hydrostatic Pressure Technology to improve safety of raw and cooked refrigerated foods such as seafood and fruit, and to extended the shelf-life and fresh-like appearance.

China

CH335 **Stucki**	University of Illinois	$45,000 Illinois

Collaborative Project to Study Improved Soil Test for Potassium using precision farming technology to improve fertilizer application.

CH347 **Hannaway**	Oregon State University	$44,850 Oregon

Using GIS, Remote Sensing and Visualization Technologies as a practical application of precision agriculture to identify potential markets for US products.

CH355 **Hajek**	Cornell University	$41,219 New York

Insect Pathogenic Fungi for Control of Asian Long-horned Beetle and Gypsy Moth for the biological control of two insect which devastate North American forests.

Costa Rica

CS20 **Rudis**	USDA Forest Service	$3,000 Mississippi

Designing Multipurpose Resource Inventories for forests.

Croatia

HR06 **Pfister**	USDA Agricultural Research Service	$43,600 Utah

Improving Livestock Production by Increasing Consumption of Tannin- and Terpene- Rich Plants in Shrub land Ecosystems and to lessen toxicity losses in livestock of $4 million.

Germany

GM65 **Calamari**	USDA Agricultural Research Service	$45,000 Louisiana

Natural Fiber Composites for Ecologically Benign Automotive Interiors for use of cotton blends.

Guatemala

GT04 **Riley**	USDA Agricultural Research Service	$45,000 Georgia

Validation of the Mechanism-based Biomarker for Fumonisin Exposure-Ensuring an Accurate Risk Assessment for Nixtamalized Corn Products in the USA and Central America using biotechnology for food safety, targeting fungal toxins in corn heated in water with lime.

Indonesia

ID16 **Armstrong**	USDA Agricultural Research Service	$32,800 Hawaii

Heat and Cold Temperature Death Kinetics of Mango Fly, Bactrocera Frauenfeldi (schiner) for the quarantine threat to US fruit exports which could result in losses of $8 million.

Israel

IS30 **Hopper**	USDA Agricultural Research Service	$15,000 Delaware

Genetics of Host Specificity of Aphelinid Parasitoids of Pest Aphids for biological control of the Russian wheat aphid and advances in integrated pest management.

Kenya

KE23 **McIntosh**	USDA Agricultural Research Service	$11,057 Missouri

A Novel Baculovirus of the Diamond Back Moth using biotechnology for biological control.

Korea

KS19 **Shannon**	USDA Agricultural Research Service	$30,000 California

Selecting for Salt Tolerance in Rice - The Role of Osmoprotectants using a novel approach to help improve health and the environment with US rice consumption which has increased nearly 50 percent from 1988 to 1998.

Mongolia

MG04 **Majerus**	USDA Natural Resources Conservation Service	$43,500

Collaborative Evaluation of Mongolian Forage Germplasm.

New Zealand

NZ60 **Lane**	USDA Agricultural Research Service	$30,500 Arizona

Soil/Site Stability and Sustainable Rangeland Ecosystems including use of the Internet to share rangeland management research results.

Nigeria

NI11 **Brown**	USDA Agricultural Research Service	$45,000 Louisiana

Identification, Characterization and Development of Corn Germplasm with Resistance to Aflatoxin Contamination by Aspergillus flavus, a food safety and trade issue.

Philippines

RP23 **Toledo**	University of Georgia	$45,000 Georgia

Adding Value to Edible By-Products (Broiler Meat) for International Markets to increase the variety of broiler meat products.

Russia

RS85 **Pelkki**	University of Kentucky	$43,865 Kentucky

Investigation of Natural Forest Forming Processes on Open-Pit Coal Mines in Western Siberia and Kentucky to reduce reclamation costs on millions of acres of surface mines in the US using high value forests which could be worth $500 million.

RS86 **Rinderer**	USDA Agricultural Research Service	$30,000 Louisiana

Screening of Honey Bees of Far Eastern Russia for Resistance to Varroa jacobsoni pest which would have a major impact on the US industry and indirectly on other segments of US agriculture.

South Africa

SF45 **Elzen**	USDA Agricultural Research Service	$41,500 Maryland

Integrated Pest Management Studies of the Small Hive Beetle to help abate this major honey bee pest.

Spain

SP36 **Johnson**	University	$43,118

Genetics of Astaxanthin Biosynthesis in the Yeast Phaffia rodozyma for carotenoids in fish feed.

Taiwan

TW24 **Humenik**	North Carolina State University	$44,800 North Carolina

Nurturing an Asian Environmental Center for Livestock Waste Management testing and demonstrating techniques used in the US.

Thailand

TH31 **Angle**	University of Maryland	$4,450 Maryland

Assessment of Phytoremediation as a Possible Technology to Remediate Cd Contaminated Soils in the TAC Province of Thailand exchange to refine technology to lessen the impact of heavy metals in soils.

United Kingdom

UK60 **Cutter**	Pennsylvania State University	$30,000 Pennsylvania

Nisin-incorporated Plastic to Control Pathogenic and Spoilage Bacteria in Fresh or Ready-to Eat Meat Products to help reduce pathogens which result in $12 billion in medical costs and microbial spoilage which causes millions of dollars in losses.

Vietnam

VM19 **Van Taoi**	USDA Agricultural Research Service	$45,000 Ohio

Exchanging, Characterizing and Preserving Soybean Germplasm with Vietnam for genetic diversity.

Zimbabwe

ZI03 **Reid**	USDA Agricultural Research Service	$45,000 Maryland

Collection and Characterization of Phakospora using biotechnology for protection from the threat of soybean rust.

FOREIGN MARKET DEVELOPMENT

Question. Please provide a breakout of how FMD Foreign Market Development Cooperator Program funds were allocated in each fiscal years 1999 and 2000.

Answer. The FMD approved marketing plan levels for fiscal years 1999 and 2000 are as follows:

FMD APPROVED MARKETING PLAN

Cooperator	1999 budget	2000 Budget
Cotton Council International	$1,853,934	$1,953,000
American Peanut Council	572,123	561,945
American Seed Trade Association	260,197	272,163
American Soybean Association	6,977,863	7,081,782
National Cottonseed Products Association	139,846	140,374
National Sunflower Association	269,604	265,871
Leather Industries Association	196,915	198,069
U.S. Dairy Export Council	601,135	708,348
American Sheep Industry Association	163,316	167,537
U.S. Hide, Skin & Leather Association	85,489	85,759
Mohair Council of America	30,020	26,129
U.S. Livestock Genetics Export Inc	774,145	801,336
National Renderers Association	1,123,589	1,009,044
USA Poultry & Egg Export Council	1,564,498	1,512,990
U.S. Meat Export Federation	1,423,672	1,528,287
U.S. Beef Breeds Council	73,083	.....
American Seafood Institute	79,403	80,069
American Forest & Paper Association	2,836,132	2,851,287
North American Millers Association	81,215	81,528
National Hay Association	46,000	55,345
National Dry Bean Council	98,038	122,103
USA Dry Pea & Lentil Council	161,036	187,890
USA Rice Federation	1,657,709	1,739,535
U.S. Grains Council	5,676,788	5,709,387
U.S. Wheat Associates	6,789,084	6,394,954
California Agricultural Export Council (Western Growers Association)	11,167	11,269
Grand Total	33,546,001	33,546,001

ALLOCATIONS

Question. Please provide the Public Law 480 funding allocations, by title, and by country and commodity for each of fiscal years 1999 and 2000 to date.

Answer. [The information follows:]

PLANNED U.S. PL 480 FOOD AID FOR FY 1999
REGION BY COUNTRY BY COMMODITY
Commodity Value and Metric Tons

COUNTRY	COMMODITY	PUBLIC LAW 480					
		Title I		Title II		Title III	
		000 MT	000 $	000 MT	000 $	000 MT	000 $
AFRICA							
Angola	Beans	--	--	5.18	2,259	--	--
Angola	Corn	--	--	29.00	3,457	--	--
Angola	Corn Soya Blend	--	--	3.60	979	--	--
Angola	High Energy Biscuits	--	--	0.05	170	--	--
Angola	Vegetable Oil	--	--	2.44	2,091	--	--
Angola	**Sub-Total ...**	**--**	**--**	**40.27**	**8,956**	**--**	**--**
Benin	Cornmeal	--	--	1.13	217	--	--
Benin	Vegetable Oil	--	--	0.55	472	--	--
Benin	Wheat	--	--	1.82	248	--	--
Benin	Wheat Soy Blend	--	--	1.29	512	--	--
Benin	**Sub-Total ...**	**--**	**--**	**4.79**	**1,449**	**--**	**--**
Burkina Faso	Beans	--	--	3.14	1,382	--	--
Burkina Faso	Corn Meal	--	--	3.25	624	--	--
Burkina Faso	Peas	--	--	0.95	226	--	--
Burkina Faso	Rice	--	--	5.17	1,954	--	--
Burkina Faso	S. F. Bulgur	--	--	11.87	2,279	--	--
Burkina Faso	Vegetable Oil	--	--	1.47	1,261	--	--
Burkina Faso	Wheat Flour	--	--	2.83	628	--	--
Burkina Faso	**Sub-Total ...**	**--**	**--**	**28.68**	**8,355**	**--**	**--**
Burundi	Corn Soy Blend	--	--	0.74	201	--	--
Burundi	Corn	--	--	2.74	351	--	--
Burundi	Peas	--	--	0.48	114	--	--
Burundi	Vegetable Oil	--	--	0.52	446	--	--
Burundi	**Sub-Total ...**	**--**	**--**	**4.48**	**1,112**	**--**	**--**
Cameroon	Peas	--	--	1.06	252	--	--
Cameroon	Rice	--	--	2.59	979	--	--
Cameroon	Vegetable Oil	--	--	0.24	206	--	--
Cameroon	**Sub-Total ...**	**--**	**--**	**3.89**	**1,437**	**--**	**--**
Cape Verde Islands	Corn	--	--	10.29	1,271	--	--
Cape Verde Islands	**Sub-Total ...**	**--**	**--**	**10.29**	**1,271**	**--**	**--**
Central African Rep.	Corn Soya Blend	--	--	0.38	103	--	--
Central African Rep.	Peas	--	--	0.17	40	--	--
Central African Rep.	Vegetable Oil	--	--	0.15	129	--	--
Central African Rep.	**Sub-Total ...**	**--**	**--**	**0.70**	**273**	**--**	**--**
Chad	S. F. Cornmeal	--	--	2.60	588	--	--
Chad	Vegetable Oil	--	--	0.29	249	--	--
Chad	Wheat Flour	--	--	1.00	222	--	--
Chad	**Sub-Total ...**	**--**	**--**	**3.89**	**1,058**	**--**	**--**
Congo	Beans	--	--	1.95	858	--	--
Congo	Corn Soya Blend	--	--	0.65	177	--	--
Congo	Cornmeal	--	--	5.04	968	--	--
Congo	Vegetable Oil	--	--	0.51	438	--	--
Congo	**Sub-Total ...**	**--**	**--**	**8.15**	**2,440**	**--**	**--**
Cote d'Ivoire	Rice	21.15	4,999.92	0.40	151	--	--
Cote D'Ivoire	**Sub-Total ...**	**21.15**	**4,999.92**	**0.40**	**151**	**--**	**--**
Djibouti	Vegetable Oil	--	--	0.15	129	--	--
Djibouti	Wheat Flour	--	--	3.00	666	--	--
Djibouti	**Sub-Total ...**	**--**	**--**	**3.15**	**795**	**--**	**--**
Eritrea	Vegetable Oil	--	--	0.53	455	--	--
Eritrea	**Sub-Total ...**	**--**	**--**	**0.53**	**455**	**--**	**--**
Ethiopia	Bulgur	--	--	3.99	710	--	--
Ethiopia	Corn Soya Blend	--	--	9.85	2,679	--	--
Ethiopia	Lentils	--	--	6.66	2,211	--	--
Ethiopia	Peas	--	--	1.08	257	--	--

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Commodity Value and Metric Tons

COUNTRY	COMMODITY	PUBLIC LAW 480					
		Title I		Title II		Title III	
		000 MT	000 $	000 MT	000 $	000 MT	000 $
Ethiopia	Rice	--	--	0.48	181	--	--
Ethiopia	Sorghum	--	--	19.51	1,892	--	--
Ethiopia	Vegetable Oil	--	--	9.67	8,297	--	--
Ethiopia	Wheat	--	--	63.44	10,031	24.90	2,899.80
Ethiopia	**Sub-Total ...**	**--**	**--**	**114.68**	**26,260**	**24.90**	**2,899.80**
Gambia	Corn Soy Blend	--	--	1.97	536	--	--
Gambia	Vegetable Oil	--	--	1.53	1,219	--	--
Gambia	**Sub-Total ...**	**--**	**--**	**3.50**	**1,755**	**--**	**--**
Ghana	Peas	--	--	0.38	90	--	--
Ghana	Rice	--	--	4.24	1,603	--	--
Ghana	Sorghum	--	--	3.38	395	--	--
Ghana	S. F. Bulgur	--	--	0.99	190	--	--
Ghana	S. F. Sorghum Grits	--	--	6.04	1,522	--	--
Ghana	Vegetable Oil	--	--	2.20	1,888	--	--
Ghana	Wheat	--	--	29.00	4,930	--	--
Ghana	Wheat Soy Blend	--	--	0.51	202	--	--
Ghana	**Sub-Total ...**	**--**	**--**	**46.74**	**10,821**	**--**	**--**
Guinea	Corn Soya Blend	--	--	2.50	680	--	--
Guinea	Peas	--	--	1.31	312	--	--
Guinea	Vegetable Oil	--	--	0.90	772	--	--
Guinea	**Sub-Total ...**	**--**	**--**	**4.71**	**1,764**	**--**	**--**
Kenya	Corn	--	--	3.95	506	--	--
Kenya	Corn Soya Blend	--	--	2.13	579	--	--
Kenya	Lentils	--	--	1.00	332	--	--
Kenya	Peas	--	--	0.53	126	--	--
Kenya	Vegetable Oil	--	--	7.77	5,174	--	--
Kenya	Wheat	--	--	8.00	1,360	--	--
Kenya	**Sub-Total ...**	**--**	**--**	**23.38**	**8,077**	**--**	**--**
Lesotho	Cornmeal	--	--	1.86	357	--	--
Lesotho	Vegetable Oil	--	--	0.18	154	--	--
Lesotho	**Sub-Total ...**	**--**	**--**	**2.04**	**512**	**--**	**--**
Liberia	Beans	--	--	0.79	348	--	--
Liberia	Bulgur	--	--	8.39	1,493	--	--
Liberia	Corn Soy Blend	--	--	3.44	936	--	--
Liberia	Lentils	--	--	1.62	538	--	--
Liberia	Peas	--	--	2.04	486	--	--
Liberia	Vegetable Oil	--	--	1.04	892	--	--
Liberia	**Sub-Total ...**	**--**	**--**	**17.32**	**4,692**	**--**	**--**
Madagascar	Corn Soya Blend	--	--	2.04	555	--	--
Madagascar	Rice	--	--	1.02	386	--	--
Madagascar	S. F. Bulgur	--	--	1.88	361	--	--
Madagascar	Vegetable Oil	--	--	8.33	5,011	--	--
Madagascar	**Sub-Total ...**	**--**	**--**	**13.27**	**6,313**	**--**	**--**
Mali	Vegetable Oil	--	--	0.20	172	--	--
Mali	Wheat Flour	--	--	3.00	666	--	--
Mali	**Sub-Total ...**	**--**	**--**	**3.20**	**838**	**--**	**--**
Mauritania	Corn Soya Blend	--	--	0.28	76	--	--
Mauritania	S. F. Sorghum Grits	--	--	0.99	249	--	--
Mauritania	Vegetable Oil	--	--	0.38	326	--	--
Mauritania	Wheat Soy Blend	--	--	0.71	282	--	--
Mauritania	**Sub-Total ...**	**--**	**--**	**2.36**	**934**	**--**	**--**
Mozambique	Beans	--	--	0.36	158	--	--
Mozambique	Vegetable Oil	--	--	9.45	5,705	--	--
Mozambique	Wheat	--	--	54.33	8,232	26.70	3,400.00
Mozambique	**Sub-Total ...**	**--**	**--**	**64.14**	**14,095**	**26.70**	**3,400.00**
Niger	Corn Soy Blend	--	--	0.32	87	--	--
Niger	Vegetable Oil	--	--	0.55	472	--	--
Niger	**Sub-Total ...**	**--**	**--**	**0.87**	**559**	**--**	**--**

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		PUBLIC LAW 480					
		Title I		Title II		Title III	
COUNTRY	COMMODITY	000 MT	000 $	000 MT	000 $	000 MT	000 $
Rwanda	Beans	--	--	0.65	286	--	--
Rwanda	Corn	--	--	10.22	1,134	--	--
Rwanda	Corn Soya Blend	--	--	2.22	604	--	--
Rwanda	Cornmeal	--	--	1.07	205	--	--
Rwanda	Peas	--	--	1.21	288	--	--
Rwanda	S.F. Cornmeal	--	--	6.00	1,356	--	--
Rwanda	Vegetable Oil	--	--	2.75	2,360	--	--
Rwanda	**Sub-Total ...**	**--**	**--**	**24.12**	**6,233**	**--**	**--**
Sahel Region	Beans	--	--	1.85	814	--	--
Sahel Region	Bulgur	--	--	12.30	2,189	--	--
Sahel Region	Vegetable Oil	--	--	0.77	661	--	--
Sahel Region	**Sub-Total ...**	**--**	**--**	**14.92**	**3,664**	**--**	**--**
Senegal	Rice	--	--	2.00	756	--	--
Senegal	Vegetable Oil	--	--	0.25	215	--	--
Senegal	**Sub-Total ...**	**--**	**--**	**2.25**	**971**	**--**	**--**
Sierra Leone	Bulgur	--	--	12.86	2,289	--	--
Sierra Leone	Corn Soy Blend	--	--	3.02	821	--	--
Sierra Leone	Lentils	--	--	3.89	1,291	--	--
Sierra Leone	Peas	--	--	0.28	67	--	--
Sierra Leone	Vegetable Oil	--	--	2.36	2,028	--	--
Sierra Leone	**Sub-Total ...**	**--**	**--**	**22.41**	**6,497**	**--**	**--**
Somalia	Corn	--	--	5.00	640	--	--
Somalia	Sorghum	--	--	9.00	1,053	--	--
Somalia	Wheat	--	--	2.00	304	--	--
Somlia	**Sub-Total ...**	**--**	**--**	**16.00**	**1,997**	**--**	**--**
Sudan	Corn Soy Blend	--	--	5.77	1,569	--	--
Sudan	Lentils	--	--	5.95	1,975	--	--
Sudan	S.F. Sorghum Grits	--	--	4.49	1,131	--	--
Sudan	Sorghum	--	--	32.64	3,819	--	--
Sudan	Vegetable Oil	--	--	7.20	6,194	--	--
Sudan	Wheat	--	--	11.28	1,863	--	--
Sudan	**Sub-Total ...**	**--**	**--**	**67.33**	**16,553**	**--**	**--**
Tanzania	Corn	--	--	21.00	2,331	--	--
Tanzania	Corn Soya Blend	--	--	5.90	1,605	--	--
Tanzania	Cornmeal	--	--	15.00	2,880	--	--
Tanzania	Peas	--	--	10.50	2,499	--	--
Tanzania	Vegetable Oil	--	--	3.11	2,668	--	--
Tanzania	**Sub-Total ...**	**--**	**--**	**55.51**	**11,983**	**--**	**--**
Uganda	Corn	--	--	1.50	192	--	--
Uganda	Corn Soya Blend	--	--	0.60	163	--	--
Uganda	Cornmeal	--	--	7.00	1,344	--	--
Uganda	Peas	--	--	0.50	119	--	--
Uganda	S.F. Cornmeal	--	--	5.00	1,130	--	--
Uganda	Vegetable Oil	--	--	5.75	4,934	--	--
Uganda	Wheat	--	--	14.86	2,378	--	--
Uganda	**Sub-Total ...**	**--**	**--**	**35.21**	**10,259**	**--**	**--**
Zambia	Beans	--	--	0.32	141	--	--
Zambia	Vegetable Oil	--	--	0.22	189	--	--
Zambia	**Sub-Total ...**	**--**	**--**	**0.54**	**330**	**--**	**--**
Total Africa ...		**21.15**	**4,999.92**	**643.72**	**162,856**	**51.60**	**6,299.80**
ASIA AND THE MIDDLE EAST							
Afghanistan	Corn Soya Blend	--	--	2.61	710	--	--
Afghanistan	Lentils	--	--	0.89	295	--	--
Afghanistan	Vegetable Oil	--	--	0.71	609	--	--
Afghanistan	Wheat Flour	--	--	5.00	1,110	--	--
Afghanistan		**--**	**--**	**9.21**	**2,725**	**--**	**--**

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		PUBLIC LAW 480					
		Title I		Title II		Title III	
COUNTRY	COMMODITY	000 MT	000 $	000 MT	000 $	000 MT	000 $
Bangladesh	Vegetable Oil	--	--	3.55	3,046	--	--
Bangladesh	Wheat	--	--	13.00	2,171	--	--
Bangladesh	**Sub-Total ...**	**--**	**--**	**16.55**	**5,217**	**--**	**--**
India	Bulgur	--	--	39.55	7,040	--	--
India	Corn Soy Blend	--	--	203.60	55,379	--	--
India	Vegetable Oil	--	--	34.05	28,746	--	--
India	**Sub-Total ...**	**--**	**--**	**277.20**	**91,165**	**--**	**--**
Indonesia	Beans	--	--	1.70	748	--	--
Indonesia	Corn Soy Blend	--	--	0.48	131	--	--
Indonesia	Rice	118.04	33,706.24	52.56	13,997	--	--
Indonesia	Vegetable Oil	--	--	0.18	154	--	--
Indonesia	Wheat	91.51	11,927.24	--	--	--	--
Indonesia	Wheat Soya Blend	--	--	0.70	278	--	--
Indonesia	**Sub-Total ...**	**209.55**	**45,633.48**	**55.62**	**15,308**	**--**	**--**
Korea, North	Corn Soya Blend	--	--	40.00	10,880	--	--
Korea, North	Rice	--	--	35.00	13,230	--	--
Korea, North	Vegetable Oil	--	--	10.00	8,580	--	--
Korea, North	**Sub-Total ...**	**--**	**--**	**85.00**	**32,690**	**--**	**--**
Pakistan	Vegetable Oil	--	--	4.61	3,955	--	--
Pakistan	Wheat	104.81	12,999.97	--	--	--	--
Pakistan	**Sub-Total ...**	**104.81**	**12,999.97**	**4.61**	**3,955**	**--**	**--**
Philippines	Rice	59.33	17,000.00	--	--	--	--
Philippines	Soybean Meal	67.17	12,000.00	--	--	--	--
Philippines	Sorghum	11.67	1,000.00	--	--	--	--
Philippines	**Sub-Total ...**	**138.16**	**30,000.00**	**--**	**--**	**--**	**--**
Sri Lanka	Rice	--	--	3.42	1,293	--	--
Sri Lanka	**Sub-Total ...**	**--**	**--**	**3.42**	**1,293**	**--**	**--**
Yemen	Vegetable Oil	--	--	0.77	661	--	--
Yemen	Wheat Flour	--	--	0.97	215	--	--
Yemen	Wheat Soy Blend	--	--	0.89	353	--	--
Yemen	**Sub-Total ...**	**--**	**--**	**2.63**	**1,229**	**--**	**--**
Total Asia and the Middle East ...		**452.52**	**88,633.46**	**454.24**	**153,582**	**--**	**--**
EUROPE							
Bosnia-Herzegovina	Vegetable Oil	4.75	3,863.08	--	--	--	--
Bosnia-Herzegovina	**Sub-Total ...**	**4.75**	**3,863.08**	**--**	**--**	**--**	**--**
Serbia	Beans	--	--	1.39	710	--	--
Serbia	Corn Soya Blend	--	--	1.23	335	--	--
Serbia	High Energy Buscuits	--	--	0.25	850	--	--
Serbia	Rice	--	--	12.62	4,770	--	--
Serbia	Vegetable Oil	--	--	12.41	10,648	--	--
Serbia	Wheat	--	--	3.50	560	--	--
Serbia	Wheat Flour	--	--	27.37	6,076	--	--
Serbia	**Sub-Total ...**	**--**	**--**	**58.77**	**23,949**	**--**	**--**
Total Europe ...		**4.75**	**3,863.08**	**58.77**	**23,949**	**--**	**--**
LATIN AMERICA AND CARIBBEAN							
Bolivia	Bulgur	--	--	0.33	59	--	--
Bolivia	Corn Soy Blend	--	--	1.40	381	--	--
Bolivia	Lentils	--	--	0.72	239	--	--
Bolivia	Peas	--	--	3.17	754	--	--
Bolivia	S. F. Bulgur	--	--	1.87	359	--	--
Bolivia	S. F. Cornmeal	--	--	0.25	57	--	--
Bolivia	Wheat Flour	--	--	33.86	7,517	--	--
Bolivia	**Sub-Total ...**	**--**	**--**	**41.60**	**9,366**	**--**	**--**

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		PUBLIC LAW 480					
		Title I		Title II		Title III	
COUNTRY	COMMODITY	000 MT	000 $	000 MT	000 $	000 MT	000 $
Dominican Republic	Beans	--	--	2.22	1,299	--	--
Dominican Republic	Bulgur	--	--	3.70	659	--	--
Dominican Republic	Corn Soya Blend	--	--	0.62	169	--	--
Dominican Republic	Rice	--	--	10.32	3,901	--	--
Dominican Republic	Vegetable Oil	--	--	1.34	1,150	--	--
Dominican Republic	**Sub-Total ...**	**--**	**--**	**18.20**	**7,177**	**--**	**--**
Ecuador	Corn Soya Blend	--	--	0.35	95	--	--
Ecuador	Rice	--	--	1.00	378	--	--
Ecuador	Soybean Meal	27.92	5,000.00	--	--	--	--
Ecuador	**Sub-Total ...**	**27.92**	**5,000.00**	**1.35**	**473**	**--**	**--**
El Salvador	Beans	--	--	0.70	409	--	--
El Salvador	Corn	--	--	2.35	301	--	--
El Salvador	Corn Soy Blend	--	--	0.02	5	--	--
El Salvador	Rice	--	--	2.68	1,013	--	--
El Salvador	Tallow	4.25	1,731.25	--	--	--	--
El Salvador	Vegetable Oil	4.60	2,073.46	0.59	506	--	--
El Salvador	**Sub-Total ...**	**8.85**	**3,804.71**	**6.34**	**2,234**	**--**	**--**
Guatemala	Beans	--	--	3.55	2,250	--	--
Guatemala	Bulgur	--	--	0.02	4	--	--
Guatemala	Corn	50.40	4,745.96	65.79	6,979	--	--
Guatemala	Corn Soya Blend	--	--	3.79	1,031	--	--
Guatemala	Rice	--	--	7.77	2,937	--	--
Guatemala	S.F. Bulgur	--	--	1.33	255	--	--
Guatemala	Soybean Meal	22.92	4,165.74	--	--	--	--
Guatemala	Tallow	4.02	1,428.72	--	--	--	--
Guatemala	Vegetable Oil	--	--	1.86	1,559	--	--
Guatemala	**Sub-Total ...**	**77.34**	**10,340.43**	**84.11**	**15,014**	**--**	**--**
Guyana	Corn	2.63	268.80	--	--	--	--
Guyana	Soybean Meal	5.67	1,044.93	--	--	--	--
Guyana	Wheat	--	--	2.05	312	--	--
Guyana	**Sub-Total ...**	**8.30**	**1,313.73**	**2.05**	**312**	**--**	**--**
Haiti	Beans	--	--	0.60	202	--	--
Haiti	Corn Soya Blend	--	--	0.80	218	--	--
Haiti	Cornmeal	--	--	0.72	138	--	--
Haiti	Lentils	--	--	4.49	1,491	--	--
Haiti	Peas	--	--	1.67	397	--	--
Haiti	S. F. Bulgur	--	--	23.75	4,560	--	--
Haiti	Vegetable Oil	--	--	4.24	3,638	--	--
Haiti	Wheat	--	--	--	--	64.80	7,399.00
Haiti	Wheat Flour	--	--	0.82	182	--	--
Haiti	Wheat Soy Blend	--	--	2.84	1,127	--	--
Haiti	**Sub-Total ...**	**--**	**--**	**39.93**	**11,953**	**64.80**	**7,399.00**
Honduras	Beans	--	--	11.74	6,618	--	--
Honduras	Corn	--	--	28.54	3,466	--	--
Honduras	Corn Soy Blend	--	--	3.95	1,074	--	--
Honduras	Cornmeal	--	--	4.23	812	--	--
Honduras	Rice	--	--	32.98	12,466	--	--
Honduras	Soybean Meal	9.50	1,753.70	--	--	--	--
Honduras	Vegetable Oil	--	--	4.70	4,033	--	--
Honduras	Wheat	50.00	6,650.32	7.43	1,161	--	--
Honduras	**Sub-Total ...**	**59.50**	**8,404.02**	**93.57**	**29,631**	**--**	**--**
Jamaica	Rice	33.91	9,004.84	--	--	--	--
Jamaica	**Sub-Total ...**	**33.91**	**9,004.84**	**--**	**--**	**--**	**--**
Nicaragua	Beans Dry	5.00	2,486.60	4.26	2,214	--	--
Nicaragua	Corn	--	--	8.18	999	--	--
Nicaragua	Corn Soy Blend	--	--	9.37	2,549	--	--
Nicaragua	Rice	--	--	18.05	6,823	--	--
Nicaragua	Vegetable Oil	--	--	2.24	1,925	--	--

PLANNED U.S. PL 480 FOOD AID FOR FY 1999
REGION BY COUNTRY BY COMMODITY
Commodity Value and Metric Tons

		PUBLIC LAW 480					
		Title I		Title II		Title III	
COUNTRY	COMMODITY	000 MT	000 $	000 MT	000 $	000 MT	000 $
Nicaragua	**Sub-Total ...**	**5.00**	**2,486.60**	**42.10**	**14,510**	**--**	**--**
Peru	Beans	--	--	1.10	484	--	--
Peru	Bulgur	--	--	8.20	1,460	--	--
Peru	Corn Soy Blend	--	--	4.30	1,170	--	--
Peru	Lentils	--	--	1.73	574	--	--
Peru	Peas	--	--	1.75	417	--	--
Peru	Rice	--	--	3.54	1,338	--	--
Peru	Vegetable Oil	--	--	62.35	37,660	--	--
Peru	Wheat Flour	--	--	6.21	1,379	--	--
Peru	**Sub-Total ...**	**--**	**--**	**89.18**	**44,481**	**--**	**--**
Total Latin America & Caribbean ...		**220.81**	**40,354.32**	**418.43**	**135,152**	**64.80**	**7,399.00**
NEAR EAST							
Egypt	Lentils	--	--	1.00	332	--	--
Egypt	**Sub-Total ...**	**--**	**--**	**1.00**	**332**	**--**	**--**
Total Near East ...		**--**	**--**	**1.00**	**332**	**--**	**--**
NIS COUNTRIES							
Armenia	Vegetable Oil	--	--	0.80	686	--	--
Armenia	Wheat Flour	--	--	2.70	599	--	--
Armenia	**Sub-Total ...**	**--**	**--**	**3.50**	**1,286**	**--**	**--**
Azerbaijan	Vegetable Oil	--	--	1.00	858	--	--
Azerbaijan	Wheat Flour	--	--	4.00	888	--	--
Azerbaijan	**Sub-Total ...**	**--**	**--**	**5.00**	**1,746**	**--**	**--**
Georgia	Peas	--	--	0.40	95	--	--
Georgia	Vegetable Oil	--	--	0.40	343	--	--
Georgia	Wheat	32.76	4,271.05	--	--	--	--
Georgia	**Sub-Total ...**	**32.76**	**4,271.05**	**0.80**	**438**	**--**	**--**
Russia	Beans	3.00	1,610.18	--	--	--	--
Russia	Beef	26.88	86,749.95	--	--	--	--
Russia	Corn	525.08	49,079.99	--	--	--	--
Russia	Lentils	6.77	3,388.88	--	--	--	--
Russia	Nonfortified Nonfat Milk	30.00	68,347.50	--	--	--	--
Russia	Rice	117.70	38,835.38	--	--	--	--
Russia	Peas	8.69	3,353.96	--	--	--	--
Russia	Pork	50.00	88,464.91	--	--	--	--
Russia	Poultry	55.84	29,999.98	--	--	--	--
Russia	Salmon	3.00	6,934.94	--	--	--	--
Russia	Seeds	15.00	17,906.61	--	--	--	--
Russia	Soybean Meal	309.74	51,280.00	--	--	--	--
Russia	Soybeans	205.93	37,698.49	--	--	--	--
Russia	Vegetable Oil	44.03	23,964.78	--	--	--	--
Russia	**Sub-Total ...**	**1,401.64**	**507,615.53**	**--**	**--**	**--**	**--**
Tajikistan	Wheat Flour	--	--	8.00	1,776	--	--
Tajikistan	**Sub-Total ...**	**--**	**--**	**8.00**	**1,776**	**--**	**--**
Uzbekisatan	Soybeans	33.35	6,374.80	--	--	--	--
Uzbekistan	**Sub-Total ...**	**33.35**	**6,374.80**	**--**	**--**	**--**	**--**
Total NIS Countries ...		**1,467.75**	**518,261.38**	**17.30**	**5,246**	**--**	**--**
Total Planned ...		**2,166.99**	**656,112.16**	**1,593.46**	**481,116**	**116.40**	**13,698.80**
Unspecified	Beans	--	--	3.50	1,794	--	--
Unspecified	Corn	--	--	3.00	384	--	--
Unspecified	Corn Soy Blend	--	--	8.17	2,222	--	--

PLANNED U.S. PL 480 FOOD AID FOR FY 1999
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Commodity Value and Metric Tons

		PUBLIC LAW 480					
		Title I		Title II		Title III	
COUNTRY	COMMODITY	000 MT	000 $	000 MT	000 $	000 MT	000 $
Unspecified	Lentils	--	--	1.80	598	--	--
Unspecified	Peas	--	--	1.50	357	--	--
Unspecified	Rice	--	--	4.15	1,569	--	--
Unspecified	S.F. Cornmeal	--	--	2.00	452	--	--
Unspecified	Vegetable Oil	--	--	9.05	7,765	--	--
Unspecified	Wheat Soy Blend	--	--	0.20	79	--	--
Unspecified	**Sub-Total ...**	--	--	**33.37**	**15,220**	--	--
Allocated Commodities		**2,166.99**	**656,112.16**	**1,626.83**	**496,336**	**116.40**	**13,698.80**
Reserve		**1,520.01**	**266,223.83**	**1,103.17**	**84,845**	**35.60**	**5,270.20**
Program Totals		**3,686.99**	**922,335.99**	**2,730.00**	**581,181**	**152.00**	**18,969.00**

NOTE: The reserve includes Title I / Title I funded food for progress, and CCC funds unallocated to Russia.

Sources:

-- P.L. 480 Title I - Based on Program Summary as of September 25, 1999, and the food assistance package announced by the Secretary of Agriculture on Nov. 6, 1998. The total does not reflect ocean freight financing of $94 million.

-- P.L. 480, Title II: Based on Approved Program Summary Country/Sponsor/Commodity Profile as of October 4, 1999. For Title II the total does not reflect ocean freight costs of $386.1 million .

-- P.L. 480, Title III: Based on Approved Program Summary Country/Sponsor/Commodity Profile,as of October 4, 1999. The total does not reflect freight cost.

File updated on: 11/05/99

PLANNED PL 480 U.S. FOOD AID FOR FY 2000
REGION BY COUNTRY BY COMMODITY
Commodity Value and Metric Tons

COUNTRY	COMMODITY	PUBLIC LAW 480					
		Title I		Title II		Title III	
		000 MT	000 $	000 MT	000 $	000 MT	000 $
AFRICA							
Angola	Beans	--	--	9.35	3,749.35	--	--
Angola	Corn	--	--	35.00	3,750.00	--	--
Angola	Corn Soya Blend	--	--	2.50	650.00	--	--
Angola	Cornmeal	--	--	6.03	169.82	--	--
Angola	Rice	14.88	3,928.57	--	--	--	--
Angola	S.F. Cornmeal	--	--	4.02	840.18	--	--
Angola	Vegetable Oil	11.06	3,982.30	6.18	4,789.50	--	--
Angola	**Sub-Total ...**	**25.94**	**7,910.87**	**63.08**	**13,948.85**	**--**	**--**
Benin	Cornmeal	--	--	1.52	294.88	--	--
Benin	Lentils	--	--	0.10	37.40	--	--
Benin	Vegetable Oil	--	--	2.00	1,550.00	--	--
Benin	Wheat	--	--	3.00	369.00	--	--
Benin	Wheat Soy Blend	--	--	1.32	496.32	--	--
Benin	**Sub-Total ...**	**--**	**--**	**7.94**	**2,747.60**	**--**	**--**
Cape Verde Islands	Corn	--	--	7.50	832.50	--	--
Cape Verde Islands	Wheat	--	--	2.50	307.50	--	--
Cape Verde Islands	**Sub-Total ...**	**--**	**--**	**10.00**	**1,140.00**	**--**	**--**
Central African Rep.	Corn Soya Blend	--	--	0.11	28.60	--	--
Central African Rep.	**Sub-Total ...**	**--**	**--**	**0.11**	**28.60**	**--**	**--**
Chad	S. F. Cornmeal	--	--	3.50	731.50	--	--
Chad	Vegetable Oil	--	--	0.10	77.50	--	--
Chad	Wheat Flour	--	--	2.50	570.00	--	--
Chad	**Sub-Total ...**	**--**	**--**	**6.10**	**1,379.00**	**--**	**--**
Ethiopia	Beans	--	--	0.88	352.88	--	--
Ethiopia	Bulgur	--	--	3.96	704.88	--	--
Ethiopia	Corn Soya Blend	--	--	1.79	465.40	--	--
Ethiopia	Lentils	--	--	0.07	26.18	--	--
Ethiopia	Rice	--	--	0.91	318.50	--	--
Ethiopia	Vegetable Oil	--	--	11.21	8,687.75	--	--
Ethiopia	Wheat	--	--	28.53	4,993.21	--	--
Ethiopia	**Sub-Total ...**	**--**	**--**	**47.35**	**15,548.80**	**--**	**--**
Gambia	Corn Soy Blend	--	--	2.66	691.60	--	--
Gambia	Vegetable Oil	--	--	1.75	1,227.25	--	--
Gambia	**Sub-Total ...**	**--**	**--**	**4.41**	**1,918.85**	**--**	**--**
Ghana	S. F. Sorghum Grits	--	--	11.71	2,927.50	--	--
Ghana	Vegetable Oil	--	--	2.50	1,777.75	--	--
Ghana	Wheat	--	--	18.90	2,923.20	--	--
Ghana	Wheat Soy Blend	--	--	1.72	646.72	--	--
Ghana	**Sub-Total ...**	**--**	**--**	**34.83**	**8,275.17**	**--**	**--**
Guinea	Bulgur	--	--	5.50	979.00	--	--
Guinea	Corn Soya Blend	--	--	1.00	260.00	--	--
Guinea	Vegetable Oil	--	--	2.60	1,887.50	--	--
Guinea	**Sub-Total ...**	**--**	**--**	**9.10**	**3,126.50**	**--**	**--**
Kenya	Corn	--	--	4.40	536.80	--	--
Kenya	**Sub-Total ...**	**--**	**--**	**4.40**	**536.80**	**--**	**--**
Liberia	Corn Soy Blend	--	--	0.62	161.20	--	--
Liberia	Lentils	--	--	0.35	130.90	--	--
Liberia	Vegetable Oil	--	--	1.50	1,120.00	--	--
Liberia	Wheat Flour	--	--	1.50	342.00	--	--
Liberia	**Sub-Total ...**	**--**	**--**	**3.97**	**1,754.10**	**--**	**--**
Madagascar	Corn Soya Blend	--	--	1.24	322.40	--	--
Madagascar	S. F. Bulgur	--	--	0.70	133.70	--	--
Madagascar	Vegetable Oil	--	--	3.52	2,135.52	--	--

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		PUBLIC LAW 480					
		Title I		Title II		Title III	
COUNTRY	COMMODITY	000 MT	000 $	000 MT	000 $	000 MT	000 $
Madagascar	**Sub-Total ...**	--	--	**5.46**	**2,591.62**	--	--
Mali	Wheat Flour	--	--	1.74	396.72	--	--
Mali	**Sub-Total ...**	--	--	**1.74**	**396.72**	--	--
Mauritania	Beans	--	--	0.11	44.11	--	--
Mauritania	S. F. Sorghum Grits	--	--	0.93	232.50	--	--
Mauritania	Vegetable Oil	--	--	0.40	310.00	--	--
Mauritania	Wheat Soy Blend	--	--	0.65	244.40	--	--
Mauritania	**Sub-Total ...**	--	--	**2.09**	**831.01**	--	--
Mozambique	Rice	5.34	1,410.26	--	--	--	--
Mozambique	Vegetable Oil	3.92	1,411.76	9.00	5,319.00	--	--
Mozambique	Wheat	9.95	1,189.05	13.39	1,646.97	--	--
Mozambique	**Sub-Total ...**	**19.21**	**4,011.07**	**22.39**	**6,965.97**	--	--
Rwanda	Corn	--	--	4.00	488.00	--	--
Rwanda	Corn Soya Blend	--	--	3.00	780.00	--	--
Rwanda	Peas	--	--	5.00	1,385.00	--	--
Rwanda	**Sub-Total ...**	--	--	**12.00**	**2,653.00**	--	--
Senegal	Beans	--	--	0.11	44.11	--	--
Senegal	**Sub-Total ...**	--	--	**0.11**	**44.11**	--	--
Sierra Leone	Bulgur	--	--	25.15	4,476.70	--	--
Sierra Leone	Corn Soy Blend	--	--	3.63	943.80	--	--
Sierra Leone	Lentils	--	--	5.91	2,210.34	--	--
Sierra Leone	Peas	--	--	1.81	501.37	--	--
Sierra Leone	Vegetable Oil	--	--	2.79	2,108.25	--	--
Sierra Leone	**Sub-Total ...**	--	--	**39.29**	**10,240.46**	--	--
Somalia	Corn	--	--	4.00	488.00	--	--
Somalia	Sorghum	--	--	10.00	1,150.00	--	--
Somalia	Wheat	--	--	4.00	548.00	--	--
Somlia	**Sub-Total ...**	--	--	**18.00**	**2,186.00**	--	--
Uganda	Corn	--	--	2.10	256.20	--	--
Uganda	Nonfortified Nonfat Milk	--	--	1.56	432.12	--	--
Uganda	Vegetable Oil	--	--	4.50	3,487.50	--	--
Uganda	Wheat	--	--	7.67	1,073.80	--	--
Uganda	**Sub-Total ...**	--	--	**15.83**	**5,249.62**	--	--
		--	--	--			
		--	--	--	--		
Total Africa ...		**45.15**	**11,921.94**	**308.20**	**81,562.78**	--	--
		--	--	--	--		
ASIA AND THE MIDDLE EAST							
Afghanistan	Corn Soya Blend	--	--	1.00	260.00	--	--
Afghanistan	Wheat	--	--	10.00	1,380.00	--	--
Afghanistan		--	--	**11.00**	**1,640.00**	--	--
Bangladesh	Vegetable Oil	--	--	2.21	1,712.75	--	--
Bangladesh	**Sub-Total ...**	--	--	**2.21**	**1,712.75**	--	--
Cambodia	Rice	--	--	10.00	3,500.00	--	--
Cambodia	**Sub-Total ...**	--	--	**10.00**	**3,500.00**	--	--
East Timor	Corn	--	--	4.50	549.00	--	--
East Timor	Corn Soya Blend	--	--	0.55	143.00	--	--
East Timor	Rice	--	--	4.50	1,575.00	--	--
East Timor	Soybeans	--	--	0.50	110.00	--	--
East Timor	**Sub-Total ...**	--	--	**10.05**	**2,377.00**	--	--
India	Bulgur	--	--	39.71	7,068.38	--	--
India	Corn Soy Blend	--	--	133.22	34,637.20	--	--
India	Vegetable Oil	--	--	17.50	12,648.40	--	--
India	**Sub-Total ...**	--	--	**190.43**	**54,353.98**	--	--

PLANNED PL 480 U.S. FOOD AID FOR FY 2000
REGION BY COUNTRY BY COMMODITY
Commodity Value and Metric Tons

COUNTRY	COMMODITY	PUBLIC LAW 480					
		Title I		Title II		Title III	
		000 MT	000 $	000 MT	000 $	000 MT	000 $
Indonesia	Beans	--	--	0.30	120.30	--	--
Indonesia	Rice	75.76	20,000.00	18.78	6,573.00	--	--
Indonesia	Wheat Soya Blend	--	--	1.36	511.36	--	--
Indonesia	**Sub-Total ...**	**75.76**	**20,000.00**	**20.44**	**7,204.66**	**--**	**--**
Korea, North	Corn	--	--	92.00	8,832.00	--	--
Korea, North	Rice	--	--	5.00	1,750.00	--	--
Korea, North	Soybeans	--	--	20.00	4,400.00	--	--
Korea, North	Vegetable Oil	--	--	10.00	7,750.00	--	--
Korea, North	Wheat	--	--	73.00	10,074.00	--	--
Korea, North	**Sub-Total ...**	**--**	**--**	**200.00**	**32,806.00**	**--**	**--**
Pakistan	Corn	53.76	5,000.00	--	--	--	--
Pakistan	Wheat	41.84	5,000.00	--	--	--	--
Pakistan	**Sub-Total ...**	**95.60**	**10,000.00**	**--**	**--**	**--**	**--**
Philippines	Corn	107.53	10,000.00	--	--	--	--
Philippines	Soybean Meal	51.02	10,000.00	--	--	--	--
Philippines	**Sub-Total ...**	**158.55**	**20,000.00**	**--**	**--**	**--**	**--**
Sri Lanka	Wheat	41.84	5,000.00	--	--	--	--
Sri Lanka	**Sub-Total ...**	**41.84**	**5,000.00**	**--**	**--**	**--**	**--**
Total Asia and the Middle East ...		**371.75**	**55,000.00**	**444.13**	**103,594.39**	**--**	**--**
EUROPE							
Albania	Beans	--	--	1.32	529.32	--	--
Albania	Rice	--	--	0.60	210.00	--	--
Albania	Vegetable Oil	--	--	1.02	790.50	--	--
Albania	Wheat Flour	--	--	7.99	1,821.72	--	--
Albania	**Sub-Total ...**	**--**	**--**	**10.93**	**3,351.54**	**--**	**--**
Bosnia-Herzegovina	Vegetable Oil	11.11	4,000.00	--	--	--	--
Bosnia-Herzegovina	Wheat	32.36	3,867.31	--	--	--	--
Bosnia-Herzegovina	**Sub-Total ...**	**43.47**	**7,867.31**	**--**	**--**	**--**	**--**
Bulgaria	Rice	5.00	1,320.00	--	--	--	--
Bulgaria	Soybean meal	10.00	1,960.00	--	--	--	--
Bulgaria	**Sub-Total ...**	**15.00**	**3,280.00**	**--**	**--**	**--**	**--**
Total Europe ...		**58.47**	**11,147.31**	**10.93**	**3,351.54**	**--**	**--**
LATIN AMERICA AND CARIBBEAN							
Bolivia	Bulgur	--	--	1.39	247.42	--	--
Bolivia	Corn Soy Blend	--	--	3.65	949.00	--	--
Bolivia	Lentils	--	--	2.84	1,062.16	--	--
Bolivia	Peas	--	--	0.38	105.26	--	--
Bolivia	Rice	--	--	0.19	66.50	--	--
Bolivia	S. F. Bulgur	--	--	1.95	372.45	--	--
Bolivia	Wheat Flour	--	--	34.52	7,870.56	--	--
Bolivia	**Sub-Total ...**	**--**	**--**	**44.92**	**10,673.35**	**--**	**--**
Ecuador	Wheat	31.15	3,722.74	--	--	--	--
Ecuador	**Sub-Total ...**	**31.15**	**3,722.74**	**--**	**--**	**--**	**--**
Guatemala	Beans	--	--	1.28	959.47	--	--
Guatemala	Corn	--	--	36.97	3,564.98	--	--
Guatemala	Corn Soya Blend	--	--	2.52	655.20	--	--
Guatemala	Rice	--	--	2.86	1,001.00	--	--

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COUNTRY	COMMODITY	PUBLIC LAW 480					
		Title I		Title II		Title III	
		000 MT	000 $	000 MT	000 $	000 MT	000 $
Guatemala	S.F. Bulgur	--	--	1.31	250.21	--	--
Guatemala	Vegetable Oil	--	--	1.16	856.15	--	--
Guatemala	**Sub-Total ...**	--	--	**46.10**	**7,287.01**	--	--
Guyana	Wheat	31.35	3,746.08	--	--	--	--
Guyana	**Sub-Total ...**	**31.35**	**3,746.08**	--	--	--	--
Haiti	Beans	--	--	0.49	196.49	--	--
Haiti	Cornmeal	--	--	0.20	38.80	--	--
Haiti	Lentils	--	--	3.37	1,260.38	--	--
Haiti	Peas	--	--	0.08	22.16	--	--
Haiti	S. F. Bulgur	--	--	13.27	2,534.57	--	--
Haiti	Vegetable Oil	--	--	2.56	1,984.00	--	--
Haiti	Wheat	--	--	45.00	5,535.00	--	--
Haiti	Wheat Soy Blend	--	--	1.92	721.92	--	--
Haiti	**Sub-Total ...**	--	--	**66.89**	**12,293.32**	--	--
Honduras	Beans	4.98	2,250.97	1.09	756.46	--	--
Honduras	Corn Soy Blend	--	--	0.76	197.60	--	--
Honduras	Cornmeal	--	--	0.07	13.58	--	--
Honduras	Rice	--	--	1.09	381.50	--	--
Honduras	Tallow	7.31	2,266.08	--	--	--	--
Honduras	Vegetable Oil	--	--	0.42	325.50	--	--
Honduras	Wheat	--	--	14.00	1,974.00	--	--
Honduras	**Sub-Total ...**	**12.29**	**4,517.05**	**17.43**	**3,648.64**	--	--
Jamaica	Rice	30.30	8,000.00	--	--	--	--
Jamaica	**Sub-Total ...**	**30.30**	**8,000.00**	--	--	--	--
Nicaragua	Vegetable Oil	--	--	0.25	193.75	--	--
Nicaragua	**Sub-Total ...**	--	--	**0.25**	**193.75**	--	--
Peru	Bulgur	--	--	4.47	795.66	--	--
Peru	Corn Soy Blend	--	--	1.37	356.20	--	--
Peru	Lentils	--	--	1.51	564.74	--	--
Peru	Peas	--	--	2.23	617.71	--	--
Peru	Rice	--	--	2.21	773.50	--	--
Peru	Vegetable Oil	--	--	57.70	34,228.23	--	--
Peru	Wheat	41.84	5,000.00	--	--	--	--
Peru	Wheat Flour	--	--	5.13	1,169.64	--	--
Peru	**Sub-Total ...**	**41.84**	**5,000.00**	**74.62**	**38,505.68**	--	--
Total Latin America & Caribbean ...		**146.93**	**24,985.87**	**250.21**	**72,601.75**	--	--
NEAR EAST							
Egypt	Vegetable Oil	--	--	0.69	534.75	--	--
Egypt	**Sub-Total ...**	--	--	**0.69**	**534.75**	--	--
Total Near East ...		--	--	**0.69**	**534.75**	--	--
NIS COUNTRIES							
Armenia	Vegetable Oil	--	--	0.30	232.50	--	--
Armenia	Wheat Flour	--	--	2.00	456.00	--	--
Armenia	**Sub-Total ...**	--	--	**2.30**	**688.50**	--	--
Azerbaijan	Wheat Flour	--	--	3.50	798.00	--	--
Azerbaijan	**Sub-Total ...**	--	--	**3.50**	**798.00**	--	--
Georgia	Wheat Flour	--	--	2.00	456.00	--	--
Georgia	**Sub-Total ...**	--	--	**2.00**	**456.00**	--	--

PLANNED PL 480 U.S. FOOD AID FOR FY 2000
REGION BY COUNTRY BY COMMODITY
Commodity Value and Metric Tons

COUNTRY	COMMODITY	PUBLIC LAW 480					
		Title I		Title II		Title III	
		000 MT	000 $	000 MT	000 $	000 MT	000 $
Russia	Beans	11.54	8,152.42	--	--	--	--
Russia	Buckwheat	8.26	1,238.25	--	--	--	--
Russia	Corn	444.92	41,750.02	--	--	--	--
Russia	Lentils	7.15	3,869.80	--	--	--	--
Russia	Rice	22.52	8,965.66	--	--	--	--
Russia	Peas	9.55	4,298.69	--	--	--	--
Russia	Poultry	20.17	10,700.02	--	--	--	--
Russia	Soybean Meal	125.26	20,700.02	--	--	--	--
Russia	Soybeans	19.00	4,223.51	--	--	--	--
Russia	Vegetable Oil	29.84	25,670.97	--	--	--	--
Russia	Wheat Flour	40.09	8,504.14	--	--	--	--
Russia	**Sub-Total ...**	**738.29**	**138,073.48**	**--**	**--**	**--**	**--**
Tajikistan	Vegetable Oil	--	--	0.30	232.50	--	--
Tajikistan	Wheat Flour	--	--	2.00	456.00	--	--
Tajikistan	**Sub-Total ...**	**--**	**--**	**2.30**	**688.50**	**--**	**--**
Uzbekisatan	Wheat	44.15	5,275.94	--	--	--	--
Uzbekistan	**Sub-Total ...**	**44.15**	**5,275.94**	**--**	**--**	**--**	**--**
Total NIS Countries ...		**782.44**	**143,349.42**	**10.10**	**2,631.00**	**--**	**--**
Total Planned ...		**1,404.75**	**246,404.55**	**1,024.26**	**264,276.21**	**--**	**--**
UNSPECIFIED							
Unspecified	Rice	--	--	6.00	2,100.00	--	--
Unspecified	Vegetable Oil	--	--	5.00	3,875.00	--	--
Unspecified	Wheat Flour	--	--	45.00	10,260.00	--	--
Unspecified (Private Trade)	*Undesignated*	*40.98*	*10,000.00*	--	--	--	--
Unspecified	**Sub-Total ...**	**40.98**	**10,000.00**	**56.00**	**16,235.00**	**--**	**--**
Allocated Commodities		**1,445.73**	**256,404.55**	**1,080.26**	**280,511.21**	**--**	**--**
Reserve		**84.88**	**60,059.07**	**1,172.74**	**273,540.44**	**--**	**--**
Program Totals		**1,530.61**	**316,463.62**	**2,253.00**	**554,051.65**	**--**	**--**

Sources:
-- P.L. 480 Title I - Based on Program Summary as of February 17, 2000 it also includes carryover from the amended 1999 Russia program. The total does not reflect ocean freight financing of $42.9 million.
-- P.L. 480, Title II - Based on Approved Program Summary Country/Sponsor/Commodity Profile as of January 5, 2000
For Title II the total does not reflect ocean freight costs of $192.2 million .
-- P.L. 480, Title III: Based on Approved Program Summary Country/Sponsor/Commodity Profile as of January 5, 2000. The total does not reflect freight cost.

File updated on: 02/17/2000

FUNDING FOR COCHRAN FELLOWSHIP PROGRAM

Question. The fiscal year 2001 budget proposes to maintain FAS funding for the Cochran Fellowship Program at a level of $3.5 million. Are available resources sufficient to extend fellowships to all countries which seek to participate in the program? If not, what additional funding would be required to meet these requests?

Answer. The success of the Cochran Fellowship Program to initiate and pursue short- and long-term trade objectives and to influence public- and private-sector decision makers has led to increased requests to initiate the program in numerous countries around the world. For fiscal year 2001, we have had requests from Agricultural Affairs Offices and U.S. Embassies to start a Cochran Program in Egypt,

Jordan, Peru, Ecuador, Argentina, Uruguay, Mongolia, and Cambodia, and expect requests for several additional African countries. The most frequent requests for the Cochran Program is to provide training in areas related to WTO/CODEX agricultural issues, food safety, sanitary and phytosanitary (SPS) issues, genetically modified organisms (GMOs), and biotechnology. In general, one of every four candidates that apply for the program are selected.

Question. Please provide fiscal year 1999 and fiscal year 2000 Cochran Fellowship Program participant levels by country and region, along with the projected participant levels for fiscal year 2001.

Answer. In fiscal year 1999, a total of 797 participants from 65 countries received training under the Country Fellowship Program. Participant numbers by region and by country follow:

—Asia: 131 participants from seven countries: Korea (1 participant), Malaysia (11), China (37), Thailand (18), Indonesia (25), Philippines (11), and Vietnam (28).

—Eastern Europe: 215 participants from 15 countries: Turkey (23), Poland (47), Hungary (15), Czech Republic (16), Slovakia (14), Albania (5), Bulgaria (15), Slovenia (8), Croatia (8), Latvia (14), Estonia (13), Lithuania (12), Romania (20), Bosnia (2), and Macedonia (3).

—Latin America and Caribbean: 149 participants from 14 Latin American and Caribbean countries: Mexico (42), Venezuela (6), Trinidad & Tobago (5), Caribbean Islands (44), Panama (8), Colombia (17), Chile (1), Guatemala (3), Costa Rica (9), Nicaragua (5), Brazil (5), El Salvador (2), Suriname (1), and Guyana (1).

—Africa and Middle East: 113 participants from 18 African and Middle Eastern countries: Cote d' Ivoire (9), Ghana (6), Senegal (10), Nigeria (5), South Africa (22), Namibia (1), Kenya (12), Uganda (9), Tanzania (5), Tunisia (12), Morocco (1), Oman (4), and 17 participants from 6 additional countries.

—New Independent States: 189 participants from 11 countries of the New Independent States: Russia (53), Ukraine (21), Kazakstan (17), Kyrgyzstan (13), Uzbekistan (20), Turkmenistan (13), Tajikistan (3), Armenia (16), Moldova (15), Georgia (9), and

—Azerbaijan (9).

The selection of participants for fiscal year 2000 has not yet been completed, thus we cannot provide exact Cochran participant levels by country for fiscal year 2000. We expect, however, to provide training to about 750 to 800 participants—roughly the same level as in fiscal year 1999. We will extend the program to six new countries in fiscal year 2000 (India, Sri Lanka, Pakistan, Botswana, Zimbabwe, Mozambique).

In fiscal year 2001, we estimate that we will again provide training to about 750–800 participants if funding levels remain at present levels.

Question. Please provide examples of the benefits of the fiscal year 1999 Cochran Fellowship Program to U.S. agriculture.

Answer. Cochran Fellowship Program participants attend trade shows, seminars, and meet with public and private sector contacts to pursue the objectives of their training. Several examples of fiscal year 1999 programs that had immediate benefits to U.S. agriculture include:

—The Cochran Program joined with FAS International Trade Policy and FAS Emerging Markets program areas to develop a U.S.-sub-Saharan Africa Workshop on Codex Alimentarius and the World Trade Organization involving 37 participants from 17 African countries. The training improved participants' understanding of the processes at work in the WTO and the international standard setting bodies. Most importantly, the discussions pointed out areas of shared interests, including mutual concerns in the next round of multilateral negotiations. The participants agreed that there are significant areas in which the U.S. and sub-Saharan African countries can cooperate in international trade and the work of the international standard setting bodies.

—The Cochran Program sponsored a Biotechnology and Genetically Modified Organism (GMO) training activity for 15 experts from five Central European countries Czech Republic, Hungary, Slovenia, Croatia, and Slovakia. The program provided a balanced U.S. viewpoint of this topic to Eastern European policy makers. A film on U.S. biotechnology has been developed by a Czech researcher from Prague Agricultural University and is now available to Central and Eastern Europe audiences.

—The FAS Agricultural Offices in China reports that fiscal year 1999 Cochran teams have led to sales of: U.S. frozen seafood (2 containers of conch, 3 containers of squid, and 5 containers of scallops), live seafood (geoduck clams,

crabs, Maine lobster and abalone), french fries (4 containers), and pistachios (over 10 containers) to date.

—The FAS Agricultural Officer covering Senegal reported that a fiscal year 1999 participant purchased two containers one each of frozen poultry and frozen meat. This was the first U.S. export of frozen chicken and meat to Senegal. The participant intends to purchase two containers per month, the value of which is estimated at over $200,000 per year.

—Despite the slowdown in the Indonesian economy, fiscal year 1999 participants report they purchased U.S. supplies of raw popcorn, almonds, prunes, dried fruits, walnuts, organic vegetables, wheat flour, and skim milk powder, as a result of their fiscal year 1999 Cochran training programs.

—The U.S. Meat Export Federation reports sales of U.S. lamb to Barbados after a Cochran training activity.

—The FAS Agricultural Trade Office in Miami states that: "The Cochran Fellowship Program continues to be the most effective FAS program used by our office in fiscal year 1999. The constraints in the Caribbean of limited training opportunities and some resentment of U.S. government policy continue to be issues for our office. The ability to offer training opportunities to persons in our sector is a powerful tool for us to use in our efforts to expand our exports in the Caribbean."

—The Agricultural Officer in Costa Rica reports pilot sales of 190 cases of US wine following a Cochran Wine Merchandising program.

—FAS Agricultural Attaches and former Cochran participants from Central and Eastern Europe report that Cochran training activities led to sales in fiscal year 1999 of: soybeans and wheat to Albania; wild rice to Czech Republic; tofu grade soybeans to Slovakia; almonds and walnut meal to Hungary; the first ever direct sale of Florida citrus and U.S. walnuts to Poland, and meat to Romania. We have heard that citrus and walnut sales continue through the present.

—The FAS Agricultural Affairs Officer in Vietnam states that all the fiscal year 1999 Cochran Programs were useful: ". . . the two programs in Animal Health helped stave-off a possible ban on all beef imports (i.e., dioxin scare in EU) and greased the skids on the quarantine period for 309 U.S. breeding hogs. Moreover, the participant who attended the Grain Purchasing program actually bought 10,000 MT of wheat last week. The Agricultural Banking Team has been brought up to speed on GSM–102, and will be very useful in the event of a Vietnam-specific GSM program."

—The Texas Grain Sorghum Board reports that over 126,000 metric tons of South Texas grain sorghum was sold to Mexican buyers as a direct result of a Cochran activity in June 1999.

—Natalia Markelova from the Samara region of Russia purchased 54 pregnant dairy goats at a value of $50,000 from an Illinois company during her fiscal year 1999 Cochran program. She plans to introduce goat milk into the domestic market and offer goat milk as an option for baby formula.

—The FAS Agricultural Specialist in Uzbekistan states: "The five participants from the oilseed industry found the Cochran/American Soybean Association training to be very professional and effective. They established many useful contacts with U.S. producers and processors of soybeans. Following the training, Uzbekistan imported a total of 123,000 tons of US soybeans under GSM–102 and Public Law 480 Title I programs. We strongly believe that Cochran training was one of the effective tools which positively affected Uzbekistan's decision to import US soybeans for the first time. Post anticipates that Uzbekistan is likely to continue to import U.S. soybeans."

Question. Please provide the total amount of funding made available for the Cochran Fellowship Program, including any funding made available by other Federal agencies and the CCC, for each of the fiscal years 1995–2000.

Answer. The Cochran Fellowship Program receives funding from three sources: direct Congressional appropriations, funding from the FAS Emerging Markets Program (EMP) for Cochran activities in specific countries, and from the U.S. Agency for International Development (USAID) under the Freedom Support Act for Cochran activities in the New Independent States (NIS). The following lists funding levels from these sources, 1995 to 2000.

Year	Appropriations	EMP	FAS USAID	Total
1995	$2,178,000	$2,100,000	$2,250,000	$6,528,000
1996	2,428,000	1,800,000	1,500,000	5,728,000
1997	2,428,000	945,000	1,800,000	5,173,000

Year	Appropriations	EMP	FAS USAID	Total
1998	3,000,000	1,120,000	1,800,000	5,920,000
1999	3,500,000	1,834,000	1,846,000	7,180,000
2000	3,500,000	([1])	1,562,000	5,062,000

[1] Not yet determined.

ALLOCATIONS

Question. Please provide the Market Access Program allocations for fiscal year 1999, including the amount of the grant, the recipient company, commodity, and targeted markets.

Answer. The information is provided for the records.

[The information follows:]

1999 MAP Brand Companies and Products

company_name	country_name	Commodity	Approved Budget
2020 Development Co., LLC	China (Mainland)	Beverages	5,000
2020 Development Co., LLC	Hong Kong	Beverages	5,000
2020 Development Co., LLC	Japan	Beverages	5,000
2020 Development Co., LLC	Peru	Beverages	5,000
2020 Development Co., LLC	Philippines	Beverages	5,000
2020 Development Co., LLC	Taiwan	Beverages	5,000
A & A Amazing Foods, Inc.	United States	Potato, soy, and whey based milk alternatives	5,000
A & H International Inc.	China (Mainland)	Seafood	5,000
Aarid Enterprise Corporation	Argentina	Food Service Products	6,000
Accelerated Genetics (Small Size)	Argentina	US animal breeders	3,000
Accelerated Genetics (Small Size)	Brazil	US animal breeders	3,000
Accelerated Genetics (Small Size)	Chile	US animal breeders	2,100
Affininty Beverages, Inc.	United States	SOFTD -- soft drinks	5,000
Agway Inc.	Spain	Hulled Millet, Confection Sunflower	5,000
Alamos Distributors, Inc.	Germany	Hot sauce, peanuts, salsa, condiments, chips	5,000
Alamos Distributors, Inc.	United States	Hot sauce, peanuts, salsa, condiments, chips	5,000
Alderfer Bologna Co.	Canada	Dried Beef and Poultry sliced chips	5,000
Alderfer Bologna Co.	Japan	Dried Beef and Poultry sliced chips	5,000
Alderfer Bologna Co.	United States	Dried Beef and Poultry sliced chips	5,000
Allied Foods, Inc.	Mexico	Pet foods	10,000
Amal Meat Corp	Jordan	grocery products/ condiments	5,000
Amal Meat Corp	United Arab Emirates	grocery products/ condiments	5,000
Amal Meat Corp	United States	grocery products/ condiments	5,000
Amal Meat Corp	West Bank	grocery products/ condiments	5,000
America's Classic Foods	China (Mainland)	Mixed & Processed: Bakery products, hard and soft ice	5,000
America's Classic Foods	Korea, Republic of	Mixed & Processed: Bakery products, hard and soft ice	5,000
America's Classic Foods	Philippines	Mixed & Processed: Bakery products, hard and soft ice	5,000
American Eagle Beverages, Inc.	Argentina	Beverages	5,000
American Eagle Beverages, Inc.	Brazil	Beverages	5,000
American Eagle Beverages, Inc.	Hong Kong	Beverages	5,000
American Foodservice Co	Bulgaria	Mixed bakery products	5,000
American Foodservice Co	Cyprus	Mixed bakery products	5,000
American Foodservice Co	Czech Republic	Mixed bakery products	5,000
American Foodservice Co	Hungary	Mixed bakery products	5,000
American Foodservice Co	Poland	Mixed bakery products	5,000
American Foodservice Co	Romania	Mixed bakery products	5,000
American Health and Nutrition, Inc	Germany	Beans, buckwheat, wheat, sunglower seeds, rye, barley	5,000
American Health and Nutrition, Inc	Italy	Beans, buckwheat, wheat, sunglower seeds, rye, barley	5,000
American Health and Nutrition, Inc	Japan	Beans, buckwheat, wheat, sunglower seeds, rye, barley	5,000
American Health and Nutrition, Inc	Netherlands	Beans, buckwheat, wheat, sunglower seeds, rye, barley	5,000
American Health and Nutrition, Inc	United Kingdom	Beans, buckwheat, wheat, sunglower seeds, rye, barley	5,000
American Health and Nutrition, Inc	United States	Beans, buckwheat, wheat, sunglower seeds, rye, barley	5,000
American Pop Corn Company	Canada	pop corn	10,000
American Pop Corn Company	Czech Republic	pop corn	5,000
American Pop Corn Company	Kuwait	pop corn	5,000
American Pop Corn Company	Lebanon	pop corn	5,000
American Pop Corn Company	Mexico	pop corn	5,000
American Pop Corn Company	Philippines	pop corn	5,000
American Pop Corn Company	Poland	pop corn	5,000
American Pop Corn Company	Saudi Arabia	pop corn	5,000
American Pop Corn Company	United Arab Emirates	pop corn	5,000
Ames International, Inc.	China (Mainland)	Nuts & Nut Products	5,000
Ames International, Inc.	Mexico	Nuts & Nut Products	5,000
Ames International, Inc.	Philippines	Nuts & Nut Products	5,000

1999 MAP Brand Companies and Products

company_name	country_name	Commodity	Approved Budget
Ames International, Inc.	United States	Nuts & Nut Products	5,000
Ampc, Inc.	Australia	Whey Protein Concentrate	5,000
Ampc, Inc.	Philippines	Whey Protein Concentrate	5,000
Ampc, Inc.	Taiwan	Whey Protein Concentrate	5,000
Ampc, Inc.	Thailand	Whey Protein Concentrate	5,000
Amy's Kitchen, Inc.	Canada	Frozen entrees	5,000
Amy's Kitchen, Inc.	United Kingdom	Frozen entrees	5,000
Amy's Kitchen, Inc.	United States	Frozen entrees	5,000
Amy Foods, Inc.	Canada	egg rolls, chicken, seafood	5,000
Ann's House of Nuts	Argentina	Nuts, Dried Fruit, Trail Mixes	6,250
Ann's House of Nuts	France	Nuts, Dried Fruit, Trail Mixes	2,650
Ann's House of Nuts	Germany	Nuts, Dried Fruit, Trail Mixes	6,500
Ann's House of Nuts	Mexico	Nuts, Dried Fruit, Trail Mixes	2,850
Ann's House of Nuts	United Arab Emirates	Nuts, Dried Fruit, Trail Mixes	5,000
Ann's House of Nuts	United Kingdom	Nuts, Dried Fruit, Trail Mixes	1,750
Annie's Homegrown, Inc.	Canada	Macaroni/Cheese Dinners	5,000
Annie's Homegrown, Inc.	United States	Macaroni/Cheese Dinners	5,000
Annie's Naturals	Canada	Condiments, CONDI	5,000
Annie's Naturals	Germany	Condiments, CONDI	5,000
Annie's Naturals	Netherlands	Condiments, CONDI	5,000
Annie's Naturals	United Kingdom	Condiments, CONDI	5,000
Arrowac Fisheries, Inc.	Belgium-Luxembourg	Squid, Dogfish	5,000
Arrowac Fisheries, Inc.	China (Mainland)	Squid, Dogfish	5,000
Aspen International Export Inc.	Tonga	groecery products	5,000
Award Baking International	Hong Kong	Cookies, crackers	5,000
Award Baking International	Japan	Cookies, crackers	5,000
Award Baking International	United States	Cookies, crackers	5,000
A. Smith Bowman (Small Size)	Chile	Spirits	10,000
A. Smith Bowman (Small Size)	Peru	Spirits	25,000
A. Smith Bowman (Small Size)	South Africa, Republic of	Spirits	15,000
A.M. Beebe Company	Bahrain	dried fruits, nuts	5,000
A.M. Beebe Company	Germany	dried fruits, nuts	5,000
A.M. Beebe Company	Japan	dried fruits, nuts	5,000
A.M. Beebe Company	United Kingdom	dried fruits, nuts	5,000
Bagels By Bell	Japan	bagels and bialys	5,000
Bagels By Bell	United States	bagels and bialys	5,000
Bard Valley Medjool Date Growers	Australia	Medjool Dates	5,000
Bard Valley Medjool Date Growers	Canada	Medjool Dates	5,000
Bard Valley Medjool Date Growers	France	Medjool Dates	5,000
Bard Valley Medjool Date Growers	New Zealand	Medjool Dates	5,000
Bard Valley Medjool Date Growers	Switzerland	Medjool Dates	5,000
Bard Valley Medjool Date Growers	United Kingdom	Medjool Dates	5,000
Bargetto's Santa Cruz Winery	Canada	wine	1,000
Bargetto's Santa Cruz Winery	China (Mainland)	wine	1,000
Bargetto's Santa Cruz Winery	Hong Kong	wine	1,000
Bargetto's Santa Cruz Winery	Japan	wine	1,000
Bargetto's Santa Cruz Winery	Mexico	wine	1,000
Barlean's Organic Oils	Hong Kong	Other Vegetable Oil	5,000
Barlean's Organic Oils	Ireland	Other Vegetable Oil	5,000
Barlean's Organic Oils	Japan	Other Vegetable Oil	5,000
Barlean's Organic Oils	Netherlands	Other Vegetable Oil	5,000
Barlean's Organic Oils	Singapore	Other Vegetable Oil	5,000
Barlean's Organic Oils	Taiwan	Other Vegetable Oil	5,000
Bay World	Argentina	Offals	4,000

1999 MAP Brand Companies and Products

company_name	country_name	Commodity	Approved Budget
Bay World	Germany	Offals	8,000
Bay World	Hong Kong	Offals	2,800
Bay World	Japan	Offals	1,124
Bay World	Korea, Republic of	Offals	2,000
Bay World	Mexico	Offals	3,800
Bay World	Taiwan	Offals	1,700
Bear Creek Country Kitchens, Inc.	Australia	Oils-organic	5,000
Bear Creek Country Kitchens, Inc.	Canada	Oils-organic	5,000
Bear Creek Country Kitchens, Inc.	Germany	Oils-organic	5,000
Bear Creek Country Kitchens, Inc.	Japan	Oils-organic	5,000
Bear Creek Country Kitchens, Inc.	Singapore	Oils-organic	5,000
Bear Creek Country Kitchens, Inc.	Taiwan	Oils-organic	5,000
Beehive Botanicals	Netherlands	Propolis Tincture;Propolis Throat Spray, Gourmet Hon	5,000
Beer Nuts Inc.	Canada	peanuts, Cashews	1,750
Beer Nuts Inc.	Japan	peanuts, Cashews	2,750
Beer Nuts Inc.	Spain	peanuts, Cashews	2,750
Beer Nuts Inc.	United States	peanuts, Cashews	1,750
Beer Nuts Inc.	Venezuela	peanuts, Cashews	1,000
Bell-Carter Foods, Inc.	Japan	Canned Ripe Olives	5,000
Berner Cheese Company	Argentina	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	Canada	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	Germany	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	Guatemala	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	Japan	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	Korea, Republic of	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	United Kingdom	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Berner Cheese Company	United States	Aerosol Cheese Sauce, Cheese Sauce, Cheese Topping	5,000
Black Mountain Brewing Co.	China (Mainland)	Beer	5,000
Blackberry Patch, Inc.	Cayman Islands	Condiments, Jams, Jellies, Syrup	1,800
Blackberry Patch, Inc.	Costa Rica	Condiments, Jams, Jellies, Syrup	1,800
Blackberry Patch, Inc.	Mexico	Condiments, Jams, Jellies, Syrup	5,000
Blackberry Patch, Inc.	Netherlands Antilles (exc. Aru	Condiments, Jams, Jellies, Syrup	1,800
Blackberry Patch, Inc.	United Kingdom	Condiments, Jams, Jellies, Syrup	15,000
Blackberry Patch, Inc.	United States	Condiments, Jams, Jellies, Syrup	25,000
Blue Diamond Growers	Australia	almonds / pistachios	25,000
Blue Diamond Growers	Germany	almonds / pistachios	53,000
Blue Diamond Growers	India	almonds / pistachios	99,000
Blue Diamond Growers	Japan	almonds / pistachios	654,111
Blue Diamond Growers	Korea, Republic of	almonds / pistachios	150,000
Blue Diamond Growers	New Zealand	almonds / pistachios	20,000
Blue Diamond Growers	Taiwan	almonds / pistachios	40,000
Blue Diamond Growers	Thailand	almonds / pistachios	100,000
Blue Diamond Growers	United Kingdom	almonds / pistachios	25,000
Blue Sky Natural Beverage Co.	Belgium-Luxembourg	Beverages	5,000
Blue Sky Natural Beverage Co.	Canada	Beverages	5,000
Blue Sky Natural Beverage Co.	Germany	Beverages	5,000
Blue Sky Natural Beverage Co.	Japan	Beverages	5,000
Boston Beer Company	Australia	Beer	5,000
Boston Beer Company	Hong Kong	Beer	5,000
Boston Beer Company	Japan	Beer	5,000
Boulder Bar Endurance	Canada	Energy Bars	5,000
Boulder Bar Endurance	Netherlands	Energy Bars	5,000
Boulder Bar Endurance	United States	Energy Bars	5,000
Brooklyn Alliance	Argentina	mixed kosher grocery prods, wine, baked goods, juices	5,000

1999 MAP Brand Companies and Products

company_name	country_name	Commodity	Approved Budget
Brooklyn Alliance	Canada	mixed kosher grocery prods, wine, baked goods, juices	5,000
Brooklyn Alliance	Germany	mixed kosher grocery prods, wine, baked goods, juices	5,000
Brooklyn Alliance	Israel	mixed kosher grocery prods, wine, baked goods, juices	5,000
Brooklyn Alliance	Japan	mixed kosher grocery prods, wine, baked goods, juices	5,000
Brooklyn Alliance	Mexico	mixed kosher grocery prods, wine, baked goods, juices	5,000
Brooklyn Alliance	United States	mixed kosher grocery prods, wine, baked goods, juices	5,000
Burke Corp.	Canada	Meat Toppings	5,000
Burke Corp.	Japan	Meat Toppings	5,000
Burris Mill & Feed, Inc.	Brazil	shrimp feed and tilapia feed	4,346
Burris Mill & Feed, Inc.	Honduras	shrimp feed and tilapia feed	2,220
Burris Mill & Feed, Inc.	Venezuela	shrimp feed and tilapia feed	2,999
Bushman Organic Marketing	Germany	Beans	3,000
Bushman Organic Marketing	United Kingdom	Beans	1,500
Bushman Organic Marketing	United States	Beans	1,500
Butter Buds Food Ingredients	China (Mainland)	Daily Concentrate	5,000
Butter Buds Food Ingredients	Denmark	Daily Concentrate	5,000
Butter Buds Food Ingredients	France	Daily Concentrate	5,000
Butter Buds Food Ingredients	Japan	Daily Concentrate	5,000
Butter Buds Food Ingredients	Philippines	Daily Concentrate	5,000
Butter Buds Food Ingredients	Singapore	Daily Concentrate	5,000
C F Fresh	Canada	Organic juices	5,000
C F Fresh	Germany	Organic juices	5,000
C F Fresh	Japan	Organic juices	5,000
C F Fresh	Taiwan	Organic juices	5,000
C F Fresh	United Kingdom	Organic juices	5,000
C F Fresh	United States	Organic juices	5,000
Cal Mark Beverage Co.	Japan	Soft drinks, flavors and concentrates	5,000
Cal Mark Beverage Co.	Korea, Republic of	Soft drinks, flavors and concentrates	5,000
California Natural Products	Norway	Bard Valley Medjool Dates	5,000
California Natural Products	Sweden	Bard Valley Medjool Dates	5,000
California Farms and Canners, Inc.	France	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	0
California Farms and Canners, Inc.	Hong Kong	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	5,000
California Farms and Canners, Inc.	Japan	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	5,000
California Farms and Canners, Inc.	Philippines	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	5,000
California Farms and Canners, Inc.	Singapore	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	5,000
California Farms and Canners, Inc.	United Arab Emirates	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	5,000
California Farms and Canners, Inc.	Yemen	Canned friut, veg, nuts, pulses, ice cream, beer, drinks	5,000
California Nuggets, Inc.	India	Corn nuts	5,000
California Nuggets, Inc.	United Arab Emirates	Corn nuts	5,000
California Nuggets, Inc.	United States	Corn nuts	5,000
Capilano Pacific, Inc.	China (Mainland)	Pasta & dry mixes	5,000
Capilano Pacific, Inc.	Germany	Pasta & dry mixes	5,000
Capilano Pacific, Inc.	Hong Kong	Pasta & dry mixes	5,000
Capilano Pacific, Inc.	Japan	Pasta & dry mixes	5,000
Capilano Pacific, Inc.	United States	Pasta & dry mixes	5,000
Carolina Classics Catfish	Belgium-Luxembourg	Catfish, Fish Feed	2,600
Carolina Classics Catfish	France	Catfish, Fish Feed	3,000
Carolina Classics Catfish	Germany	Catfish, Fish Feed	7,414
Carolina Classics Catfish	Japan	Catfish, Fish Feed	1,750
Carolina Classics Catfish	Venezuela	Catfish, Fish Feed	4,358
Cenzone Tech Inc.	Egypt	enzymes, acid, lactose	5,000
Cenzone Tech Inc.	Hungary	enzymes, acid, lactose	5,000
Cenzone Tech Inc.	Lithuania	enzymes, acid, lactose	5,000
Cenzone Tech Inc.	Mexico	enzymes, acid, lactose	5,000

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company_name	country_name	Commodity	Approved Budget
Cenzone Tech Inc.	Poland	enzymes, acid, lactose	5,000
Cenzone Tech Inc.	Turkey	enzymes, acid, lactose	5,000
Certified Angus Beef	Canada	Beef	10,000
Certified Angus Beef	Japan	Beef	15,000
Chalone Wine Estates	Canada	wine	2,000
Chalone Wine Estates	Germany	wine	1,000
Chalone Wine Estates	Japan	wine	1,000
Chalone Wine Estates	Sweden	wine	500
Chalone Wine Estates	Switzerland	wine	1,000
Chalone Wine Estates	United Kingdom	wine	2,000
Chateau Julien Wine Estate	Canada	wine	1,500
Chateau Julien Wine Estate	Germany	wine	4,500
Chateau Julien Wine Estate	United Kingdom	wine	3,000
Chemgen	Brazil	feed enzyme	3,500
Chemgen	China (Mainland)	feed enzyme	5,000
Chemgen	Israel	feed enzyme	3,000
Chemgen	Malaysia	feed enzyme	3,000
Chemgen	Mexico	feed enzyme	5,500
Chemgen	Peru	feed enzyme	3,500
Chemgen	Philippines	feed enzyme	3,000
Chemgen	Taiwan	feed enzyme	23,530
Chemgen	Thailand	feed enzyme	5,000
Cherry Central	Japan	dried blueberries and cherries	26,000
Chez De Prez Cheesecake, Inc.	Brazil	cheese cake	5,000
Chez De Prez Cheesecake, Inc.	Canada	cheese cake	5,000
Chez De Prez Cheesecake, Inc.	Mexico	cheese cake	5,000
Chez De Prez Cheesecake, Inc.	United States	cheese cake	5,000
Chief Wenatchee	Canada	Fresh Fruit	5,000
Chief Wenatchee	Japan	Fresh Fruit	5,000
Chihade International, Inc.	Bahrain	Grape Leaves, Pizza, Condiments	10,000
Chihade International, Inc.	Egypt	Grape Leaves, Pizza, Condiments	10,000
Chihade International, Inc.	Kuwait	Grape Leaves, Pizza, Condiments	20,000
Chihade International, Inc.	Qatar	Grape Leaves, Pizza, Condiments	5,000
Chihade International, Inc.	United Arab Emirates	Grape Leaves, Pizza, Condiments	55,000
Chihade International, Inc.	Yemen	Grape Leaves, Pizza, Condiments	5,000
Chile Today - Hot Tamale	United States	Dried Fruit, Spice, Salty Snacks, Processed Products	5,000
Chukar Cherry Company	Japan	Cherry & Berry Products	5,000
Clarkson Grain Co., Inc.	Italy	Food grade soybeans	5,000
Clarkson Grain Co., Inc.	Japan	Food grade soybeans	5,000
Clarkson Grain Co., Inc.	Netherlands	Food grade soybeans	5,000
Clarkson Grain Co., Inc.	Singapore	Food grade soybeans	5,000
Clarkson Grain Co., Inc.	Taiwan	Food grade soybeans	5,000
Clarkson Grain Co., Inc.	United Kingdom	Food grade soybeans	5,000
Clif Bar, Inc.	France	Energy bars	5,000
Clif Bar, Inc.	Germany	Energy bars	5,000
Clif Bar, Inc.	Netherlands	Energy bars	5,000
Clif Bar, Inc.	Spain	Energy bars	5,000
Clif Bar, Inc.	Switzerland	Energy bars	5,000
Clif Bar, Inc.	United Kingdom	Energy bars	5,000
Coffees of Hawaii, Inc.	Germany	Coffee	5,000
Coffees of Hawaii, Inc.	Japan	Coffee	5,000
Coffees of Hawaii, Inc.	United Kingdom	Coffee	5,000
Coffees of Hawaii, Inc.	United States	Coffee	5,000
Collin Street Bakery	Australia	Bakery Products	50,000

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Collin Street Bakery	Germany	Bakery Products	37,000
Colony South Corp.	Canada	Condiments, Snack Foods, Juice	3,500
Colony South Corp.	Germany	Condiments, Snack Foods, Juice	8,500
Colony South Corp.	Italy	Condiments, Snack Foods, Juice	2,500
Colony South Corp.	United Kingdom	Condiments, Snack Foods, Juice	18,500
Colony South Corp.	United States	Condiments, Snack Foods, Juice	5,000
Colorado Sweet Gold, LLC	Canada	Corn starch	5,000
Colorado Sweet Gold, LLC	Japan	Corn starch	5,000
Colorado Sweet Gold, LLC	Mexico	Corn starch	5,000
Colorado Sweet Gold, LLC	United States	Corn starch	5,000
Concannon Vineyard	Japan	wine	5,000
Concannon Vineyard	Switzerland	wine	3,000
Concannon Vineyard	United Kingdom	wine	2,000
Cookietree Bakeries	France	Snack Foods	5,000
Cookietree Bakeries	Germany	Snack Foods	5,000
Cookietree Bakeries	Korea, Republic of	Snack Foods	5,000
Cookietree Bakeries	Norway	Snack Foods	5,000
Cookietree Bakeries	Saudi Arabia	Snack Foods	5,000
Cookietree Bakeries	United Kingdom	Snack Foods	5,000
Crown Products, Inc.	Azerbaijan, Republic of	Snack Foods	5,000
Crown Products, Inc.	Costa Rica	Snack Foods	10,000
Crown Products, Inc.	Egypt	Snack Foods	6,000
Crown Products, Inc.	El Salvador	Snack Foods	10,000
Crown Products, Inc.	Gambia, The	Snack Foods	5,000
Crown Products, Inc.	Germany	Snack Foods	10,000
Crown Products, Inc.	Guinea	Snack Foods	15,000
Crown Products, Inc.	Honduras	Snack Foods	10,000
Crown Products, Inc.	Japan	Snack Foods	5,000
Crown Products, Inc.	Kenya	Snack Foods	5,000
Crown Products, Inc.	Kuwait	Snack Foods	5,000
Crown Products, Inc.	Liberia	Snack Foods	5,000
Crown Products, Inc.	Morocco	Snack Foods	10,000
Crown Products, Inc.	Netherlands Antilles (exc. Aru	Snack Foods	5,000
Crown Products, Inc.	Pakistan	Snack Foods	6,000
Crown Products, Inc.	Qatar	Snack Foods	6,000
Crown Products, Inc.	Singapore	Snack Foods	8,000
Crown Products, Inc.	Vietnam	Snack Foods	6,000
Crown Products, Inc.	Yemen	Snack Foods	15,000
Crystal International Corporation	Egypt	Trading Company General Grocery Line	10,000
Crystal International Corporation	Germany	Trading Company General Grocery Line	7,000
Crystal International Corporation	Haiti	Trading Company General Grocery Line	20,000
Crystal International Corporation	Honduras	Trading Company General Grocery Line	50,000
Crystal International Corporation	Jordan	Trading Company General Grocery Line	5,000
Crystal International Corporation	Netherlands	Trading Company General Grocery Line	20,000
Crystal International Corporation	Peru	Trading Company General Grocery Line	10,000
Crystal International Corporation	United Kingdom	Trading Company General Grocery Line	2,500
C.J. Korb & Associates Company	Israel	Soy-cheese products, chips	5,000
C.J. Korb & Associates Company	Japan	Soy-cheese products, chips	5,000
Da Vinci Gourmet, Ltd.	Germany	Mochas, Dessert Sauces, Lattes	5,000
Da Vinci Gourmet, Ltd.	Japan	Mochas, Dessert Sauces, Lattes	5,000
Da Vinci Gourmet, Ltd.	Mexico	Mochas, Dessert Sauces, Lattes	5,000
Da Vinci Gourmet, Ltd.	Sweden	Mochas, Dessert Sauces, Lattes	5,000
Da Vinci Gourmet, Ltd.	Taiwan	Mochas, Dessert Sauces, Lattes	5,000
Da Vinci Gourmet, Ltd.	United Kingdom	Mochas, Dessert Sauces, Lattes	5,000

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Dahlgren & Company, Inc.	Bahrain	Dairy Products	5,000
Dahlgren & Company, Inc.	Mexico	Dairy Products	5,000
Dahlgren & Company, Inc.	Turkey	Dairy Products	5,000
Dahlgren & Company, Inc.	Venezuela	Dairy Products	5,000
De Beukelaer Corporation	Canada	grocery products	60,000
Decas Cranberry Sales, Inc.	Germany	fresh/frozen cranberries	11,290
Decas Cranberry Sales, Inc.	Japan	fresh/frozen cranberries	22,500
Decas Cranberry Sales, Inc.	Taiwan	fresh/frozen cranberries	11,500
Decas Cranberry Sales, Inc.	United Kingdom	fresh/frozen cranberries	339,922
Deep Sea Fish	Belgium-Luxembourg	Seafood	7,000
Deep Sea Fish	Japan	Seafood	3,500
Deep Sea Fish	Korea, Republic of	Seafood	3,000
Deep Sea Fish	Taiwan	Seafood	3,000
Del Sol Food Company, Inc.	Canada	Condiments	1,500
Del Sol Food Company, Inc.	Germany	Condiments	1,750
Del Sol Food Company, Inc.	Ireland	Condiments	1,500
Del Sol Food Company, Inc.	United Kingdom	Condiments	2,500
Delicato Vineyards	Canada	wine	10,000
Delicato Vineyards	Denmark	wine	2,900
Delicato Vineyards	Germany	wine	18,200
Delicato Vineyards	Netherlands	wine	2,900
Delicato Vineyards	Switzerland	wine	2,900
Delicato Vineyards	United Kingdom	wine	13,100
Deloach Vineyards, Inc.	Switzerland	wine	11,000
Deloach Vineyards, Inc.	United Kingdom	wine	4,000
Desert Health Products, Inc.	France	Nutritional supplements	5,000
Desert Whale Jojba Company, Inc.	France	Jojoba oil, almond oil, apricot oil etc.	5,000
Desert Whale Jojba Company, Inc.	Germany	Jojoba oil, almond oil, apricot oil etc.	5,000
Desert Whale Jojba Company, Inc.	Japan	Jojoba oil, almond oil, apricot oil etc.	5,000
Desert Whale Jojba Company, Inc.	Thailand	Jojoba oil, almond oil, apricot oil etc.	5,000
Desert Whale Jojba Company, Inc.	United States	Jojoba oil, almond oil, apricot oil etc.	5,000
Devansoy Farms, Inc.	Germany	Soy products	2,000
Devansoy Farms, Inc.	Italy	Soy products	5,000
Devansoy Farms, Inc.	New Zealand	Soy products	5,000
Devansoy Farms, Inc.	United Kingdom	Soy products	3,000
Devansoy Farms, Inc.	United States	Soy products	5,000
Diamond V Mills, Inc.	China (Mainland)	Feed	5,000
Diamond V Mills, Inc.	Colombia	Feed	5,000
Diamond V Mills, Inc.	France	Feed	5,000
Diamond V Mills, Inc.	Germany	Feed	5,000
Diamond V Mills, Inc.	Mexico	Feed	5,000
Diamond V Mills, Inc.	Peru	Feed	5,000
Diamond V Mills, Inc.	United Kingdom	Feed	5,000
Dundee Brandied Fruit Company	Canada	Processed fruit	5,000
Dundee Brandied Fruit Company	Mexico	Processed fruit	5,000
Dundee Brandied Fruit Company	Venezuela	Processed fruit	5,000
DXR International, Inc	China (Mainland)	grocery products	5,000
DXR International, Inc	Hong Kong	grocery products	5,000
DXR International, Inc	Korea, Republic of	grocery products	5,000
DXR International, Inc	Singapore	grocery products	5,000
DXR International, Inc	Taiwan	grocery products	5,000
Eagle Products, Inc.	France	pet foods	5,000
Eagle Products, Inc.	Germany	pet foods	5,000
Eagle Products, Inc.	Greece	pet foods	5,000

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Eagle Products, Inc.	Italy	pet foods	5,000
Eagle Products, Inc.	Spain	pet foods	5,000
Eagle Products, Inc.	United Kingdom	pet foods	5,000
Earth's Creation	Venezuela	Oils, Ingredients	50,000
Earthrise Company	France	fruit, vegetables	5,000
Earthrise Company	Germany	fruit, vegetables	5,000
Earthrise Company	Italy	fruit, vegetables	5,000
Earthrise Company	Portugal	fruit, vegetables	5,000
Earthrise Company	Switzerland	fruit, vegetables	5,000
Earthrise Company	Taiwan	fruit, vegetables	5,000
Earthrise Company	United Kingdom	fruit, vegetables	5,000
East Coast Seafood, Inc.	France	American Lobster, Skate, Monkfish, & Dogfish	108,723
EcoFoods, Inc.	Israel	Soy based pudding and beverage	5,000
EcoFoods, Inc.	United States	Soy based pudding and beverage	5,000
El Jay Poultry Corporation	Hong Kong	Poultry and Turkey	100,000
Equipment Team Hawaii	Germany	fruit	5,000
Equipment Team Hawaii	United States	fruit	5,000
Essen Nutrition Corp.	India	sauces, syrup, mixes, salad dressings, mayonnaise	20,000
Essen Nutrition Corp.	Mexico	sauces, syrup, mixes, salad dressings, mayonnaise	10,000
EuroPartner, Inc.	Denmark	Raisins, prunes	5,000
EuroPartner, Inc.	Germany	Raisins, prunes	5,000
EuroPartner, Inc.	Netherlands	Raisins, prunes	5,000
EuroPartner, Inc.	Norway	Raisins, prunes	25,000
EuroPartner, Inc.	Switzerland	Raisins, prunes	10,000
European Vegetable Specialties Far	Canada	Radicchio, med hearts, frisee, treviso	5,000
European Vegetable Specialties Far	Hong Kong	Radicchio, med hearts, frisee, treviso	5,000
European Vegetable Specialties Far	Japan	Radicchio, med hearts, frisee, treviso	5,000
Excalibur Sires	Netherlands	Bovine Genetics	3,150
Farmland Industries, Inc	Argentina	Pet Foods	5,000
Farmland Industries, Inc	China (Mainland)	Pet Foods	5,000
Farmland Industries, Inc	Guatemala	Pet Foods	5,000
Farmland Industries, Inc	Mexico	Pet Foods	5,000
Farmland Industries, Inc	Taiwan	Pet Foods	5,000
Farmland Industries, Inc	Uruguay	Pet Foods	5,000
Ferrara Pan Candy Company	Germany	Confectionery	2,500
Ferrara Pan Candy Company	United Kingdom	Confectionery	1,500
Flavor Consultants	China (Mainland)	Soy proteins	4,450
Flavor Consultants	Japan	Soy proteins	4,250
Flavor Consultants	Poland	Soy proteins	3,925
Flavor Consultants	United States	Soy proteins	3,000
Florida European Export-Import C	France	Fresh Fruits and Vegatables	6,000
Florida European Export-Import C	Germany	Fresh Fruits and Vegatables	10,000
Florida Flavors, Inc.	France	Fruit Flavored Oils and Extracts	10,000
Foodtown International	Barbados	various grocery products -- Foodtown brand	5,000
Foodtown International	Cayman Islands	various grocery products -- Foodtown brand	5,000
Foodtown International	Grenada	various grocery products -- Foodtown brand	5,000
Foodtown International	Jamaica & Dep	various grocery products -- Foodtown brand	5,000
Foodtown International	United States	various grocery products -- Foodtown brand	5,000
Freemont Seafood, Inc.	China (Mainland)	Squid, Sardines, Mackerel	5,000
French Gourmet Inc.	Canada	Bakery Products	5,000
French Gourmet Inc.	Singapore	Bakery Products	5,000
French Gourmet Inc.	United Arab Emirates	Bakery Products	5,000
French Gourmet Inc.	United States	Bakery Products	5,000
Frontier Trading	Mexico	grocery products	5,000

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Garden Valley Organic	Japan	Dairy products	5,000
Garden Valley Organic	United Kingdom	Dairy products	5,000
GinsingPlus Nutriceutical, Inc.	Singapore	Ginsing Nutriceuticals	5,000
Global Beverage Company	Canada	beverages	5,000
Global Beverage Company	Germany	beverages	0
Global Export Marketing Company	Bahrain	TexMex, Salad Dressing, condiments, Vegetable	5,000
Global Export Marketing Company	Benin	TexMex, Salad Dressing, condiments, Vegetable	5,000
Global Export Marketing Company	Germany	TexMex, Salad Dressing, condiments, Vegetable	5,000
Global Export Marketing Company	Jordan	TexMex, Salad Dressing, condiments, Vegetable	5,000
Global Export Marketing Company	Kuwait	TexMex, Salad Dressing, condiments, Vegetable	5,000
Global Export Marketing Company	United Arab Emirates	TexMex, Salad Dressing, condiments, Vegetable	5,000
Global Merchandising Corp.	China (Mainland)	Spices, cookies, peanuts	5,000
Global Merchandising Corp.	Japan	Spices, cookies, peanuts	5,000
Global Merchandising Corp.	Philippines	Spices, cookies, peanuts	5,000
Global Merchandising Corp.	Singapore	Spices, cookies, peanuts	5,000
Global Trading Resource	Germany	Condiments and vegetable oils, flour, turkey	5,000
Global Trading Resource	Israel	Condiments and vegetable oils, flour, turkey	5,000
Global Trading Resource	Russian Federation	Condiments and vegetable oils, flour, turkey	5,000
Global Trading Resource	Ukraine	Condiments and vegetable oils, flour, turkey	5,000
Global Trading Resource	United States	Condiments and vegetable oils, flour, turkey	5,000
Golden State Vintners	Canada	wine	12,500
Golden State Vintners	China (Mainland)	wine	12,500
Golden State Vintners	Japan	wine	5,000
Golden State Vintners	Switzerland	wine	20,000
Golden State Vintners	Taiwan	wine	5,000
Golden State Vintners	United Kingdom	wine	35,000
Golden Temple Bakery, Inc.	Argentina	Cereals	5,000
Golden Temple Bakery, Inc.	China (Mainland)	Cereals	5,000
Golden Temple Bakery, Inc.	India	Cereals	5,000
Golden Temple Bakery, Inc.	Japan	Cereals	5,000
Golden Temple Bakery, Inc.	Saudi Arabia	Cereals	5,000
Golden Temple Bakery, Inc.	United Arab Emirates	Cereals	5,000
Golden West Nuts, Inc.	Egypt	Almonds	5,000
Golden West Nuts, Inc.	Germany	Almonds	5,000
Golden West Nuts, Inc.	Mexico	Almonds	5,000
Golden West Nuts, Inc.	Saudi Arabia	Almonds	5,000
Golden West Nuts, Inc.	United Arab Emirates	Almonds	5,000
Gourmail Inc/Jyoti Cuisine	Canada	PREPF, PNUTS	5,000
Gourmail Inc/Jyoti Cuisine	France	PREPF, PNUTS	5,000
Gourmail Inc/Jyoti Cuisine	Germany	PREPF, PNUTS	5,000
Gourmail Inc/Jyoti Cuisine	Japan	PREPF, PNUTS	5,000
Gourmail Inc/Jyoti Cuisine	United Kingdom	PREPF, PNUTS	5,000
Gourmail Inc/Jyoti Cuisine	United States	PREPF, PNUTS	5,000
Graceland Fruit Cooperative, Inc.	China (Mainland)	dried carrot, peach, apple, blueberry, cherry, cranberry	5,000
Graceland Fruit Cooperative, Inc.	Japan	dried carrot, peach, apple, blueberry, cherry, cranberry	5,000
Graceland Fruit Cooperative, Inc.	Singapore	dried carrot, peach, apple, blueberry, cherry, cranberry	5,000
Graceland Fruit Cooperative, Inc.	Taiwan	dried carrot, peach, apple, blueberry, cherry, cranberry	5,000
Great Crescent International Inc.	Hong Kong	crackers, cookies	5,000
Great Crescent International Inc.	Japan	crackers, cookies	5,000
Great Crescent International Inc.	United States	crackers, cookies	5,000
Griffin Food Co.	Mexico	Syrups, Sauces, Jellies/Preserves, Peanut Butter	5,000
Hansmann's Mills, Inc.	France	Bakery Products, Condiment	5,000
Hansmann's Mills, Inc.	Germany	Bakery Products, Condiment	5,000
Hansmann's Mills, Inc.	United Kingdom	Bakery Products, Condiment	5,000

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Hawaiian Sun Products	Canada	Nut & Fruit Proudcts	5,000
Hawaiian Sun Products	Japan	Nut & Fruit Proudcts	5,000
Hawaiian Sun Products	Korea, Republic of	Nut & Fruit Proudcts	5,000
Hayward Enterprises, Inc.	Canada	Fruit and vegetable puree	5,000
Hayward Enterprises, Inc.	Mexico	Fruit and vegetable puree	5,000
Hayward Enterprises, Inc.	United States	Fruit and vegetable puree	5,000
HB Trading	Germany	SNKBK, PROCP	5,000
HB Trading	United States	SNKBK, PROCP	5,000
Heart & Harvest	Germany	Health bars, snack bars	5,000
Heart & Harvest	Mexico	Health bars, snack bars	5,000
Heart & Harvest	Saudi Arabia	Health bars, snack bars	5,000
Heart & Harvest	Singapore	Health bars, snack bars	5,000
Heartland Beef Sales, Inc.	Canada	Beef w/peppers and onions, Portioned sliced beef, poul	5,000
Helrazor, Inc.	Australia	Condiments	5,000
Helrazor, Inc.	Canada	Condiments	5,000
Helrazor, Inc.	Germany	Condiments	5,000
Helrazor, Inc.	United Kingdom	Condiments	5,000
Herman Goelitz, Inc.	Australia	Confectionery	69,000
Herman Goelitz, Inc.	Canada	Confectionery	116,500
Herman Goelitz, Inc.	China (Mainland)	Confectionery	40,000
Herman Goelitz, Inc.	United Kingdom	Confectionery	108,000
Hester Foods, Llc	Philippines	cereal based beverages, ice cream	5,000
HS Trading Co.	Canada	Bagels, specialty cookie	1,000
HS Trading Co.	United Kingdom	Bagels, specialty cookie	10,000
HS Trading Co.	United States	Bagels, specialty cookie	20,000
Hsu's Ginseng Enterprises, Inc.	China (Mainland)	ginseng/roots, slices, tea, capsules	5,000
Hunter & Hillsberg	Germany	maple syrup/candy/cream, wine	5,000
H.B. Hunter Co.	Japan	Toppings, Jellys, Syrups	20,000
H.B. Hunter Co.	Korea, Republic of	Toppings, Jellys, Syrups	2,000
H.B. Hunter Co.	Spain	Toppings, Jellys, Syrups	2,000
H.B. Hunter Co.	Taiwan	Toppings, Jellys, Syrups	1,000
Idaho Pacific Corporation	Brazil	Seasoned & regular Potato Granules,Potato Flakes, Pot	5,000
Idaho Pacific Corporation	China (Mainland)	Seasoned & regular Potato Granules,Potato Flakes, Pot	5,000
Idaho Pacific Corporation	Japan	Seasoned & regular Potato Granules,Potato Flakes, Pot	5,000
Idaho Pacific Corporation	Mexico	Seasoned & regular Potato Granules,Potato Flakes, Pot	5,000
Idaho Pacific Corporation	Singapore	Seasoned & regular Potato Granules,Potato Flakes, Pot	5,000
Imagine Foods, Inc.,	Australia	ice cream, puddings, beverage	5,000
Imagine Foods, Inc.,	Canada	ice cream, puddings, beverage	5,000
Imagine Foods, Inc.,	Italy	ice cream, puddings, beverage	5,000
Imagine Foods, Inc.,	United Kingdom	ice cream, puddings, beverage	5,000
INI International	Australia	Pasta, oils, sauces, condiments etc.	5,000
INI International	Chile	Pasta, oils, sauces, condiments etc.	5,000
INI International	Hong Kong	Pasta, oils, sauces, condiments etc.	5,000
INI International	Singapore	Pasta, oils, sauces, condiments etc.	5,000
Internat Property Consult.	Spain	PNTBTR (peanut butter), CONDI (condiments)	5,000
International American Supermark	France	Processed Sweet Corn, Bakery, snacks, vegetables	5,000
International American Supermark	Germany	Processed Sweet Corn, Bakery, snacks, vegetables	0
International American Supermark	Hungary	Processed Sweet Corn, Bakery, snacks, vegetables	0
International American Supermark	Mexico	Processed Sweet Corn, Bakery, snacks, vegetables	5,000
International American Supermark	Spain	Processed Sweet Corn, Bakery, snacks, vegetables	5,000
International American Supermark	Sweden	Processed Sweet Corn, Bakery, snacks, vegetables	5,000
International American Supermark	United Arab Emirates	Processed Sweet Corn, Bakery, snacks, vegetables	5,000
International Brand Services, Inc.	Bahrain	Baked Goods	5,000
International Brand Services, Inc.	Kuwait	Baked Goods	5,000

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International Brand Services, Inc.	Saudi Arabia	Baked Goods	5,000
International Brand Services, Inc.	United Arab Emirates	Baked Goods	5,000
International Industries Corporatio	Egypt	Trading Company General Grocery Line	50,000
International Industries Corporatio	Germany	Trading Company General Grocery Line	16,000
International Industries Corporatio	United Kingdom	Trading Company General Grocery Line	20,000
International Ingredient Corporatio	China (Mainland)	feed ingredients	5,000
International Ingredient Corporatio	Korea, Republic of	feed ingredients	5,000
International Ingredient Corporatio	Mexico	feed ingredients	5,000
International Ingredient Corporatio	Taiwan	feed ingredients	5,000
International Ingredient Corporatio	Thailand	feed ingredients	5,000
International Ingredient Corporatio	Venezuela	feed ingredients	5,000
International Market Brands	Chile	Canned & Frozen Vegetables/processed chicken	5,000
International Market Brands	Hong Kong	Canned & Frozen Vegetables/processed chicken	15,000
International Market Brands	Philippines	Canned & Frozen Vegetables/processed chicken	5,000
International Market Brands	Portugal	Canned & Frozen Vegetables/processed chicken	5,000
International Market Brands	Spain	Canned & Frozen Vegetables/processed chicken	5,000
International Market Brands	United Kingdom	Canned & Frozen Vegetables/processed chicken	5,000
International Seafood Distributors	Belgium-Luxembourg	Sea Scallops, Conch, Monkfish, Crab, Dogfish, Eels	15,000
International Seafood Distributors	China (Mainland)	Sea Scallops, Conch, Monkfish, Crab, Dogfish, Eels	26,000
International Seafood Distributors	France	Sea Scallops, Conch, Monkfish, Crab, Dogfish, Eels	5,000
International Seafood Distributors	Hong Kong	Sea Scallops, Conch, Monkfish, Crab, Dogfish, Eels	10,000
International Seafood Distributors	Japan	Sea Scallops, Conch, Monkfish, Crab, Dogfish, Eels	15,000
International Seafood Distributors	Singapore	Sea Scallops, Conch, Monkfish, Crab, Dogfish, Eels	12,000
J-K Products International	Philippines	processed products	5,000
Jardine Foods	Australia	Trading Company General Grocery Line	17,500
Jardine Foods	Belgium-Luxembourg	Trading Company General Grocery Line	1,000
Jardine Foods	France	Trading Company General Grocery Line	4,500
Jardine Foods	Germany	Trading Company General Grocery Line	2,000
Jardine Foods	Ireland	Trading Company General Grocery Line	2,000
Jardine Foods	Netherlands	Trading Company General Grocery Line	1,000
Jardine Foods	Sweden	Trading Company General Grocery Line	2,000
Jardine Foods	United Kingdom	Trading Company General Grocery Line	20,000
JBH International Trading	Japan	Process foods, condiments	5,000
JBH International Trading	Korea, Republic of	Process foods, condiments	5,000
Jersey Asparagus Farms, Inc.	Mexico	Asparagus Seed & Crowns	5,000
Jersey Asparagus Farms, Inc.	United States	Asparagus Seed & Crowns	5,000
Jewel Date Company	Germany	processed products	5,000
Jewel Date Company	Italy	processed products	5,000
Jewel Date Company	United Kingdom	processed products	5,000
John Volpi & Company, Inc.	Japan	Traditional Italian Prosciutto & Rotola	15,000
Jones Brewing Company	Australia	Beer	0
Jones Brewing Company	Egypt	Beer	5,000
Jones Brewing Company	Japan	Beer	5,000
Jones Brewing Company	New Zealand	Beer	0
Jones Brewing Company	Saudi Arabia	Beer	5,000
Jones Brewing Company	United Kingdom	Beer	5,000
Jones Dairy Farm	Japan	Pork sausage, bacon, hams	25,000
J.P. Veggies Inc.	China (Mainland)	PROCP, various immitation meat products	5,000
J.P. Veggies Inc.	Hong Kong	PROCP, various immitation meat products	5,000
J.P. Veggies Inc.	Japan	PROCP, various immitation meat products	5,000
J.P. Veggies Inc.	Korea, Republic of	PROCP, various immitation meat products	5,000
J.P. Veggies Inc.	Singapore	PROCP, various immitation meat products	5,000
J.P. Veggies Inc.	Taiwan	PROCP, various immitation meat products	5,000
Kautz Ironstone Vineyards	Canada	wine	9,000

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Kautz Ironstone Vineyards	China (Mainland)	wine	3,000
Kautz Ironstone Vineyards	Denmark	wine	10,000
Kautz Ironstone Vineyards	Thailand	wine	3,000
Kautz Ironstone Vineyards	United Kingdom	wine	10,000
Kelley's Katch Caviar	Japan	Seafood	2,500
Kelley's Katch Caviar	United States	Seafood	2,500
Kindle Nut Company	China (Mainland)	Almonds	5,000
Kindle Nut Company	Germany	Almonds	5,000
Kindle Nut Company	Japan	Almonds	5,000
Kindle Nut Company	United States	Almonds	5,000
Klamath Algae Products, Inc.	Australia	Freeze-dried blue green algae products	5,000
Klamath Algae Products, Inc.	Ireland	Freeze-dried blue green algae products	5,000
Klamath Algae Products, Inc.	United Kingdom	Freeze-dried blue green algae products	5,000
Klamath Valley Botanicals, Ltd.	Australia	Organic products, juices, algae, cereals	5,000
Klamath Valley Botanicals, Ltd.	Canada	Organic products, juices, algae, cereals	5,000
Klamath Valley Botanicals, Ltd.	China (Mainland)	Organic products, juices, algae, cereals	5,000
Klamath Valley Botanicals, Ltd.	Germany	Organic products, juices, algae, cereals	5,000
Klamath Valley Botanicals, Ltd.	Japan	Organic products, juices, algae, cereals	5,000
Klamath Valley Botanicals, Ltd.	Korea, Republic of	Organic products, juices, algae, cereals	5,000
Knight Seed Co., Inc.	Germany	Confection Sunflowers, Dry Edible Beans, Soybeans	5,000
Knight Seed Co., Inc.	Japan	Confection Sunflowers, Dry Edible Beans, Soybeans	5,000
Knight Seed Co., Inc.	Spain	Confection Sunflowers, Dry Edible Beans, Soybeans	5,000
Kokopelli Winery, Inc.	Canada	Wines (organically grown grapes)	5,000
Kokopelli Winery, Inc.	Germany	Wines (organically grown grapes)	5,000
Kokopelli Winery, Inc.	Italy	Wines (organically grown grapes)	5,000
Kokopelli Winery, Inc.	Japan	Wines (organically grown grapes)	5,000
Kokopelli Winery, Inc.	Netherlands	Wines (organically grown grapes)	5,000
Kokopelli Winery, Inc.	United Kingdom	Wines (organically grown grapes)	5,000
Kokopelli Winery, Inc.	United States	Wines (organically grown grapes)	5,000
Kona Breeze Coffee Company, Inc.	Germany	Roasted coffee	5,000
Kona Breeze Coffee Company, Inc.	Japan	Roasted coffee	5,000
Kona Breeze Coffee Company, Inc.	Korea, Republic of	Roasted coffee	5,000
Kostas International	France	Flat breads	5,000
Kostas International	Germany	Flat breads	5,000
Kostas International	Japan	Flat breads	5,000
Kostas International	Singapore	Flat breads	5,000
Kostas International	United States	Flat breads	5,000
Kozy Shack, Inc.	Canada	dairy products, pudding	5,000
Kwik Enterprises	Argentina	Snack Food	3,000
Kwik Enterprises	Australia	Snack Food	1,000
Kwik Enterprises	China (Mainland)	Snack Food	1,000
Kwik Enterprises	France	Snack Food	1,000
Kwik Enterprises	Hong Kong	Snack Food	2,500
Kwik Enterprises	Indonesia	Snack Food	3,000
Kwik Enterprises	Ireland	Snack Food	1,000
Kwik Enterprises	Italy	Snack Food	1,000
Kwik Enterprises	Macau	Snack Food	3,000
Kwik Enterprises	Philippines	Snack Food	2,500
Kwik Enterprises	Switzerland	Snack Food	1,000
Lamex Foods, Inc.	Taiwan	chicken broth	3,300
Land O Lakes Food Ingredients Di	Argentina	Cheese, cheese power, cheese dips, butter, whey, etc.	5,000
Land O Lakes Food Ingredients Di	Brazil	Cheese, cheese power, cheese dips, butter, whey, etc.	5,000
Land O Lakes Food Ingredients Di	China (Mainland)	Cheese, cheese power, cheese dips, butter, whey, etc.	5,000
Land O Lakes Food Ingredients Di	Japan	Cheese, cheese power, cheese dips, butter, whey, etc.	5,000

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Land O Lakes Food Ingredients Di	Korea, Republic of	Cheese, cheese power, cheese dips, butter, whey, etc.	5,000
Land O Lakes Food Ingredients Di	Mexico	Cheese, cheese power, cheese dips, butter, whey, etc.	5,000
LDI Inc./Wege Pretzel Co.	China (Mainland)	SNKSL -- pretzels	0
LDI Inc./Wege Pretzel Co.	Japan	SNKSL -- pretzels	5,000
LDI Inc./Wege Pretzel Co.	United States	SNKSL -- pretzels	0
Lee Enterprises	Korea, Republic of	Beef	25,000
Liberty Growers Inc.	Costa Rica	mixed fruits promoted in a group, pears, peaches & oth	5,000
Liberty Growers Inc.	Dominican Republic	mixed fruits promoted in a group, pears, peaches & oth	5,000
Liberty Growers Inc.	United States	mixed fruits promoted in a group, pears, peaches & oth	5,000
Liberty Orchards Co., Inc.	Australia	Snack Foods	5,000
Liberty Orchards Co., Inc.	Germany	Snack Foods	5,000
Liberty Orchards Co., Inc.	Japan	Snack Foods	5,000
Liberty Orchards Co., Inc.	Mexico	Snack Foods	5,000
Lightlife Foods, Inc.	Israel	PROCP (processed products)	5,000
Link Industries	Brazil	kipperedbeef regular flavor,and black pepper	5,000
Link Industries	Canada	kipperedbeef regular flavor,and black pepper	5,000
Link Industries	Japan	kipperedbeef regular flavor,and black pepper	5,000
Link Industries	Mexico	kipperedbeef regular flavor,and black pepper	5,000
Lund's Fisheries Inc.	Belgium-Luxembourg	Squid, monkfish, mackerel, herring	0
Lund's Fisheries Inc.	China (Mainland)	Squid, monkfish, mackerel, herring	14,500
Lund's Fisheries Inc.	Spain	Squid, monkfish, mackerel, herring	8,400
Lundberg Family Farms	Canada	Rice products	5,000
Lundberg Family Farms	Germany	Rice products	5,000
Lundberg Family Farms	Japan	Rice products	5,000
Lyons Magnus	Canada	juice, beverages, snack foods, syrups, flavored toppings	5,000
Lyons Magnus	Singapore	juice, beverages, snack foods, syrups, flavored toppings	5,000
Madrona Vineyards	Canada	wine	800
Madrona Vineyards	Germany	wine	1,200
Madrona Vineyards	Netherlands	wine	500
Madrona Vineyards	Switzerland	wine	500
Magic Miles Ltd., Inc.	Argentina	Potato flakes	5,000
Magic Miles Ltd., Inc.	China (Mainland)	Potato flakes	5,000
Magic Miles Ltd., Inc.	Mexico	Potato flakes	5,000
Magic Miles Ltd., Inc.	United Arab Emirates	Potato flakes	5,000
Magic Seasoning Blends	Canada	Spices	4,000
Magic Seasoning Blends	Denmark	Spices	3,000
Magic Seasoning Blends	Germany	Spices	6,000
Magic Seasoning Blends	Kuwait	Spices	3,000
Magic Seasoning Blends	Mexico	Spices	3,000
Magic Seasoning Blends	Singapore	Spices	4,000
Magic Seasoning Blends	United Arab Emirates	Spices	2,000
Magic Seasoning Blends	United Kingdom	Spices	3,000
Maplehurst Genetics	Turkey	Frozen Bovine Semen	2,362
Mariani Packing Company (Small)	Hong Kong	Dried fruits and beverages	5,000
Mariani Packing Company (Small)	Italy	Dried fruits and beverages	25,000
Mariani Packing Company (Small)	Malaysia	Dried fruits and beverages	5,000
Mariani Packing Company (Small)	Singapore	Dried fruits and beverages	5,000
Mariani Packing Company (Small)	United Kingdom	Dried fruits and beverages	5,000
Marinelli Shellfish	China (Mainland)	Clams, Oysters, Mussels, Crabmet, Dungeness Crab	5,000
Marinelli Shellfish	Hong Kong	Clams, Oysters, Mussels, Crabmet, Dungeness Crab	5,000
Marinelli Shellfish	Korea, Republic of	Clams, Oysters, Mussels, Crabmet, Dungeness Crab	5,000
Marinelli Shellfish	Thailand	Clams, Oysters, Mussels, Crabmet, Dungeness Crab	5,000
McFarland's Foods, Inc.	Germany	soup base (paste), chicken breast, chicken bacon	5,000
McFarland's Foods, Inc.	South Africa, Republic of	soup base (paste), chicken breast, chicken bacon	5,000

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McFarland's Foods, Inc.	United States	soup base (paste), chicken breast, chicken bacon	5,000
McIlhenny Company	Australia	Sauces and Spices	150,000
McIlhenny Company	Hong Kong	Sauces and Spices	40,000
MCVL de Arizona	Mexico	Milk, mayonaise, margarine, cooking oil	5,000
Merrick Petfoods, Inc.	Italy	dog food and cat food, dog and cat treats	40,000
Merrick Petfoods, Inc.	Netherlands	dog food and cat food, dog and cat treats	2,000
Merryvale Vineyards	Belgium-Luxembourg	wine	3,000
Merryvale Vineyards	Canada	wine	3,000
Merryvale Vineyards	Hong Kong	wine	2,000
Merryvale Vineyards	Italy	wine	2,000
Merryvale Vineyards	Japan	wine	12,000
Merryvale Vineyards	Singapore	wine	1,000
Merryvale Vineyards	Taiwan	wine	2,000
Merryvale Vineyards	United Kingdom	wine	10,000
Michael Angelo's Gourmet Italian	Canada	Chicken breast & patties, turkey burgers/patties, waffle	33,750
Michael Angelo's Gourmet Italian	Costa Rica	Chicken breast & patties, turkey burgers/patties, waffle	2,857
Michael Angelo's Gourmet Italian	Dominican Republic	Chicken breast & patties, turkey burgers/patties, waffle	2,857
Michael Angelo's Gourmet Italian	El Salvador	Chicken breast & patties, turkey burgers/patties, waffle	2,857
Michael Angelo's Gourmet Italian	Guatemala	Chicken breast & patties, turkey burgers/patties, waffle	5,714
Michael Angelo's Gourmet Italian	Honduras	Chicken breast & patties, turkey burgers/patties, waffle	2,857
Michael Angelo's Gourmet Italian	Mexico	Chicken breast & patties, turkey burgers/patties, waffle	35,325
Michael Angelo's Gourmet Italian	Panama	Chicken breast & patties, turkey burgers/patties, waffle	2,857
Midamar Corporation	Bahrain	poultry, processed meats	5,000
Midamar Corporation	Hong Kong	poultry, processed meats	5,000
Midamar Corporation	Lebanon	poultry, processed meats	5,000
Midamar Corporation	Malaysia	poultry, processed meats	5,000
Midamar Corporation	Singapore	poultry, processed meats	5,000
Midwestern Pet Foods, Inc.	Belgium-Luxembourg	pet food (cat,dog)	5,000
Midwestern Pet Foods, Inc.	Ecuador	pet food (cat,dog)	5,000
Midwestern Pet Foods, Inc.	Greece	pet food (cat,dog)	5,000
Midwestern Pet Foods, Inc.	Italy	pet food (cat,dog)	5,000
Midwestern Pet Foods, Inc.	South Africa, Republic of	pet food (cat,dog)	5,000
Midwestern Soybean International	Japan	soybeans (dry, edible)	10,000
Milk Specialities Co.	Canada	Feed supplements for dairy cows	5,000
Milk Specialities Co.	Colombia	Feed supplements for dairy cows	5,000
Milk Specialities Co.	Mexico	Feed supplements for dairy cows	5,000
Mo Hotta - Mo Betta, Inc.	United States	Hot sauces and pepper flakes and powder	5,000
Mom 'n Pops	Germany	Chocolate confectionery	2,500
Mom 'n Pops	United Kingdom	Chocolate confectionery	2,500
Monticello Cellars, Inc.	Germany	wine	1,500
Monticello Cellars, Inc.	United Kingdom	wine	1,500
Mooney Farms	France	sun dried tomato pesto, tomatoes, kiwi fruit	5,000
Mooney Farms	United States	sun dried tomato pesto, tomatoes, kiwi fruit	5,000
Morgan-Davis International	Netherlands	Morgan-Davis American Wagyu (Beef)	3,000
Morrison Farms	China (Mainland)	microwave popcorn	5,000
Morrison Farms	France	microwave popcorn	5,000
Morrison Farms	Norway	microwave popcorn	5,000
Morrison Farms	Taiwan	microwave popcorn	5,000
Mrs. Leeper's, Inc.	Canada	Pasta	5,000
Mrs. Leeper's, Inc.	Germany	Pasta	5,000
Mrs. Leeper's, Inc.	United Kingdom	Pasta	5,000
Nancy's Specialty Foods	Canada	quiche	5,000
Nancy's Specialty Foods	Mexico	quiche	5,000
National Raisin Co.	China (Mainland)	raisins	5,000

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National Raisin Co.	Germany	raisins	5,000
National Raisin Co.	India	raisins	5,000
National Raisin Co.	United States	raisins	5,000
Native Wisconsin Ginseng Coop	Germany	Wisconsin ginseng products (tea, capsule, honey etc.)	5,000
Native Wisconsin Ginseng Coop	Italy	Wisconsin ginseng products (tea, capsule, honey etc.)	5,000
Native Wisconsin Ginseng Coop	Mexico	Wisconsin ginseng products (tea, capsule, honey etc.)	5,000
Natural American Ginseng Inc.	Canada	Ginseng products	20,000
Natural American Ginseng Inc.	China (Mainland)	Ginseng products	50,000
Natural Choice Foods, Inc.	Germany	Orgnaic frozen fruit, bars, sorbet, stews	5,000
Natural Choice Foods, Inc.	Japan	Orgnaic frozen fruit, bars, sorbet, stews	5,000
Natural Choice Foods, Inc.	United Kingdom	Orgnaic frozen fruit, bars, sorbet, stews	5,000
Natural Choice Foods, Inc.	United States	Orgnaic frozen fruit, bars, sorbet, stews	5,000
Nebraska Bean, Inc.	Germany	Packaged beans and grain products	5,000
Nebraska Bean, Inc.	Italy	Packaged beans and grain products	5,000
Nebraska Bean, Inc.	United Kingdom	Packaged beans and grain products	5,000
NeCo Seed Farms, Inc.	Japan	Soybeans	5,000
NeCo Seed Farms, Inc.	Taiwan	Soybeans	5,000
New Generations Dairy Cattle	Brazil	Bovine Semen	2,943
New Jamaican Gold, Inc.	Turkey	canned iced coffee	5,000
New Source Co	Kazakhstan, Republic of	Juices, CONDI, BKCER, VEGET, Cn Fruit, SNKPC,	5,000
Newfield Partners, Ltd.	Honduras	Rice	105,000
NewStar Fresh Foods, LLC.	China (Mainland)	Fresh vegetables	5,000
NewStar Fresh Foods, LLC.	Hong Kong	Fresh vegetables	5,000
NewStar Fresh Foods, LLC.	Japan	Fresh vegetables	5,000
NewStar Fresh Foods, LLC.	United States	Fresh vegetables	5,000
Newton Vineyard	Austria	wine	500
Newton Vineyard	Denmark	wine	1,000
Newton Vineyard	Germany	wine	2,000
Newton Vineyard	Japan	wine	1,000
Newton Vineyard	United Kingdom	wine	500
Nichols Winery & Cellars	France	wine	1,500
Norbest	Japan	Further process turkey and whole turkey	5,000
Norpac Foods	Canada	Canned and Frozen Corn	5,000
Norpac Foods	Japan	Canned and Frozen Corn	5,000
Norpac Foods	Taiwan	Canned and Frozen Corn	5,000
North American Bison Cooperative	Canada	Bison Meat & Products	5,000
North American Bison Cooperative	France	Bison Meat & Products	5,000
North American Bison Cooperative	Germany	Bison Meat & Products	5,000
North American Bison Cooperative	Italy	Bison Meat & Products	5,000
North American Bison Cooperative	Japan	Bison Meat & Products	5,000
North American Bison Cooperative	Singapore	Bison Meat & Products	5,000
North American Bison Cooperative	United Kingdom	Bison Meat & Products	5,000
Northeast Group	United Kingdom	grocery products	5,000
Nutra-Flo Company	China (Mainland)	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	Japan	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	Mexico	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	Netherlands	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	Philippines	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	Taiwan	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	Thailand	Dry animal protein feed ingredient	5,000
Nutra-Flo Company	United States	Dry animal protein feed ingredient	5,000
Nutz/Wild Fruitz Beverages, Inc.	Egypt	Juices	5,000
Nutz/Wild Fruitz Beverages, Inc.	Kuwait	Juices	5,000
Nutz/Wild Fruitz Beverages, Inc.	United Arab Emirates	Juices	5,000

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Nutz/Wild Fruitz Beverages, Inc.	United Kingdom	Juices	5,000
Nutz/Wild Fruitz Beverages, Inc.	United States	Juices	5,000
Oak Hill Farms	France	Dressings, Sauces, Mixes	1,000
Oak Hill Farms	Germany	Dressings, Sauces, Mixes	2,500
Oak Hill Farms	Ireland	Dressings, Sauces, Mixes	1,000
Oak Hill Farms	Netherlands	Dressings, Sauces, Mixes	1,000
Oak Hill Farms	Sweden	Dressings, Sauces, Mixes	1,500
Oak Hill Farms	United Kingdom	Dressings, Sauces, Mixes	5,000
Ocean Spray Cranberries, Inc.	Belgium-Luxembourg	Fresh Grapefruit	4,000
Ocean Spray Cranberries, Inc.	Denmark	Fresh Grapefruit	4,000
Ocean Spray Cranberries, Inc.	France	Fresh Grapefruit	8,000
Oceanica Trade & Investment, Inc.	Belgium-Luxembourg	seafood products	0
Oceanica Trade & Investment, Inc.	Germany	seafood products	0
Oceanica Trade & Investment, Inc.	Netherlands	seafood products	0
Ojai Organics	France	Organice Food	5,000
Ojai Organics	Germany	Organice Food	5,000
Ojai Organics	Japan	Organice Food	5,000
Ojai Organics	Netherlands	Organice Food	5,000
Ojai Organics	United Kingdom	Organice Food	5,000
Old Fashioned Foods, Inc.	Canada	Cheese Sauses & Salsas	5,000
Old Fashioned Foods, Inc.	Germany	Cheese Sauses & Salsas	5,000
Old Fashioned Foods, Inc.	Mexico	Cheese Sauses & Salsas	5,000
Old Fashioned Foods, Inc.	Philippines	Cheese Sauses & Salsas	5,000
Old Fashioned Foods, Inc.	United Kingdom	Cheese Sauses & Salsas	5,000
Old London Foods	Australia	SNKBK, PROCP	5,000
Old London Foods	France	SNKBK, PROCP	5,000
Old London Foods	Germany	SNKBK, PROCP	5,000
Old London Foods	Japan	SNKBK, PROCP	5,000
Old London Foods	United Kingdom	SNKBK, PROCP	5,000
Old London Foods	United States	SNKBK, PROCP	5,000
Omega Nutritin USA, Inc.	Australia	Organic vinegar, flaxseed, and oils	5,000
Omega Nutritin USA, Inc.	Germany	Organic vinegar, flaxseed, and oils	5,000
Omega Nutritin USA, Inc.	Italy	Organic vinegar, flaxseed, and oils	5,000
Omega Nutritin USA, Inc.	Japan	Organic vinegar, flaxseed, and oils	5,000
Omega Nutritin USA, Inc.	Netherlands	Organic vinegar, flaxseed, and oils	5,000
Omega Nutritin USA, Inc.	United Kingdom	Organic vinegar, flaxseed, and oils	5,000
Oneonta Trading Company, Inc.	Australia	Citrus, cherries, pears	5,000
Oneonta Trading Company, Inc.	Egypt	Citrus, cherries, pears	5,000
Oneonta Trading Company, Inc.	Singapore	Citrus, cherries, pears	5,000
Oneonta Trading Company, Inc.	Sweden	Citrus, cherries, pears	5,000
Oneonta Trading Company, Inc.	Taiwan	Citrus, cherries, pears	5,000
Oneonta Trading Company, Inc.	United Kingdom	Citrus, cherries, pears	5,000
Ontario International, Inc.	Denmark	Fresh Vegetables	5,000
Ontario International, Inc.	United Kingdom	Fresh Vegetables	5,000
Oregon Berry Packing Company	United States	fresh and frozen fruits	5,000
Oregon Brewing Company, Inc.	Japan	Various beers	5,000
Oregon Brewing Company, Inc.	United Kingdom	Various beers	5,000
Oregon Chai	Canada	Tea Drinks	5,000
Oregon Chai	United Kingdom	Tea Drinks	5,000
Oregon Cherry Growers, Inc.	Japan	Fresh cherries	5,000
Oregon Potato Company	Bahrain	Potato Flakes	0
Oregon Potato Company	China (Mainland)	Potato Flakes	5,000
Oregon Potato Company	Italy	Potato Flakes	5,000
Oregon Potato Company	Philippines	Potato Flakes	5,000

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Oregon Potato Company	Singapore	Potato Flakes	5,000
Oregon Potato Company	South Africa, Republic of	Potato Flakes	5,000
Organic Food Ingredients	China (Mainland)	Organic juices, blends, and concentrates	5,000
Organic Food Ingredients	Germany	Organic juices, blends, and concentrates	5,000
Organic Food Ingredients	Japan	Organic juices, blends, and concentrates	5,000
Organic Food Ingredients	Netherlands	Organic juices, blends, and concentrates	5,000
Organic Food Ingredients	United States	Organic juices, blends, and concentrates	5,000
Otis McAllister, Inc.	China (Mainland)	Fruit Juices	5,000
Otis McAllister, Inc.	Hong Kong	Fruit Juices	5,000
Otis McAllister, Inc.	Italy	Fruit Juices	5,000
Pacific American Fish Co., Inc.	China (Mainland)	Squid	5,000
Pacific Valley Foods	China (Mainland)	grocery products	5,000
Pacific Valley Foods	Japan	grocery products	0
Pacific Valley Foods	Mexico	grocery products	5,000
Pacific Valley Foods	Philippines	grocery products	5,000
Pacific Valley Foods	Singapore	grocery products	5,000
PacRim Wines	China (Mainland)	Wines	5,000
PacRim Wines	Japan	Wines	5,000
Palermo's Villa, Inc.	Canada	Pizza products	5,000
Pamela's Products	Germany	Wheat-Free Biscotti, Cookies, Baking Mixes	5,000
Pamela's Products	Italy	Wheat-Free Biscotti, Cookies, Baking Mixes	5,000
Pamela's Products	Japan	Wheat-Free Biscotti, Cookies, Baking Mixes	5,000
Pamela's Products	Netherlands	Wheat-Free Biscotti, Cookies, Baking Mixes	5,000
Pamela's Products	United Kingdom	Wheat-Free Biscotti, Cookies, Baking Mixes	5,000
Par-Way/Tryson Company	Canada	Seasoned oil sprays, soybean oil	5,000
Par-Way/Tryson Company	Germany	Seasoned oil sprays, soybean oil	5,000
Par-Way/Tryson Company	Japan	Seasoned oil sprays, soybean oil	5,000
Par-Way/Tryson Company	Mexico	Seasoned oil sprays, soybean oil	5,000
Par-Way/Tryson Company	United Kingdom	Seasoned oil sprays, soybean oil	5,000
Paramount Export Company	Hong Kong	Sausage	5,000
Paramount Farms	Canada	Pistachios	25,000
Paramount Farms	Malaysia	Pistachios	14,500
Peaceworks, Inc.	Australia	PROCP, CONDI	5,000
Peaceworks, Inc.	Canada	PROCP, CONDI	5,000
Peaceworks, Inc.	France	PROCP, CONDI	5,000
Peaceworks, Inc.	Germany	PROCP, CONDI	5,000
Peaceworks, Inc.	United Kingdom	PROCP, CONDI	5,000
Peaceworks, Inc.	United States	PROCP, CONDI	5,000
Peachy Canyon Winery	Japan	wine	1,000
Peachy Canyon Winery	Switzerland	wine	1,000
Peachy Canyon Winery	United Kingdom	wine	1,000
Piazza Pizza	Canada	Pizza	5,000
Piazza Pizza	Mexico	Pizza	5,000
Pines International	Malaysia	Wheat Powder, tabs	5,000
Pines International	Taiwan	Wheat Powder, tabs	5,000
Pogue Industries, Inc.	Japan	pasta, popcorn, sauces	5,000
Poole-Brook Farms	United States	CONDI, SPICE	5,000
Portland Brewing Company	Australia	Beer	5,000
Portland Brewing Company	France	Beer	5,000
Portland Brewing Company	United Kingdom	Beer	5,000
PowerBar, Inc.	Australia	Assorted energy bars	5,000
PowerBar, Inc.	Austria	Assorted energy bars	5,000
PowerBar, Inc.	Germany	Assorted energy bars	5,000
PowerBar, Inc.	Hong Kong	Assorted energy bars	5,000

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company_name	country_name	Commodity	Approved Budget
PowerBar, Inc.	New Zealand	Assorted energy bars	5,000
Precise Pet Products (Small)	Australia	Dog/Cat Food	3,000
Precise Pet Products (Small)	Belgium-Luxembourg	Dog/Cat Food	10,600
Precise Pet Products (Small)	Chile	Dog/Cat Food	10,500
Precise Pet Products (Small)	France	Dog/Cat Food	8,500
Precise Pet Products (Small)	Germany	Dog/Cat Food	36,500
Precise Pet Products (Small)	Greece	Dog/Cat Food	7,275
Precise Pet Products (Small)	Indonesia	Dog/Cat Food	3,450
Precise Pet Products (Small)	Italy	Dog/Cat Food	18,100
Precise Pet Products (Small)	Japan	Dog/Cat Food	21,250
Precise Pet Products (Small)	Korea, Republic of	Dog/Cat Food	36,120
Precise Pet Products (Small)	Norway	Dog/Cat Food	24,000
Precise Pet Products (Small)	Singapore	Dog/Cat Food	3,000
Precise Pet Products (Small)	Spain	Dog/Cat Food	25,500
Precise Pet Products (Small)	Sweden	Dog/Cat Food	25,750
Precise Pet Products (Small)	Switzerland	Dog/Cat Food	2,250
Precise Pet Products (Small)	Taiwan	Dog/Cat Food	12,800
Precise Pet Products (Small)	United Kingdom	Dog/Cat Food	19,500
Preferred Popcorn L.L.C.	Canada	Raw yellow popcorn	5,000
Preferred Popcorn L.L.C.	France	Raw yellow popcorn	5,000
Preferred Popcorn L.L.C.	Hong Kong	Raw yellow popcorn	5,000
Preferred Popcorn L.L.C.	Japan	Raw yellow popcorn	5,000
Preferred Popcorn L.L.C.	Mexico	Raw yellow popcorn	5,000
Preferred Popcorn L.L.C.	Singapore	Raw yellow popcorn	5,000
Prestance Corporation	Japan	Bottle pomegranate juice concentrate	5,000
Prince Of Peace Enterprises, Inc.	Canada	Beverages	5,000
Prince Of Peace Enterprises, Inc.	China (Mainland)	Beverages	5,000
Prince Of Peace Enterprises, Inc.	Malaysia	Beverages	5,000
Prince Of Peace Enterprises, Inc.	Taiwan	Beverages	5,000
PTC International	Japan	Chicken wings, cakes, pies, cheesecakes	11,000
PTC International	Korea, Republic of	Chicken wings, cakes, pies, cheesecakes	11,500
Pure Pride Inc	Estonia	Soy powder, oil, protein and fiber	5,000
Pure Pride Inc	France	Soy powder, oil, protein and fiber	5,000
Pure Pride Inc	Germany	Soy powder, oil, protein and fiber	5,000
Pure Pride Inc	Italy	Soy powder, oil, protein and fiber	5,000
Pure Pride Inc	Japan	Soy powder, oil, protein and fiber	5,000
Quady Winery	United Kingdom	wine	5,000
Quality Foods	Australia	Sauces, condiments, seasonings, snacks	5,000
Quality Foods	Canada	Sauces, condiments, seasonings, snacks	5,000
Quality Foods	Denmark	Sauces, condiments, seasonings, snacks	5,000
Quality Foods	India	Sauces, condiments, seasonings, snacks	0
Quality Foods	Singapore	Sauces, condiments, seasonings, snacks	5,000
Quality Foods	Sweden	Sauces, condiments, seasonings, snacks	5,000
Quality Foods	United States	Sauces, condiments, seasonings, snacks	5,000
Quality Ingredients Corporation	China (Mainland)	Instant cappuccino, whip topping powder, non-dairy cr	5,000
Quality Ingredients Corporation	Mexico	Instant cappuccino, whip topping powder, non-dairy cr	5,000
Quality Ingredients Corporation	Singapore	Instant cappuccino, whip topping powder, non-dairy cr	5,000
Racke USA	France	wine	3,000
Racke USA	Hong Kong	wine	3,000
Racke USA	Japan	wine	3,000
Racke USA	Singapore	wine	3,000
Racke USA	United Kingdom	wine	3,000
Ramsey Popcorn Company, Inc.	Israel	Microwave Popcorn	5,000
Rare Value	Indonesia	PROCP (processed products)	0

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Rare Value	Japan	PROCP (processed products)	5,000
Rare Value	Philippines	PROCP (processed products)	0
Raskas Foods, Inc.	Mexico	Cream Cheese	5,000
Red Arrow International, LLC.	Brazil	Flavors	5,000
Red Arrow International, LLC.	China (Mainland)	Flavors	5,000
Red Arrow International, LLC.	France	Flavors	5,000
Red Arrow International, LLC.	Japan	Flavors	5,000
Red Arrow International, LLC.	Mexico	Flavors	5,000
Red Arrow International, LLC.	Netherlands	Flavors	5,000
Red Arrow International, LLC.	United Kingdom	Flavors	5,000
RIBUS, Inc.	France	Processing aid ingredient for foods	5,000
RIBUS, Inc.	Germany	Processing aid ingredient for foods	5,000
RIBUS, Inc.	United Kingdom	Processing aid ingredient for foods	0
Riceland Foods	Saudi Arabia	USA long grain parboiled rice	100,000
Riceland Foods	United Arab Emirates	USA long grain parboiled rice	6,000
Riceland Foods	Yemen	USA long grain parboiled rice	6,000
RKJK Trading Co., Inc.	Israel	Cake Mix, Duncan Hines brand	5,000
Rocky Mountain Popcorn Co.	Mexico	popcorn	5,000
Roman Meal Company	Canada	Grain Products	5,000
Roman Meal Company	Hong Kong	Grain Products	5,000
Roman Meal Company	Mexico	Grain Products	5,000
Roman Meal Company	Thailand	Grain Products	5,000
Ross/Katagiri & Associates	Japan	Wines	5,000
Round Hill Winery	Hong Kong	wine	1,500
Round Hill Winery	Mexico	wine	1,000
Round Hill Winery	Switzerland	wine	9,500
Rubschlager Baking Corp.	Canada	Bread	5,000
Rubschlager Baking Corp.	Mexico	Bread	5,000
R. Torre and Co., Inc.	Germany	Syrups	5,000
R. Torre and Co., Inc.	United Kingdom	Syrups	5,000
R.H. Phillips	Canada	Wine	1,500
R.H. Phillips	Germany	Wine	450
R.H. Phillips	Japan	Wine	950
R.H. Phillips	Netherlands	Wine	350
R.H. Phillips	United Kingdom	Wine	750
R.W. Garcia Co., Inc.	Canada	Salad Eatos-Flavored Chip Strips, Dips and Salsas, Tor	5,000
R.W. Garcia Co., Inc.	Germany	Salad Eatos-Flavored Chip Strips, Dips and Salsas, Tor	5,000
R.W. Garcia Co., Inc.	Japan	Salad Eatos-Flavored Chip Strips, Dips and Salsas, Tor	5,000
R.W. Garcia Co., Inc.	United Kingdom	Salad Eatos-Flavored Chip Strips, Dips and Salsas, Tor	5,000
Sabroso Company	Brazil	Fruit Juice	5,000
Sabroso Company	China (Mainland)	Fruit Juice	5,000
Sabroso Company	Japan	Fruit Juice	5,000
Sabroso Company	United Kingdom	Fruit Juice	5,000
Schug Carneros Estate Winery	Canada	wine	2,500
Schug Carneros Estate Winery	Denmark	wine	2,500
Schug Carneros Estate Winery	Germany	wine	3,000
Schug Carneros Estate Winery	Japan	wine	1,000
Sea And Farmfresh Importing Com	Bangladesh	seafood	5,000
Sea And Farmfresh Importing Com	China (Mainland)	seafood	5,000
Sea And Farmfresh Importing Com	Liberia	seafood	5,000
Sea And Farmfresh Importing Com	Philippines	seafood	5,000
Sea And Farmfresh Importing Com	Singapore	seafood	5,000
Sea And Farmfresh Importing Com	United States	seafood	5,000
Seaview Packing, Inc.	Germany	Dates, Grapefruit, Grapes, Kumquats, Lemons, Orange	5,000

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Seaview Packing, Inc.	Spain	Dates, Grapefruit, Grapes, Kumquats, Lemons, Orange	5,000
Select Sires	Chile	Frozen Bovine Semen	4,000
Select Sires	Costa Rica	Frozen Bovine Semen	5,000
Select Sires	Venezuela	Frozen Bovine Semen	6,748
Seltzer's Smokehouse Meats	Mexico	bolognas -- made of beef and poultry	5,000
Seltzer's Smokehouse Meats	United States	bolognas -- made of beef and poultry	5,000
Sequoia Grove Vineyards	Ireland	wine	2,000
Sequoia Grove Vineyards	Japan	wine	500
Sequoia Grove Vineyards	United Kingdom	wine	500
Shoei Foods USA	Taiwan	Dried fruit & nuts	5,000
Sigco Sun Products, Inc.	Poland	Sunflower Inshell	5,000
Sigco Sun Products, Inc.	Spain	Sunflower Inshell	5,000
Sioux Honey Association	Bahrain	Honey	5,000
Sioux Honey Association	Chile	Honey	5,000
Sioux Honey Association	Colombia	Honey	5,000
Sioux Honey Association	Japan	Honey	5,000
Sioux Honey Association	Korea, Republic of	Honey	5,000
Sioux Honey Association	Kuwait	Honey	5,000
Sioux Honey Association	Pakistan	Honey	5,000
Sioux Honey Association	Philippines	Honey	5,000
Sioux Honey Association	Qatar	Honey	5,000
Sioux Honey Association	Venezuela	Honey	5,000
Sire Power, Inc.	Argentina	Frozen Bovine Semen	4,000
Sire Power, Inc.	Mexico	Frozen Bovine Semen	3,000
SK Food International	Germany	Salty Snacks	5,000
SK Food International	Italy	Salty Snacks	5,000
SK Food International	Japan	Salty Snacks	5,000
SK Food International	United Kingdom	Salty Snacks	5,000
Skaftafell International Grocery	Iceland	Grocery Products	5,000
SKE Midwestern, Inc.	Germany	Peas, beans, and sunflower seeds	5,000
Smith-Anderson Enterprises, Inc.	Canada	California Wine	1,500
Smith-Anderson Enterprises, Inc.	China (Mainland)	California Wine	1,000
Smith-Anderson Enterprises, Inc.	Japan	California Wine	3,500
Smith-Anderson Enterprises, Inc.	United Kingdom	California Wine	2,000
Snokist Growers	Australia	Canned and fresh cherries	5,000
Snokist Growers	Taiwan	Canned and fresh cherries	5,000
Soup 2000, Inc.	Canada	One pot meals, dry soup mix	10,000
Southwest Specialty Food, Inc.	Canada	Sauces, slasas, oils, soups	5,000
Southwest Specialty Food, Inc.	Germany	Sauces, slasas, oils, soups	5,000
Southwest Specialty Food, Inc.	United Kingdom	Sauces, slasas, oils, soups	5,000
Southwest Specialty Food, Inc.	United States	Sauces, slasas, oils, soups	5,000
Spring Mountain Vineyard	Hong Kong	wine	600
Spring Mountain Vineyard	Japan	wine	600
Spring Mountain Vineyard	Switzerland	wine	600
Spring Mountain Vineyard	Taiwan	wine	600
Spring Mountain Vineyard	United Kingdom	wine	600
Stacy's Pita Chip Company	Japan	SNKBK	5,000
Stacy's Pita Chip Company	Singapore	SNKBK	5,000
Stacy's Pita Chip Company	United States	SNKBK	5,000
Stahmann Farms, Inc.	Japan	pecan nuts	5,000
State Fish Company, Inc.	Belgium-Luxembourg	seafood	5,000
State Fish Company, Inc.	China (Mainland)	seafood	5,000
State Fish Company, Inc.	Japan	seafood	5,000
Stewart Pet Products, Ltd.	Canada	Dog Biscuits	5,000

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Stewart Pet Products, Ltd.	Denmark	Dog Biscuits	5,000
Stewart Pet Products, Ltd.	France	Dog Biscuits	5,000
Stewart Pet Products, Ltd.	Germany	Dog Biscuits	5,000
Stewart Pet Products, Ltd.	Japan	Dog Biscuits	5,000
Stewart Pet Products, Ltd.	Mexico	Dog Biscuits	5,000
Stewart Pet Products, Ltd.	Netherlands	Dog Biscuits	5,000
Stewart Pet Products, Ltd.	United Kingdom	Dog Biscuits	5,000
Summerfield Foods, Inc.	Germany	Fat Free; Soup, Refried beans, Chili. Cookies; 'Car', 'C	5,000
Summerfield Foods, Inc.	Japan	Fat Free; Soup, Refried beans, Chili. Cookies; 'Car', 'C	5,000
Summerfield Foods, Inc.	Spain	Fat Free; Soup, Refried beans, Chili. Cookies; 'Car', 'C	5,000
Summerfield Foods, Inc.	United Kingdom	Fat Free; Soup, Refried beans, Chili. Cookies; 'Car', 'C	5,000
Summerfield Foods, Inc.	United States	Fat Free; Soup, Refried beans, Chili. Cookies; 'Car', 'C	5,000
Sun Garden Garden~Gangi Cannin	Mexico	Beans and hominy	5,000
Sun Maid	United Kingdom	California Raisins	175,000
Sunkist Growers	Canada	Fresh Citrus	328,050
Sunkist Growers	Hong Kong	Fresh Citrus	291,600
Sunkist Growers	Japan	Fresh Citrus	1,173,172
Sunkist Growers	Malaysia	Fresh Citrus	109,350
Sunkist Growers	Singapore	Fresh Citrus	109,350
SunRich, Inc	France	Organic corn sweetenders, soy beverages, seed corn etc	5,000
SunRich, Inc	Germany	Organic corn sweetenders, soy beverages, seed corn etc	5,000
SunRich, Inc	Japan	Organic corn sweetenders, soy beverages, seed corn etc	5,000
SunRich, Inc	Netherlands	Organic corn sweetenders, soy beverages, seed corn etc	5,000
SunRich, Inc	United Kingdom	Organic corn sweetenders, soy beverages, seed corn etc	5,000
SunRich, Inc	United States	Organic corn sweetenders, soy beverages, seed corn etc	5,000
Sunsweet Growers, Inc.	Germany	Prunes	175,000
Sunsweet Growers, Inc.	Italy	Prunes	133,000
Sunsweet Growers, Inc.	United Kingdom	Prunes	168,000
Sweetwater Bottling Co.	United States	Maple flavored soda and seltzer	5,000
S&A International	Guyana	vegetables, condiments, cereals, snacks	5,000
S&A International	St. Vincent and the Grenadine	vegetables, condiments, cereals, snacks	5,000
S&A International	Trinidad and Tobago	vegetables, condiments, cereals, snacks	5,000
S&A International	United States	vegetables, condiments, cereals, snacks	5,000
S.B. Global Trading Co.	Australia	TexMex, Bakery Products	5,000
S.B. Global Trading Co.	Colombia	TexMex, Bakery Products	5,000
S.B. Global Trading Co.	Denmark	TexMex, Bakery Products	5,000
S.B. Global Trading Co.	Japan	TexMex, Bakery Products	5,000
S.B. Global Trading Co.	Singapore	TexMex, Bakery Products	5,000
S.B. Global Trading Co.	United Kingdom	TexMex, Bakery Products	5,000
S.B. Global Trading Co.	United States	TexMex, Bakery Products	5,000
S.E.W. Friel	Germany	Tomato Juice, Vegetable Juice, Corn, Succotash	10,000
S.E.W. Friel	Japan	Tomato Juice, Vegetable Juice, Corn, Succotash	15,000
Taylor Packing Company	United Kingdom	dried prunes	12,000
Technicall	Germany	Wine	5,000
Technicall	Japan	Wine	5,000
The California Winery	China (Mainland)	wine	3,000
The California Winery	Hong Kong	wine	36,000
The California Winery	Singapore	wine	6,000
The El Paso Chile Company	Canada	Salsas, spicy dips, Margarita and Bloody Mary Mixes,	13,000
The El Paso Chile Company	France	Salsas, spicy dips, Margarita and Bloody Mary Mixes,	15,000
The El Paso Chile Company	Germany	Salsas, spicy dips, Margarita and Bloody Mary Mixes,	15,000
The El Paso Chile Company	United Kingdom	Salsas, spicy dips, Margarita and Bloody Mary Mixes,	30,000
The El Paso Chile Company	United States	Salsas, spicy dips, Margarita and Bloody Mary Mixes,	14,000
The Food Merchants, Inc.	Canada	Organic pasta, pasta, mayonnaise and dressings	5,000

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The Food Merchants, Inc.	United States	Organic pasta, pasta, mayonnaise and dressings	5,000
The Risers Corporation	Canada	Flavored Pasta &Sauces	21,000
The Risers Corporation	United States	Flavored Pasta &Sauces	21,000
The Wizard's Cauldron	Germany	Organic Sauces, Condiments	10,000
The Wizard's Cauldron	Japan	Organic Sauces, Condiments	10,000
The Wizard's Cauldron	Netherlands	Organic Sauces, Condiments	5,000
The Wizard's Cauldron	United Kingdom	Organic Sauces, Condiments	5,000
Tishco America	China (Mainland)	Process products	5,000
Tishco America	Germany	Process products	5,000
Tishco America	India	Process products	5,000
Tomasello Winery, Inc.	Germany	mixed fruit wines (blueberry, raspberry, and grape)	5,000
Tomasello Winery, Inc.	Japan	mixed fruit wines (blueberry, raspberry, and grape)	5,000
Tostino Coffee Roasters	Mexico	coffee, coffee products	5,000
Traditional Medicinals Inc.	Canada	Natural & Health Foods	5,000
Trans America Brokerage Inc.	France	Sauce, Snack Foods	5,000
Trans America Brokerage Inc.	Germany	Sauce, Snack Foods	5,000
Trans America Brokerage Inc.	Netherlands	Sauce, Snack Foods	5,000
Trans America Brokerage Inc.	Saudi Arabia	Sauce, Snack Foods	0
Trans America Brokerage Inc.	Spain	Sauce, Snack Foods	5,000
Trans America Brokerage Inc.	Sweden	Sauce, Snack Foods	5,000
Trans America Brokerage Inc.	United Kingdom	Sauce, Snack Foods	5,000
Trans Global Trading	Jamaica & Dep	Snack Foods	12,000
Trans Global Trading	United States	Snack Foods	1,300
Transcon Trading Co., Inc.	Argentina	animal feed	3,000
Transcon Trading Co., Inc.	Australia	animal feed	4,500
Transcon Trading Co., Inc.	Austria	animal feed	1,000
Transcon Trading Co., Inc.	Belgium-Luxembourg	animal feed	1,000
Transcon Trading Co., Inc.	Brazil	animal feed	5,000
Transcon Trading Co., Inc.	Canada	animal feed	1,000
Transcon Trading Co., Inc.	Chile	animal feed	1,000
Transcon Trading Co., Inc.	China (Mainland)	animal feed	1,000
Transcon Trading Co., Inc.	Colombia	animal feed	1,000
Transcon Trading Co., Inc.	Cyprus	animal feed	1,000
Transcon Trading Co., Inc.	Denmark	animal feed	1,500
Transcon Trading Co., Inc.	Egypt	animal feed	1,000
Transcon Trading Co., Inc.	Finland	animal feed	1,000
Transcon Trading Co., Inc.	France	animal feed	10,000
Transcon Trading Co., Inc.	Germany	animal feed	9,000
Transcon Trading Co., Inc.	Guatemala	animal feed	1,000
Transcon Trading Co., Inc.	Hong Kong	animal feed	2,000
Transcon Trading Co., Inc.	Israel	animal feed	1,000
Transcon Trading Co., Inc.	Italy	animal feed	22,500
Transcon Trading Co., Inc.	Japan	animal feed	5,000
Transcon Trading Co., Inc.	Lithuania	animal feed	1,000
Transcon Trading Co., Inc.	Mauritius and Dependents	animal feed	1,000
Transcon Trading Co., Inc.	Mexico	animal feed	1,000
Transcon Trading Co., Inc.	Netherlands	animal feed	2,500
Transcon Trading Co., Inc.	Norway	animal feed	1,500
Transcon Trading Co., Inc.	Panama	animal feed	4,000
Transcon Trading Co., Inc.	Singapore	animal feed	1,000
Transcon Trading Co., Inc.	South Africa, Republic of	animal feed	1,000
Transcon Trading Co., Inc.	Sweden	animal feed	3,000
Transcon Trading Co., Inc.	Switzerland	animal feed	1,000
Transcon Trading Co., Inc.	Thailand	animal feed	1,000

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Transcon Trading Co., Inc.	Trinidad and Tobago	animal feed	1,000
Transcon Trading Co., Inc.	United Arab Emirates	animal feed	10,000
Transcon Trading Co., Inc.	United Kingdom	animal feed	29,000
Transcon Trading Co., Inc.	Venezuela	animal feed	1,000
Tree Top, Inc.	Canada	Fruit Juices, Apple Sauce	5,000
Tree Top, Inc.	Hong Kong	Fruit Juices, Apple Sauce	5,000
Tree Top, Inc.	Mexico	Fruit Juices, Apple Sauce	5,000
Tree Top, Inc.	Taiwan	Fruit Juices, Apple Sauce	5,000
Triad Worldwide, Inc	Malaysia	nuts, raisins, canned goods, grocery products	5,000
Tropical Blossom Honey Co., Inc.	Japan	Honey, Hot Sauces, Spice Mix, Fruit Drinks, Coconut	3,000
Tropical Blossom Honey Co., Inc.	Netherlands	Honey, Hot Sauces, Spice Mix, Fruit Drinks, Coconut	1,500
Tropical Blossom Honey Co., Inc.	Netherlands Antilles (exc. Aru	Honey, Hot Sauces, Spice Mix, Fruit Drinks, Coconut	3,500
Tropical Blossom Honey Co., Inc.	United Arab Emirates	Honey, Hot Sauces, Spice Mix, Fruit Drinks, Coconut	3,750
TRT International	Russian Federation	mayonnaise	5,000
Truitt Bros., Inc.	Japan	fruit, vegetables	5,000
Turf-Seed, Inc.	China (Mainland)	Lawn grasses	5,000
Turtle Mountain, Inc.	Australia	Frozen deserts	5,000
Turtle Mountain, Inc.	Canada	Frozen deserts	5,000
Turtle Mountain, Inc.	Japan	Frozen deserts	5,000
Turtle Mountain, Inc.	Taiwan	Frozen deserts	5,000
Turtle Mountain, Inc.	United Kingdom	Frozen deserts	5,000
T.C. Jacoby & Company, Inc.	Mexico	Cheese and cream cheese	5,000
U.S. Food Corporation	Mexico	Milk alternative	5,000
U.S. Foods & Pharmaceuticals, Inc	China (Mainland)	prepared and processed foods	5,000
U.S. Foods & Pharmaceuticals, Inc	Jamaica & Dep	prepared and processed foods	5,000
U.S. Foods & Pharmaceuticals, Inc	Saudi Arabia	prepared and processed foods	5,000
U.S. Grain Company	Finland	Pet food	4,000
U.S. Grain Company	Germany	Pet food	15,000
U.S. Grain Company	Italy	Pet food	5,000
U.S. Grain Company	Portugal	Pet food	5,000
U.S. Grain Company	Spain	Pet food	5,000
U.S. Grain Company	Switzerland	Pet food	6,000
U.S. Soy	Germany	processed soy ingredients	5,000
U.S. Soy	Japan	processed soy ingredients	7,500
U.S. Soy	Netherlands	processed soy ingredients	5,000
U.S. Soy	Switzerland	processed soy ingredients	5,000
U.S. Soy	United Kingdom	processed soy ingredients	5,000
U.S. Soy	United States	processed soy ingredients	10,000
Valley Fig Growers	Canada	Dried Fruit	5,000
Valley Fig Growers	China (Mainland)	Dried Fruit	5,000
Valley Fig Growers	Japan	Dried Fruit	5,000
Valley Fig Growers	New Zealand	Dried Fruit	5,000
Valley Fig Growers	Singapore	Dried Fruit	5,000
Valley Fig Growers	United States	Dried Fruit	5,000
Vancol Industries, Inc	Canada	Carbonated soft drinks, flavored water	5,000
Vancol Industries, Inc	Germany	Carbonated soft drinks, flavored water	5,000
Vancol Industries, Inc	Hong Kong	Carbonated soft drinks, flavored water	5,000
Vancol Industries, Inc	Korea, Republic of	Carbonated soft drinks, flavored water	5,000
Vancol Industries, Inc	Mexico	Carbonated soft drinks, flavored water	5,000
Vancol Industries, Inc	United Kingdom	Carbonated soft drinks, flavored water	5,000
Vanguard Trading Services, Inc.	China (Mainland)	grocery products	5,000
Vanguard Trading Services, Inc.	Hong Kong	grocery products	5,000
Vanguard Trading Services, Inc.	Japan	grocery products	5,000
Vanguard Trading Services, Inc.	Taiwan	grocery products	5,000

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Vanguard Trading Services, Inc.	Venezuela	grocery products	5,000
Vanguard Trading Services, Inc.	Yemen	grocery products	5,000
Ventana Vineyards	Germany	wine	500
Ventana Vineyards	Italy	wine	1,000
Ventana Vineyards	Japan	wine	2,500
Vermont Speciality Meats, Inc.	United States	Ostrich Meat	0
Vienna Sausage Manufacturing Co	Hong Kong	Value added meats	5,000
Vienna Sausage Manufacturing Co	Japan	Value added meats	5,000
Vienna Sausage Manufacturing Co	Mexico	Value added meats	5,000
Vienna Sausage Manufacturing Co	Singapore	Value added meats	5,000
Vienna Sausage Manufacturing Co	Taiwan	Value added meats	5,000
Vision Specialty Foods, Inc.	Denmark	CANFR, CONDI	5,000
Vision Specialty Foods, Inc.	Germany	CANFR, CONDI	5,000
Vision Specialty Foods, Inc.	Sweden	CANFR, CONDI	5,000
Vision Specialty Foods, Inc.	United Kingdom	CANFR, CONDI	5,000
Vtrade	United States	Pasta, Spices, Nonfat Dry Milk	5,000
Wakefern Food Corporation	Bermuda	Fruit, Vegetables, Dairy, Juice, Cereal, Snack Food	5,000
Wakefern Food Corporation	Dominican Republic	Fruit, Vegetables, Dairy, Juice, Cereal, Snack Food	5,000
Wakefern Food Corporation	Iceland	Fruit, Vegetables, Dairy, Juice, Cereal, Snack Food	5,000
Wakefern Food Corporation	Israel	Fruit, Vegetables, Dairy, Juice, Cereal, Snack Food	5,000
Wakefern Food Corporation	Panama	Fruit, Vegetables, Dairy, Juice, Cereal, Snack Food	5,000
Wakefern Food Corporation	United Kingdom	Fruit, Vegetables, Dairy, Juice, Cereal, Snack Food	5,000
Walnut Acres Organic Fm	Canada	PROCP, OTNJU, CANFR	5,000
Walnut Acres Organic Fm	United States	PROCP, OTNJU, CANFR	5,000
Way Cool, Inc.	Canada	Asst. Energy Bars	5,000
Way Cool, Inc.	Germany	Asst. Energy Bars	5,000
Way Cool, Inc.	Netherlands	Asst. Energy Bars	5,000
Way Cool, Inc.	United Kingdom	Asst. Energy Bars	5,000
Way Cool, Inc.	United States	Asst. Energy Bars	5,000
WCA Services, Inc.	Germany	Ginseng capsules	5,000
WCA Services, Inc.	Italy	Ginseng capsules	5,000
WCA Services, Inc.	Sweden	Ginseng capsules	5,000
Welch Foods Inc., A Cooperative	Hong Kong	Welch's 100% Grape Juices	155,000
Welch Foods Inc., A Cooperative	Japan	Welch's 100% Grape Juices	236,401
Welch Foods Inc., A Cooperative	Korea, Republic of	Welch's 100% Grape Juices	55,000
Welch Foods Inc., A Cooperative	Taiwan	Welch's 100% Grape Juices	25,000
Welch Foods Inc., A Cooperative	United Kingdom	Welch's 100% Grape Juices	100,000
Well-Pict, Inc.	Brazil	Fresh Fruit	5,000
Well-Pict, Inc.	Canada	Fresh Fruit	5,000
Well-Pict, Inc.	Hong Kong	Fresh Fruit	5,000
Well-Pict, Inc.	Taiwan	Fresh Fruit	5,000
Wente Vineyards	Barbados	wine	5,000
Wente Vineyards	Belgium-Luxembourg	wine	5,000
Wente Vineyards	Canada	wine	10,000
Wente Vineyards	China (Mainland)	wine	5,000
Wente Vineyards	Denmark	wine	20,000
Wente Vineyards	Dominican Republic	wine	2,500
Wente Vineyards	France	wine	7,500
Wente Vineyards	India	wine	5,000
Wente Vineyards	Ireland	wine	5,000
Wente Vineyards	Japan	wine	15,000
Wente Vineyards	Mexico	wine	5,000
Wente Vineyards	Netherlands	wine	25,000
Wente Vineyards	United Kingdom	wine	10,000

1999 MAP Brand Companies and Products

company_name	country_name	Commodity	Approved Budget
Western Export Services, Inc	Japan	grocery products, malt beverage, Beer	10,000
Western Family Foods, Inc.	Hong Kong	grocery products	5,000
Western Family Foods, Inc.	Japan	grocery products	5,000
Western Family Foods, Inc.	Panama	grocery products	5,000
Western Family Foods, Inc.	Philippines	grocery products	5,000
Western Family Foods, Inc.	Singapore	grocery products	5,000
Western Family Foods, Inc.	Taiwan	grocery products	5,000
White River Hardwoods	Australia	Mouldings	2,000
White River Hardwoods	Canada	Mouldings	3,750
White River Hardwoods	Costa Rica	Mouldings	1,500
White River Hardwoods	France	Mouldings	7,500
White River Hardwoods	Hong Kong	Mouldings	2,000
White River Hardwoods	Malaysia	Mouldings	6,000
White River Hardwoods	Netherlands	Mouldings	2,500
White River Hardwoods	Panama	Mouldings	2,000
White River Hardwoods	Singapore	Mouldings	8,000
White River Hardwoods	United Kingdom	Mouldings	2,000
White Toque/Gourmet USA	France	groceries - Gourmet USA brand	5,000
White Toque/Gourmet USA	Netherlands	groceries - Gourmet USA brand	5,000
Wild Rice Exchange	Argentina	rice	5,000
Wild Rice Exchange	Brazil	rice	5,000
Wild Rice Exchange	Denmark	rice	5,000
Wild Rice Exchange	Germany	rice	5,000
Wild Rice Exchange	United Kingdom	rice	5,000
Wild Rice Exchange	United States	rice	5,000
Will-Pak Foods, Inc.	Canada	Instanat side dishes, soups, chili, beans	5,000
Will-Pak Foods, Inc.	Saudi Arabia	Instanat side dishes, soups, chili, beans	5,000
Willow Wind Organic Farms	Germany	Frozen vegetables	5,000
Willow Wind Organic Farms	Japan	Frozen vegetables	5,000
Willow Wind Organic Farms	United Kingdom	Frozen vegetables	5,000
Willow Wind Organic Farms	United States	Frozen vegetables	5,000
Wines Of America, Ltd.	Czech Republic	Wine	5,000
Wines Of America, Ltd.	Germany	Wine	5,000
Wisconsin Ginseng/Herb Associati	China (Mainland)	Extract, capsules, aloe-cranberry juice drink	5,000
World Trade Consultants, Ltd.	Japan	Bakery ingredients	5,000
World Trade Consultants, Ltd.	Taiwan	Bakery ingredients	5,000
Worldwide Marketing Corporation	Argentina	Distilled Liquors/Bourbon whiskey	15,000
Worldwide Marketing Corporation	Brazil	Distilled Liquors/Bourbon whiskey	10,000
Worldwide Marketing Corporation	Chile	Distilled Liquors/Bourbon whiskey	5,000
Worldwide Marketing Corporation	France	Distilled Liquors/Bourbon whiskey	10,000
Worldwide Marketing Corporation	Italy	Distilled Liquors/Bourbon whiskey	5,000
Worldwide Marketing Corporation	Japan	Distilled Liquors/Bourbon whiskey	50,000
Worldwide Marketing Corporation	Spain	Distilled Liquors/Bourbon whiskey	5,000
Worldwide Sires, Inc.	China (Mainland)	Frozen Bovine Semen	1,700
Worldwide Sires, Inc.	France	Frozen Bovine Semen	4,500
Worldwide Sires, Inc.	Hungary	Frozen Bovine Semen	3,000
Worldwide Sires, Inc.	Ireland	Frozen Bovine Semen	4,000
Worldwide Sires, Inc.	Japan	Frozen Bovine Semen	2,000
Worldwide Sires, Inc.	Netherlands	Frozen Bovine Semen	5,500
Worldwide Sires, Inc.	New Zealand	Frozen Bovine Semen	3,500
Worldwide Sires, Inc.	Poland	Frozen Bovine Semen	3,000
Worldwide Sires, Inc.	Russian Federation	Frozen Bovine Semen	2,000
Worldwide Sires, Inc.	Spain	Frozen Bovine Semen	4,800
Worldwide Sires, Inc.	Turkey	Frozen Bovine Semen	3,000

1999 MAP Brand Companies and Products

company_name	country_name	Commodity	Approved Budget
Wyeast Laboratories, Inc	Germany	Yeast products	5,000
Wyeast Laboratories, Inc	Japan	Yeast products	5,000
Wyeast Laboratories, Inc	New Zealand	Yeast products	5,000
W. Kundig USA	France	Dried mushrooms, rice and wild rice blends	5,000
W. Kundig USA	Germany	Dried mushrooms, rice and wild rice blends	5,000
W. Kundig USA	Switzerland	Dried mushrooms, rice and wild rice blends	5,000
Yoshida Food Products	United Kingdom	Condiments, Sauces, Marinades	5,000
Young Pecan Company	France	Tree Nuts	10,000
Young Pecan Company	Germany	Tree Nuts	10,000
Young Pecan Company	Netherlands	Tree Nuts	5,000
Yummy Foods USA	Colombia	fishmeal, honey, instant pasta foods	5,000
Yummy Foods USA	El Salvador	fishmeal, honey, instant pasta foods	5,000
Yummy Foods USA	Guatemala	fishmeal, honey, instant pasta foods	5,000
Yummy Foods USA	Honduras	fishmeal, honey, instant pasta foods	5,000
Yummy Foods USA	Korea, Republic of	fishmeal, honey, instant pasta foods	0
Yummy Foods USA	Mexico	fishmeal, honey, instant pasta foods	5,000
Yummy Foods USA	Panama	fishmeal, honey, instant pasta foods	5,000
ZB Industries, Inc.	Canada	Frozen Seafood Entrees, Frozen Stir-Fry Vegetables	5,000
ZB Industries, Inc.	United Kingdom	Frozen Seafood Entrees, Frozen Stir-Fry Vegetables	0
ZB Industries, Inc.	United States	Frozen Seafood Entrees, Frozen Stir-Fry Vegetables	5,000
Zinpro Corporation	Australia	Poasted Cron, Beans, Margarita Mix, Vinegars, Marin	5,000
Zinpro Corporation	Brazil	Poasted Cron, Beans, Margarita Mix, Vinegars, Marin	5,000
Zinpro Corporation	China (Mainland)	Poasted Cron, Beans, Margarita Mix, Vinegars, Marin	5,000
Zinpro Corporation	France	Poasted Cron, Beans, Margarita Mix, Vinegars, Marin	5,000
Zinpro Corporation	Germany	Poasted Cron, Beans, Margarita Mix, Vinegars, Marin	5,000
Zinpro Corporation	Spain	Poasted Cron, Beans, Margarita Mix, Vinegars, Marin	5,000
Grand Total			**13,431,857**

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OVERSEAS OFFICES

Question. Please provide a list of FAS overseas counselor/attache and trade offices for fiscal year 1999 and 2000, and proposed for fiscal year 2001, and the amount of funding and full-time equivalent staffing levels provided for each.

Answer. A list of FAS overseas counselor/attache and trade offices and the amount of funding and full-time equivalent staffing levels is provided.

[The information follows:]

FOREIGN AGRICULTURAL SERVICE
OVERSEAS COUNSELOR/ATTACHE AND TRADE OFFICES
Funding and Staff* Levels -- FY 1999-FY 2001
(Thousands of Dollars)

FOREIGN AGRICULTURAL AFFAIRS						
WESTERN EUROPE	FY 1999		FY 2000		FY 2001	
	Funding	On-Board Employ.	Funding	On-Board Employ.	Funding	On-Board Employ.
FRANCE	905	7	794	6	794	6
GERMANY	832	7	696	6	696	6
ITALY, EMB.	708	6	757	6	757	6
GREECE	220	2	228	2	228	2
NETHERLANDS	778	5	811	5	811	5
BELGIUM,E	218	2	240	1	240	1
DENMARK	183	3	193	3	193	3
SPAIN	792	6	793	6	793	6
PORTUGAL	157	2	155	2	155	2
UNITED KINGDOM	780	6	773	6	773	6
IRELAND	150	1	158	1	158	1
BELG. USEU	1,298	6	1,416	6	1,416	6
SWITZ, GENEVA.	872	4	1,062	4	1,062	4
ITALY, FODAG	231	1	232	1	232	1
TOTAL	8,124	58	8,308	55	8,308	55
EASTERN EUROPE AND EURASIA						
AUSTRIA	712	4	691	4	691	4
CZECH REP.	40	1	42	1	42	1
BULGARIA	220	3	258	3	258	3
ROMANIA	35	1	42	1	42	1
SERBIA-MONT	39	1	0	0	0	0
PAKISTAN	301	4	299	4	299	4
POLAND	589	4	550	4	550	4
UKRAINE	256	2	48	1	48	1

EASTERN EUROPE AND EURASIA (Continued)	FY 1999		FY 2000		FY 2001	
	Funding	On-Board Employ.	Funding	On-Board Employ.	Funding	On-Board Employ.
RUSSIA	974	9	950	8	950	8
SWEDEN	381	5	367	5	367	5
TURKEY	460	4	493	4	493	4
TOTAL	4,007	38	3,740	35	3,740	35
WESTERN HEMISPHERE						
ARGENTINA	747	5	757	5	757	5
BRAZIL	491	4	438	4	438	4
CANADA	458	5	488	5	488	5
CHILE	337	3	343	3	343	3
COLOMBIA	440	4	530	4	530	4
COSTA RICA	407	3	402	3	402	3
DOM. REPUBLIC	380	2	471	2	467	2
GUATEMALA	521	3	461	3	461	3
MEXICO	985	9	1,000	10	896	9
PERU	327	4	343	4	343	4
ECUADOR	138	2	154	2	154	2
VENEZUELA	712	5	779	5	779	5
TOTAL	5,943	49	6,166	50	6,058	49
AFRICA AND MIDDLE EAST						
COTE D'IVOIRE	366	3	342	3	342	3
EGYPT	442	4	464	4	464	4
ISRAEL	143	1	158	1	158	1
SYRIA	54	1	54	1	54	1
KENYA	299	2	367	2	367	2
MOROCCO	250	3	261	3	261	3
ALGERIA	35	0	35	0	35	0
TUNISIA	77	2	75	2	75	2

AFRICA (Continued)	FY 1999		FY 2000		FY 2001	
	Funding	On-Board Employ.	Funding	On-Board Employ.	Funding	On-Board Employ.
NIGERIA	475	2	439	2	439	2
SO. AFRICA	745	6	695	6	695	6
TOTAL	2,886	24	2,890	24	2,890	24
ASIA						
AUSTRALIA	323	3	308	3	308	3
CHINA	923	4	952	4	952	4
INDIA	365	7	390	7	390	7
BANGLADESH	39	1	45	1	45	1
INDONESIA	501	5	444	5	444	5
JAPAN	1,390	12	1,431	12	1,431	12
KOREA	528	5	610	5	610	5
MALAYSIA	288	3	279	3	279	3
NEW ZEALAND	201	3	189	3	189	3
PHILIPPINES	475	5	505	5	505	5
THAILAND	575	5	539	5	539	5
VIETNAM	347	2	351	2	351	2
TOTAL	5,955	55	6,043	55	6,043	55
TOTAL, FAA	26,915	224	27,147	219	27,039	218
AGRICULTURAL TRADE OFFICES						
SAO PAULO, Brazil	512	4	439	4	439	4
TORONTO, Canada	–	–	–	–	550	4
SHANGHAI, China	653	1	497	1	497	1
GUANGZHOU, China	419	1	434	1	434	1
HAMBURG, Germany	460	3	461	3	461	3
HONG KONG	1,017	4	896	4	896	4
JAKARTA, Indonesia	347	1	293	1	293	1
AGRICULTURAL TRADE OFFICES (Continued)	FY 1999		FY 2000		FY 2001	
	Funding	On-Board Employ.	Funding	On-Board Employ.	Funding	On-Board Employ.

MILAN, Italy	345	2	168	1	0	0
TOKYO, Japan	1,977	6	2,050	5	2,050	5
OSAKA, Japan	476	3	534	3	534	3
SEOUL, Korea	915	4	1,027	4	1,027	4
MEXICO CITY	1,873	4	1,191	4	1,191	4
MONTERREY, Mexico	–	–	–	–	400	4
MANILA, Philippines	–	–	–	–	550	4
MOSCOW, Russia	217	1	323	1	323	1
JEDDAH, Saudi Arabia	93	1	0	0	0	0
RIYADH, Saudi Arabia	318	2	257	2	257	2
SINGAPORE	854	3	860	2	0	0
DUBAI, U.A.E.	363	4	390	4	390	4
CARIBBEAN BASIN, USA	415	3	410	3	410	3
TOTAL, ATO	11,254	47	10,230	43	10,702	52
GRAND TOTAL	**38,169**	**271**	**37,377**	**262**	**37,741**	**270**

*Overseas managed on a head count basis, not FTE basis. Total includes FSN's as well as U.S. Foreign Service personnel.

INTERNATIONAL COOPERATIVE ADMINISTRATIVE SUPPORT SERVICES* FY 1999-2001			
	FY 1999	FY 2000	FY 2001
Foreign Agricultural Affairs			
	9,452	9,794	10,362
Agricultural Trade Offices			
	1,929	1,662	1,741
TOTAL	**11,381**	**11,456**	**12,103**

*ICASS and Other Reimbursements to State Department.

EXPORT CREDIT GUARANTEE ACTIVITIES

Question. Please provide a listing of the activities supported under each of the four export credit guarantee activities in fiscal year 1999 and in fiscal year 2000 to date: Supplier Credit Guarantees, Facilities Guarantees, GSM–102, and GSM–103.

Answer.

[The information follows:]

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Andean Region	350.00	267.20	82.80	5/ 8/ 9/
Cotton (36)		21.90		
Feed Grains (36)		98.30		
Meat, Frozen or Chilled (36)		3.10		
Oilseeds (36)		2.00		
Protein Meals (36)		34.80		
Rice (36)		9.20		
Tallow (36)		0.30		
Vegetable Oils (36)		16.90		
Wheat, Wheat Flour, Semolina (36)		80.70		
Other Commodities (36)		0.00		
Argentina	7.00	0.00	7.00	5/ 8/ 9/
All Commodities (36)		0.00		
Azerbaijan	5.00	0.00	5.00	5/ 8/ 9/
All Commodities (36)		0.00		
Baltic Region	15.00	0.00	15.00	4/ 5/ 8/ 10/
All Commodities (24)		0.00		
Brazil	250.00	23.00	227.00	10/
Livestock, Breeder (36)		0.10		9/
Sub-Total...	**5.00**	**0.10**	**4.90**	
Feed Grains (36)		2.10		
Fruit, Fresh (36)		1.20		
Rice (36)		17.60		
Wood Pulp (720 Days)		2.00		
Other Commodities (36)		0.00		5/
Sub-Total...	**245.00**	**22.90**	**222.10**	
Central America Region	110.00	64.10	45.90	5/ 8/ 9/
Cotton (36)		17.40		
Feed Grains (36)		22.10		
Livestock, Breeder (36)		0.10		
Protein Meals (36)		17.30		
Rice (36)		0.10		
Tallow (36)		2.60		
Vegetable Oils (36)		2.30		
Wheat (36)		2.20		
Other Commodities (36)		0.00		
Central Europe Region	10.00	0.00	10.00	4/ 5/ 8/ 10/
All Commodities (24)		0.00		
China	100.00	0.00	100.00	5/ 6/ 8/ 9/
All Commodities (36)		0.00		

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
East African Region	35.00	0.00	35.00	4/ 5/
All Commodities (12)		0.00		
East Caribbean Region	60.00	44.80	15.20	5/ 8/ 9/
Feed Grains (36)		6.20		
Protein Meals (36)		0.80		
Rice (36)		8.20		
Oilseeds (36)		5.80		
Wheat (36)		23.80		
Other Commodities (36)		0.00		
Egypt	100.00	32.00	68.00	5/ 7/ 9/
Feed Grains (12)		1.00		
Protein Meals (12)		4.20		
Wheat (12)		26.80		
Other Commodities (12)		0.00		
Georgia, Republic of	5.00	0.00	5.00	5/ 8/ 9/
All Commodities (36)		0.00		
India	20.00	0.00	20.00	5/ 8/ 9/
All Commodities (36)		0.00		
Indonesia	400.00	119.90	280.10	4/
Barley Malt (36)		0.00		
Brine Shrimp Eggs (36)		0.00		
Corn Products (36)		0.00		
Cotton (36)		12.90		
Cotton Fabrics, 100% (36)		0.00		11/
Cotton Yarn, 100% (36)		0.00		11/
Dairy Products (36)		0.00		
Feed Grains (36)		0.00		
Fruit, Dried (36)		0.00		
Fruit, Fresh (36)		0.00		
Fruit Juices, 100% (36)		0.00		
Hay (36)		0.00		
Hides and Skins (36)		0.00		
Leather (incl. wet blues) (36)		0.00		11/
Meat, Frozen or Chilled (36)		0.00		
Oilseeds (36)		98.50		
Planting Seeds (36)		0.00		
Potatoes (36)		0.00		
Poultry Breeder Stock (36)		0.00		
Protein Meals (36)		0.00		
Pulses (36)		0.00		
Rice (36)		0.00		
Tree Nuts (36)		0.00		
Wheat; Wheat Flour; Semolina (36)		4.20		
Wood Products, Solid (720 Days)		0.00		
Wood Pulp (720 Days)		4.30		
Wool; Mohair (36)		0.00		

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Jordan	20.00	0.00	20.00	4/ 5/ 13/
All Commodities (12)		0.00		
Kazakastan	10.00	3.80	6.20	4/ 5/ 10/
Meat, Frozen or Chilled (12)		3.80		
Other Commodities (12)		0.00		
Korea	1,000.00	647.50	352.50	10/ 19/
Cotton (24)	125.00	30.60	94.40	
Feed Grains (24)		264.00		
Soybean Meal (24)		0.00		
Sub-Total...	**320.00**	**264.00**	**56.00**	
Fruit, Dried (24)		0.00		
Fruit, Fresh (24)		0.00		
Potatoes (24)		0.00		
Tree Nuts (24)		0.00		
Sub-Total...	**5.00**	**0.00**	**5.00**	
Hides and Skins (24)	50.00	49.80	0.20	
Leather (24)	20.00	20.00	0.00	11/
Meat, Beef (24)	60.00	60.00	0.00	
Meat, Pork (24)	25.00	25.00	0.00	
Roe (24)	5.00	0.00	5.00	
Soybeans (24)	150.00	66.00	84.00	
Surimi, Frozen (24)	25.00	8.80	16.20	11/
Wheat (24)	110.00	108.50	1.50	
Wood Products, Solid (720 Days)	10.00	1.00	9.00	
Wood Pulp (720 Days)	95.00	13.80	81.20	
Lebanon	12.00	0.00	12.00	5/ 8/ 9/ 17/
All Commodities (36)		0.00		
Sub-Total	**7.00**	**0.00**	**7.00**	
Animal Feed Products (36)		0.00		
Aquacultural Feed (36)		0.00		
Feed Grains (36)		0.00		
Oilseeds (36)		0.00		
Planting Seeds (36)		0.00		
Protein Meals (36)		0.00		
Wheat; Wheat Flour; Semolina (36)		0.00		
Sub-Total...	**5.00**	**0.00**	**5.00**	

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Malaysia	100.00	30.10	69.90	5/ 8/ 9/
Oilseeds (36)		29.10		
Wheat (36)		1.00		
Other Commodities (36)		0.00		
Mexico	1,250.00	1,227.90	22.10	5/ 8/ 10/
Animal Feed Products (24)		0.70		
Corn Products (24)		1.10		
Cotton (24)		160.70		
Cotton Fabrics (24)		0.10		
Feed Grains (24)		429.50		
Hides and Skins (24)		5.50		
Leather (24)		0.30		
Meat, Frozen or Chilled (24)		55.40		
Oilseeds (24)		338.60		
Protein Meals (24)		21.60		
Rice (24)		3.90		
Tallow, grease (24)		37.90		
Vegetable Oils (24)		62.40		
Wheat, Wheat Flour, Semolina (24)		110.20		
Other Commodities (24)		0.00		
Morocco	10.00	0.00	10.00	5/ 8/ 9/
All Commodities (36)		0.00		
Pakistan	60.00	36.20	23.80	10/
Wheat (36)		36.20		
Philippines	100.00	42.20	57.80	5/ 8/ 9/
Oilseeds (36)		3.40		
Protein Meals (36)		3.70		
Wheat (36)		35.10		
Other Commodities (36)		0.00		
Poland	25.00	0.00	25.00	5/ 8/ 9/
All Commodities (36)		0.00		
Romania	45.00	0.00	45.00	4/ 5/ 8/
All Commodities (36)		0.00		

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Southeast Asia Region	90.00	57.60	32.40	4/
Barley Malt (36)		0.00		
Brine Shrimp Eggs (36)		0.00		
Corn Products (36)		0.00		
Cotton (36)		0.00		
Cotton Fabrics, 100% (36)		0.00		11/
Cotton Yarn, 100% (36)		0.00		11/
Dairy Products (36)		0.00		
Feed Grains (36)		15.66		
Fish and Shellfish (Fresh, Chilled, Frozen, Canned, Salted/Dried (36)		0.00		
Fruit, Canned (36)		0.00		
Fruit, Dried (36)		0.00		
Fruit, Fresh (36)		0.00		
Fruit Juices (36)		0.00		11/
Hay (36)		0.00		
Hides and Skins (36)		0.04		
Ice Cream (36)		0.00		11/
Leather (36)		0.00		11/
Livestock, Breeder (36)		0.00		
Meat, Frozen or Chilled (36)		0.00		
Oilseeds (36)		27.80		
Peanut Butter (36)		0.00		11/
Peanut Flour (36)		0.00		
Planting Seeds (36)		0.00		
Potatoes (36)		0.00		
Poultry Breeder Stock (36)		0.00		
Protein Meals (36)		1.80		
Pulses (36)		0.00		
Rice (36)		0.00		
Straw (36)		0.00		
Tree Nuts (36)		0.00		
Vegetable Oils (36)		0.00		
Vegetables, Canned (36)		0.00		
Vegetables, Fresh (36)		0.00		
Wheat; Wheat Flour; Semolina (36)		12.30		
Wood Products, Solid (720 Days)		0.00		
Wool; Mohair (36)		0.00		

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Southeast Europe Region	25.00	2.80	22.20	4/ 5/ 8/ 10/
Protein Meals (24)		2.80		
Other Commodities (24)		0.00		
Southern Africa Region	50.00	13.00	37.00	5/ 8/ 9/
Soft Drinks (36)		1.30		
Meat, Frozen or Chilled (36)		4.30		
Poultry Breeder Stock (36)		2.70		
Rice (36)		3.50		
Vegetable Oils (36)		1.20		
Other Commodities (36)		0.00		
Sri Lanka	70.00	0.00	70.00	
Cotton (36)	20.00	0.00	20.00	
Wheat (36)	50.00	0.00	50.00	
Thailand	300.00	31.00	269.00	5/ 8/ 9/
Oilseeds (36)		28.10		
Leather (36)		2.90		11/
Other Commodities (36)		0.00		
Tunisia	30.00	8.00	22.00	4/ 8/
Dairy Products (36)		2.30		
Other Commodities (36)		0.00		
Sub-Total...	**20.00**	**2.30**	**17.70**	5/
Vegetable Oils (36)		5.70		15/
Sub-Total...	**10.00**	**5.70**	**4.30**	

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Turkey	350.00	277.30	72.70	5/ 8/ 9/ 18/
Corn Products (36)		0.40		
Cotton (36)		36.40		
Feed Grains (36)		40.80		
Hides and Skins (36)		2.80		
Oilseeds (36)		46.40		
Planting Seeds (36)		0.60		
Poultry Breeder Stock (36)		0.50		
Protein Meals (36)		48.60		
Pulses (36)		0.30		
Rice (36)		12.70		
Tallow (36)		22.00		
Vegetable Oils (36)		59.80		
Wheat (36)		6.00		
Other Commodities (36)		0.00		
Uzbekistan	20.00	19.60	0.40	4/ 5/ 8/ 10/
Oilseeds (24)		19.60		
Other Commodities (24)		0.00		
West African Region	52.00	3.20	48.80	4/
Animal Genetics (36)		0.00		
Cattle (36)		0.00		
Livestock, Breeder (36)		0.00		
Sub-Total...	**2.00**	**0.00**	**2.00**	
Rice (12)		3.00		
Vegetable Oils (12)		0.20		
Other Commodities (12)		0.00		
Sub-Total...	**50.00**	**3.20**	**46.80**	5/
West Caribbean Region	35.00	3.90	31.10	5/ 9/ 10/
Feed Grains (18)		2.40		
Protein Meals (18)		1.50		
Other Commodities (18)		0.00		
TOTAL FOR GSM-102	5,121.00	2,955.10	2,165.90	
For Comparison Purposes: FY 1998 Payment Guarantee Commitments through September 30, 1998.				
TOTAL FOR GSM-102	5,793.00	3,962.52	1,830.48	

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-103 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Central America Region	10.00	0.40	9.60	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.40		
China	2.00	0.00	2.00	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Colombia	110.00	11.20	98.80	
Feed Grains (7 years)		6.10		
Meat, Frozen or Chilled (7 years)		0.00		
Oilseeds (7 years)		0.80		
Protein Meal (7 years)		1.00		
Rice (7 years)		0.00		
Wheat; Wheat Flour; Semolina (7 years)		3.30		
Cote D'Voire	2.00	0.00	2.00	9/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Egypt	5.00	0.00	5.00	4/
Animal Genetics (7 years)		0.00		
Cattle (feeder (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Indonesia	10.00	0.00	10.00	4/
Animal Genetics (7 years)		0.00		
Cattle (feeder (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Jordan	15.00	14.40	0.60	4/ 20/
Feed Grains (7 years)		0.00		
Wheat (7 years)		14.40		
Lebanon	15.00	1.40	13.60	
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		1.40		4/
Sub-Total...	**10.00**	**1.40**	**8.60**	14/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		4/
Sub-Total...	**5.00**	**0.00**	**5.00**	14/

Summary of FY 99 Export Credit Guarantee Program Activity for GSM-103 as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Mexico	50.00	2.10	47.90	12/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		2.10		
Morocco	75.00	14.70	60.30	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Cotton (7 years)		0.00		
Feed Grains (7 years)		2.90		
Livestock, Breeder (7 years)		0.00		
Oilseeds (7 years)		0.00		
Protein Meals (7 years)		0.00		
Vegetable Oils (7 years)		0.00		
Wheat (7 years)		11.80		
Philippines	2.00	0.00	2.00	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Southern Africa Region	1.00	0.00	1.00	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Tunisia	40.00	0.00	40.00	4/ 16/
Livestock, Breeder (7 years)		0.00		
Poultry Breeder Stock (7 years)		0.00		
Turkey	40.00	0.00	40.00	4/
Livestock, Breeder (7 years)		0.00		
Poultry Breeder Stock (7 years)		0.00		
TOTAL FOR GSM-103	377.00	44.20	332.80	
For Comparison Purposes: FY 1998 Payment Guarantee Commitments through September 30, 1998.				
TOTAL FOR GSM-103	310.00	56.00	254.00	

Summary of FY 99 Supplier Credit Guarantee Program (SCGP) Activity as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Andean Region	10.00	0.03	9.97	4/ 5/
Oilseeds (180)		0.03		
Other Commodities (180)		0.00		
Argentina	1.00	0.00	1.00	4/ 5/
All Commodities (180)		0.00		
Baltic Region	5.00	0.94	4.06	4/ 5/
Meat, Frozen or Chilled (180)		0.94		
Other Commodities (180)		0.00		
Brazil	10.00	0.08	9.92	4/ 5/
Fruit, Fresh (180)		0.08		
Other Commodities (180)		0.00		
Bulgaria	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
Central American Region	10.00	7.50	2.50	4/ 5/
Meat, Frozen or Chilled (180)		2.70		
Meat Products, Processed (180)		1.40		
Rice (180)		3.20		
Protein Meals (180)		0.20		
Other Commodities (180)		0.00		
Central Europe Region	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
China	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
East Africa Region	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
East Caribbean Region	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
Georgia, Republic of	5.00	2.90	2.10	4/
Meat, Frozen or Chilled (Poultry) (180)		2.90		
Wheat; Wheat Flour; Semolina (180)		0.00		
Israel	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
Jamaica	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
Kazakstan	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		

Summary of FY 99 Supplier Credit Guarantee Program (SCGP) Activity as of close of business:
September 30, 1999

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 1999	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Korea	50.00	0.39	49.61	4/ 5/
Fruit, Fresh (180)		0.29		
Wood Products, Solid (180)		0.10		
Other Commodities (180)		0.00		
Mexico	100.00	32.71	67.29	5/ 9/
Aquaculture Feed (Shrimp and Fish) (180)		0.73		
Cotton (180)		0.07		
Feed Grains (180)		10.80		
Fruit, Fresh (180)		0.01		
Meat, Frozen or Chilled (180)		3.60		
Meat Products, Processed (180)		0.40		
Oilseeds (180)		8.13		
Pulses (180)		0.31		
Rice (180)		8.66		
Other commodities (180)		0.00		
Poland	10.00	0.01	9.99	
Vegetable Oils (180)		0.01		
Other Commodities (180)		0.00		
Southeast Asia Region	50.00	0.89	49.11	4/ 5/
Fish (Fresh, Chilled, Frozen and Canned) (180)		0.01		
Fruit, Fresh (180)		0.43		
Meat, Frozen or Chilled (180)		0.40		
Tree Nuts (180)		0.05		
Other Commodities (180)		0.00		
Southeast Europe Region	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
Turkey	5.00	0.57	4.43	4/ 5/
Hides and Skins (180)		0.57		
Other Commodities (180)		0.00		
TOTAL FOR SCGP	361.00	46.02	314.98	
For Comparison Purposes: FY 1998 Payment Guarantee Commitments through September 30, 1998.				
TOTAL FOR SCGP	293.00	18.18	274.82	

FOR COMPARISON PURPOSES:

FY 1999 PAYMENT GUARANTEE COMMITMENTS THROUGH 9/30/99:

TOTAL FOR CCC CREDITS	**5,859.00**	**3,045.32**	**2,813.68**
For Comparison Purposes: FY 1998 Payment Guarantee Commitments through September 30, 1998.			
TOTAL FOR CCC CREDITS	**6,396.00**	**4,036.70**	**2,359.30**

FY 99

FOOTNOTES:

1/ **These announcement footnotes are indicative only. See actual provisions set forth in Program Announcements. These FAS news releases are available on the Internet at http://www.fas.usda.gov or through fax polling. Callers should set their fax machines for polling and dial (202) 720-1728. For additional information, contact the FAS Information Division (202) 720-7115.**

2/ Except as noted, the following terms apply:
--Coverage is available on an FAS/FOB basis
--Maximum coverage is 98% of port value, SCGP is 50% of port value
--Final registration date for is 9/30/99
--Final export date is 11/30/99

3/ UNLESS OTHERWISE INDICATED, GSM-102 is shown in months, 103 in years and SCGP in days. *For SCGP no interest coverage is offered.

4/ Coverage on a C&F basis is available on sales made on C&F or CIF basis.

5/ Commodities as reflected in program announcement PR-0122-99. Credit terms as set forth in country/regional program announcements.

6/ China (102)--Total authorization was $200.0 million, however, $100.0 million remains unallocated i.e. non-operational.

7/ Egypt(102)--Total authorization was $225.0 million, however, $125.0 million remains unallocated i.e., non-operational.

8/ Credit terms for solid wood products, wood pulp and wood chips are offered up to 720 days.

9/ Breeder Livestock coverage is available on C&F basis to point of ocean vessel or international carrier discharge.

10/ For credit periods exceeding 6 months, principal repayments plus accrued interest are due at 6 month intervals.

11/ Products have been determined to be "high value products". See program announcement for details.

12/ Mexico(103)--Total authorization was $100.0 million, however, $50.0 remains unallocated i.e. non-operational.

13/ Jordan (102)- Allocation offers coverage on sales to buyers in Jordan other than the Ministry of Supply.

14/ Lebanon (103)--For the $10.0 million line, registrations eligible for Central Bank of Lebanon only. Any approved Lebanese bank is eligible for the $5.0 million line.

15/ Tunisia (102)--For the $10.0 million line, Central Bank of Tunisia is the CCC approved bank. Also, the eligible buyer is National Office of Oil.

16/ Tunisia (103)--The eligible buyer is the Office National des Cereales.

17/ Lebanon (102)--For the $7.0 million line, any approved Lebanese bank is eligible. For the $5.0 million line, the Central Bank of Lebanon is the only eligible bank.

18/ Turkey(102)--Credit terms amended to include an additional credit option. See program announcement for details.

19/ Korea(102)--Contractual arrangements must call for shipment no later than December 31, 1999.

20/ Jordan(103)--The eligible buyer is the Ministry of Industry and Trade.

ECG 9-99

COUNTRIES INCLUDED WITHIN REGIONS:

GSM-102/103

ANDEAN REGION:	Bolivia, Chile, Colombia, Ecuador, Peru, and Venezuela
CENTRAL AMERICA REGION:	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama
BALTIC REGION:	Estonia, Latvia, and Lithuania
CENTRAL EUROPE REGION:	Czech Republic, Hungary and Slovakia
EAST AFRICA REGION:	Kenya, Uganda and Tanzania
EAST CARIBBEAN REGION:	Barbados, Grenada, Guyana, St. Lucia, St. Vincent & the Grenadines, Suriname and Trinidad & Tobago
SOUTHEAST ASIA REGION:	Indonesia, Malaysia, Philippines, Thailand, Singapore and Vietnam
SOUTHERN AFRICA REGION:	Angola, Botswana, Burundi, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, South Africa, Swaziland, Democratic Republic of the Congo (formerly Zaire), Zambia, and Zimbabwe
SOUTHEAST EUROPE REGION:	Bosnia, Croatia, and Slovenia
WEST AFRICA REGION:	Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Congo, Cote d'Voire, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Liberia, Mali, Mauritania, Nigeria, Senegal, Sierra Leone, and Togo
WEST CARIBBEAN REGION:	Dominican Republic, Haiti, and Jamaica

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SUPPLIER CREDIT GUARANTEE PROGRAM

ANDEAN REGION:	Bolivia, Chile, and Peru
BALTIC REGION:	Estonia, Latvia, and Lithuania
CENTRAL AMERICA REGION:	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama
CENTRAL EUROPE REGION:	Czech Republic, Hungary and Slovakia
EAST AFRICA REGION:	Kenya, Uganda and Tanzania
EAST CARIBBEAN REGION:	Barbados, Grenada, Guyana, St. Lucia, St. Vincent & the Grenadines, Suriname, and Trinidad and Tobago
SOUTHEAST ASIA REGION:	Indonesia, Malaysia, Philippines, Thailand, Singapore
SOUTH EAST EUROPE REGION:	Croatia and Slovenia

Summary of FY 2000 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Andean Region	350.00	108.60	241.40	5/ 6/ 7/
Cotton (36)		0.40		
Feed Grains (36)		64.80		
Oilseeds (36)		0.90		
Protein Meals (36)		12.80		
Rice (36)		3.50		
Vegetable Oils (36)		0.40		
Wheat (36)		25.80		
Other Commodities (36)		0.00		
Argentina	7.00	1.30	5.70	5/ 6/ 7/ 8/
Cotton (36)		1.30		
All Commodities (36)		0.00		
Azerbaijan	5.00	0.00	5.00	4/ 5/ 8/
All Commodities (12)		0.00		
Baltic Region	15.00	0.00	15.00	4/ 5/ 8/
All Commodities (12)		0.00		
Brazil	250.00	6.50	243.50	5/ 6/ 7/ 8/
Cotton (36)		6.50		
All Commodities (36)		0.00		
Central America Region	110.00	27.60	82.40	5/ 6/ 7/
Cotton (36)		11.70		
Feed Grains (36)		7.10		
Oilseeds (36)		0.40		
Protein Meals (36)		5.70		
Rice (36)		1.90		
Tallow (36)		0.60		
Vegetable Oils (36)		0.20		
Other Commodities (36)		0.00		
Central Europe Region	10.00	0.00	10.00	4/ 5/ 6/ 8/
All Commodities (36)		0.00		
East Africa Region	35.00	0.00	35.00	4/ 5/
All Commodities (12)		0.00		
East Caribbean Region	60.00	17.80	42.20	5/ 6/ 7/
Feed Grains (36)		2.70		
Oilseeds (36)		6.40		
Wheat (36)		8.70		
Other Commodities (36)		0.00		
Egypt	100.00	9.50	90.50	4/ 5/ 6/ 14/
Wheat (36)		9.50		
Other Commodities (36)		0.00		
Georgia, Republic of	10.00	0.00	10.00	4/ 5/ 6/
All Commodities (36)		0.00		
India	20.00	0.00	20.00	4/ 5/ 6/
All Commodities (36)		0.00		

Summary of FY 2000 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Indonesia	400.00	141.60	258.40	4/ 6/ 8/
Animal Genetics(Embryos and Semen(36)		0.00		
Barley Malt (36)		0.00		
Brine Shrimp Eggs (Farm Raised) 36)		0.00		
Corn Products (36)		0.00		
Cotton (36)		34.90		
Cotton Fabrics 100% (36)		0.00		9/
Cotton Yarn 100% (36)		0.00		9/
Dairy Products (36)		0.00		
Feed Grains (36)		0.00		
Fruit, Dried (36)		0.00		
Fruit, Fresh (36)		0.00		
Fruit Juice (36)		0.00		
Hides and Skins (36)		0.00		
Leather (36)		0.00		9/
Livestock, Breeder (36)		0.00		
Meat, Frozen or Chilled (36)		0.00		
Oilseeds (36)		105.10		
Planting Seeds (36)		0.00		
Potatoes (36)		0.00		
Poultry Breeder Stock (36)		0.00		
Protein Meals (36)		1.60		
Pulses (36)		0.00		
Rice (36)		0.00		
Tree Nuts (36)		0.00		
Wheat; Wheat Flour; Semolina (36)		0.00		
Wood Products, Solid (36)		0.00		
Wood Pulp (36)		0.00		
Wool; Mohair (36)		0.00		
Jordan	50.00	10.30	39.70	4/
All Commodities (36)		0.00		5/ 6/
Sub-Total...	**10.00**	**0.00**	**10.00**	
Feed Grains (36)		5.00		15/
Wheat (36)		5.30		
Sub-Total...	**40.00**	**10.30**	**29.70**	
Kazakastan	10.00	0.00	10.00	4/ 5/ 8/
All Commodities (12)		0.00		
Korea	500.00	223.60	276.40	8/ 12/
Cotton (24)	50.00	30.30	19.70	
Feed Grains (24)		25.00		
Soybean Meal (24)		0.00		
Sub-Total...	**100.00**	**25.00**	**75.00**	
Oilseeds (24)		43.70		
Wood Products, Solid (24)		0.30		
Other Commodities (24)		0.00		6/
Sub-Total...	**150.00**	**44.00**	**106.00**	
Hides and Skins (24)	30.00	30.00	0.00	
Leather (24)	10.00	10.00	0.00	9/
Meat, Beef (24)	35.00	35.00	0.00	
Meat, Pork (24)	20.00	0.00	20.00	
Wheat (24)	105.00	49.30	55.70	

Summary of FY 2000 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Malaysia	100.00	11.10	88.90	4/ 5/ 6/
Oilseeds (36)		11.10		
Other Commodities (36)		0.00		
Mexico	1,000.00	570.90	429.10	5/ 6/ 8/ 10/
Animal Feed Products (24)		0.40		
Corn Products (24)		0.20		
Cotton (24)		78.40		
Feed Grains (24)		173.10		
Hides and Skins (24)		2.60		
Leather (24)		1.70		9/
Livestock, Breeding (24)		0.50		
Meat, Frozen or Chilled (24)		50.40		
Oilseeds (24)		162.60		
Protein Meals (24)		7.10		
Rice (24)		1.40		
Tallow (24)		13.90		
Vegetable Oils (24)		37.80		
Wheat, Wheat Flour, Semolina (24)		40.80		
Other Commodities (24)		0.00		
Morocco	10.00	0.00	10.00	4/ 5/ 6/
All Commodities (36)		0.00		
Pakistan	125.00	0.00	125.00	4/ 8/ 13/
Wheat (36)		0.00		
Philippines	100.00	29.60	70.40	4/ 5/ 6/
Feed Grains (36)		3.90		
Protein Meals (36)		3.50		
Wheat (36)		22.20		
Other Commodities (36)		0.00		
Poland	25.00	0.00	25.00	4/ 5/ 6/ 8/
All Commodities (36)		0.00		
Romania	10.00	0.00	10.00	4/ 5/ 6/
All Commodities (36)		0.00		
Southeast Asia Region	90.00	16.30	73.70	4/ 5/ 6/
Feed Grains (36)		7.50		
Oilseeds (36)		8.80		
Other Commodities (36)		0.00		
Southeast Europe Region	25.00	0.00	25.00	4/ 5/ 6/ 8/
All Commodities (24)		0.00		
Southern Africa Region	50.00	0.00	50.00	4/ 5/ 6/
Other Commodities (36)		0.00		
Sri Lanka	70.00	0.00	70.00	4/ 8/
Cotton (36)	20.00	0.00	20.00	
Wheat (36)	50.00	0.00	50.00	

Summary of FY 2000 Export Credit Guarantee Program Activity for GSM-102 as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Thailand	290.00	3.00	287.00	4/ 5/ 6/
Leather (36)		3.00		
Other Commodities (36)		0.00		
Tunisia	30.00	0.00	30.00	4/
All Commodities (36)		0.00		5/
Sub-Total...	**20.00**	**0.00**	**20.00**	
Vegetable Oils, Including Fully Refined (36)		0.00		17/
Sub-Total...	**10.00**	**0.00**	**10.00**	
Turkey	350.00	236.70	113.30	5/ 6/ 7/
Cotton (36)		97.70		
Feed Grains (36)		27.00		
Hides and Skins (36)		1.70		
Oilseeds (36)		18.00		
Planting Seeds (36)		0.20		
Protein Meals (36)		34.50		
Rice (36)		15.80		
Tallow (36)		12.20		
Vegetable Oils (36)		21.90		
Wheat (36)		7.70		
Other Commodities (36)		0.00		
West Africa Region	32.00	0.00	32.00	4/
All Commodities (12)		0.00		5/
Sub-Total...	**30.00**	**0.00**	**30.00**	
Animal Genetics (36)		0.00		
Cattle (Feeder) (36)		0.00		
Livestock, Breeder (36)		0.00		
Sub-Total...	**2.00**	**0.00**	**2.00**	
West Caribbean Region	35.00	1.80	33.20	5/ 7/ 8/
Feed Grains (18)		1.30		
Protein Meals (18)		0.50		
Other Commodities (18)		0.00		
TOTAL FOR GSM-102	4,274.00	1,416.20	2,857.80	
For Comparison Purposes: FY 1999 Payment Guarantee Commitments through March 12, 1999.				
TOTAL FOR GSM-102	3,516.00	1,153.32	2,362.68	

Summary of FY 2000 Export Credit Guarantee Program Activity for GSM-103 as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Central America Region	10.00	0.00	10.00	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Egypt	5.00	0.00	5.00	4/
Livestock, Breeder (7 years)		0.00		
Poultry Breeder Stock (7 years)		0.00		
Indonesia	10.00	0.00	10.00	4/ 8/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Jordan	15.00	13.00	2.00	4/ 16/
Feed Grains (5 years)		0.00		
Wheat (5 years)		13.00		
Mexico	35.00	0.80	34.20	11/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.80		
Morocco	50.00	0.00	50.00	4/
Feed Grains (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Oilseeds (7 years)		0.00		
Protein Meals (7 years)		0.00		
Vegetable Oil (7 years)		0.00		
Wheat (7 years)		0.00		
Peru	5.00	0.00	5.00	4/
Animal Genetics (5 years)		0.00		
Livestock, Breeder (5 years)		0.00		
Poland	5.00	0.00	5.00	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Philippines	2.00	0.00	2.00	4/
Livestock, Breeder (7 years)		0.00		
Southern Africa Region	1.00	0.00	1.00	4/
Animal Genetics (7 years)		0.00		
Cattle (Feeder) (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Tunisia	40.00	0.00	40.00	4/ 18/
Feed Grains (7 years)		0.00		
Wheat, Wheat Flour, Semolina (7 years)		0.00		

Summary of FY 2000 Export Credit Guarantee Program Activity for GSM-103 as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Turkey	40.00	0.00	40.00	
Animal Genetics (7 years)		0.00		4/
Cattle, Feeder (7 years)		0.00		
Livestock, Breeder (7 years)		0.00		
Poultry Breeder Stock (7 years)		0.00		
TOTAL FOR GSM-103	143.00	13.80	129.20	
For Comparison Purposes: FY 1999 Payment Guarantee Commitments through March 12, 1999.				
TOTAL FOR GSM-103	360.00	12.40	347.60	

Summary of FY 2000 Supplier Credit Guarantee Program (SCGP) Activity as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 16/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/ 15/
	–coverage in millions of dollars–			
Andean Region	10.00	0.00	10.00	4/ 5/
All Commodities (180)		0.00		
Argentina	1.00	0.00	1.00	4/ 5/
All Commodities (180)		0.00		
Azerbaijan	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
Baltic Region	5.00	2.30	2.70	4/ 5/
Meat, Frozen or Chilled (180)		2.30		
Other Commodities (180)		0.00		
Brazil	10.00	0.00	10.00	4/ 5/
All Commodities (180)		0.00		
Central America Region	10.00	5.50	4.50	4/ 5/
Meat, Frozen or Chilled (180)		4.00		
Rice (180)		1.50		
Other Commodities (180)		0.00		
Central Europe Region	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
East Africa Region	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
East Caribbean Region	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
Israel	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
Kazakstan	5.00	1.70	3.30	4/ 5/
Meat, Frozen or Chilled (180)		1.70		
Other Commodities (180)		0.00		
Korea	50.00	0.30	49.70	4/ 5/
Fruit, Fresh (180)		0.30		
Meat, Frozen or Chilled (180)		0.00		
All Commodities (180)		0.00		
Mexico	100.00	20.24	79.76	5/
Aquaculture Feed (180)		0.26		
Cotton (180)		0.05		
Feed Grains (180)		5.77		
Meat, Frozen or Chilled (180)		4.16		
Oilseeds (180)		10.00		
Other Commodities (180)		0.00		
Poland	10.00	0.00	10.00	4/ 5/
All Commodities (180)		0.00		
Romania	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		

Summary of FY 2000 Supplier Credit Guarantee Program (SCGP) Activity as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 16/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/ 15/
	--coverage in millions of dollars--			
Southeast Asia Region	50.00	0.22	49.78	4/ 5/
Fish and Shellfish (180)		0.01		
Fruit/Veg. Concentrates (180)		0.01		
Meat, Frozen or Chilled (180)		0.10		
Tree Nuts (180)		0.10		
Other Commodities (180)		0.00		
Southeast Europe Region	20.00	0.00	20.00	4/ 5/
All Commodities (180)		0.00		
Turkey	5.00	0.36	4.64	4/ 5/
Hides and Skins (180)		0.15		
Tree Nuts (180)		0.21		
Other Commodities (180)				
West Africa Region	10.00	6.08	3.92	4/ 5/
Condiments (180)		0.01		
Corn Products (180)		0.01		
Fruit Juice (180)		0.04		
Fruit/Veg. Concentrates (180)		0.01		
Honey Products (180)		0.01		9/
Lard (180)		0.01		
Meat, Processed (180)		0.03		9/
Prepared Foods, Shelf Stable (180)		0.01		9/
Pulses (180)		0.01		
Rice (180)		4.68		
Snack Foods (180)		0.02		9/
Soft Drinks and other Beverages (180)		0.60		
Soup, Dehydrated Instant (180)		0.50		9/
Vegetables, Canned (180)		0.03		
Vegetables, Dried (180)		0.01		
Vegetable Oils (180)		0.09		
Wheat (180)		0.01		
Other Commodities (180)		0.00		
West Caribbean Region	5.00	0.00	5.00	4/ 5/
All Commodities (180)		0.00		
Yemen	10.00	0.00	10.00	4/ 5/
All Commodities (180)		0.00		
TOTAL FOR SCGP	361.00	36.70	324.30	
For Comparison Purposes: FY 1999 Payment Guarantee Commitments through March 12, 1999.				
TOTAL FOR SCGP	346.00	18.05	327.95	

Summary of FY 2000 Facility Guarantee Program (FGP) Activity as of close of business:
March 10, 2000

Country / Commodity (Maximum Credit Period 3/)	Announced Allocations FY 2000	Exporter Applications Received	Balance	Remarks/Additional Information 1/ 2/
	--coverage in millions of dollars--			
Andean Region	20.00	0.00	20.00	8/
Manufactured Goods/Services (5 years)		0.00		
Baltic Region	10.00	0.00	10.00	8/
Manufactured Goods/Services (5 years)		0.00		
Caribbean Region	20.00	0.00	20.00	8/
Manufactured Goods/Services (5 years)		0.00		
Central America Region	30.00	0.00	30.00	8/
Manufactured Goods/Services (8 years)		0.00		
East Africa Region	10.00	0.00	10.00	8/
Manufactured Goods/Services (3 years)		0.00		
Mexico	50.00	4.80	45.20	8/
Equipment (8 years)		4.80		
Manufactured Goods/Services (8 years)		0.00		
Romania	5.00	0.00	5.00	8/
Manufactured Goods/Services (5 years)		0.00		
Southeast Asia Region	50.00	0.00	50.00	8/
Manufactured Goods/Services (8 years)		0.00		
Southern Africa Region	10.00	0.00	10.00	8/
Manufactured Goods/Services (8 years)		0.00		
Turkey	10.00	0.00	10.00	8/
Manufactured Goods/Services (5 years)		0.00		
TOTAL FOR FGP	215.00	4.80	210.20	
For Comparison Purposes: Not available for this date.				
TOTAL FOR FGP	0.00	0.00	0.00	
TOTAL FOR CCC CREDITS	**4,993.00**	**1,471.50**	**3,521.50**	
For Comparison Purposes: FY 1999 Payment Guarantee Commitments through March 12, 1999.				
TOTAL FOR CCC CREDITS	**4,222.00**	**1,183.77**	**3,038.23**	

FY 2000

FOOTNOTES:

1/ **These announcement footnotes are indicative only. See actual provisions set forth in Program Announcements. These FAS news releases are available on the Internet at http://www.fas.usda.gov or through fax polling. Callers should set their fax machines for polling and dial (202) 720-1728. For additional information, contact the FAS Information Division (202) 720-7115.**

2/ Except as noted, the following terms apply:
--Coverage is available on an FAS/FOB basis
--Maximum coverage is 98% of port value for GSM 102/103, SCGP is 65% of port value and FGP is 95% of port value.
--Final registration date for is 9/30/00
--Final export date is 11/30/00

3/ UNLESS OTHERWISE INDICATED, GSM-102 is shown in months, 103 in years, FGP in years and SCGP in days. *For SCGP no interest coverage is offered.

4/ Coverage on a C&F basis is available on sales made on C&F or CIF basis.

5/ commodities as reflected in program announcement PR-0450-99 or as superseded. Credit terms as set forth in country/ regional program announcements.

6/ Credit terms for solid wood products, wood pulp and wood chips are offered up to 720 days.

7/ For Breeder Livestock, animal genetics, feeder cattle and poultry breeder stock, coverage is available on C&F basis to point of ocean vessel or international carrier discharge.

8/ For credit periods exceeding 6 months, principal repayments plus accrued interest are due at 6 month intervals.

9/ Products have been determined to be "high value products". See program announcement for details.

10/ Mexico(102)-- Total authorization was $1.5 billion, however, $500 million remains unallocated i.e., non-operational.

11/ Mexico(103)--Total authorization was $100.0 million, however, $65.0 million remains unallocated i.e., non-operational.

12/ Korea(102)--Total authorization was $590.0 million, however, $90.0 million remains unallocated i.e., non-operational.

13/ Pakistan(102)--Total authorization was $210.0 million, however, $85.0 million remains unallocated i.e., non-operational.

14/ Egypt(102)--All commodities except poultry parts are eligible.

15/ Jordan(102)--The eligible buyer for the $40.0 million line of credit is Ministry of Industry & Trade.

16/ Jordan(103)--The eligible buyer is Ministry of Industry & Trade.

17/ Tunisia(102)--For the $10.0 million line of credit the eligible buyer is National Office of Oil.

18/ Tunisia(103)--The eligible buyer is Office National de Cereales.

ECG 03-00

COUNTRIES INCLUDED WITHIN REGIONS:

GSM-102/103

ANDEAN REGION:	Bolivia, Chile, Colombia, Peru, Ecuador and Venezuela
BALTIC REGION:	Estonia, Latvia and Lithuania
CENTRAL AMERICA REGION:	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama
CENTRAL EUROPE REGION:	Czech-Republic, Hungary and Slovakia
EAST AFRICA REGION:	Kenya, Uganda and Tanzania
EAST CARIBBEAN REGION:	Barbados, Grenada, Guyana, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.
SOUTHEAST ASIA REGION:	Malaysia, Philippines, Thailand and Vietman.
SOUTHEAST EUROPE REGION:	Bosnia, Croatia and Slovenia
SOUTHERN AFRICA REGION:	Angola, Botswana, Burundi, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, South Africa, Swaziland, Democratic Republic of the Congo (formerly Zaire), Zambia and Zimbabwe
WEST AFRICA REGION:	Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Congo, Cote d'Voire, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Liberia, Mali, Mauritania, Nigeria, Senegal, Sierra Leone and Togo
WEST CARIBBEAN REGION:	Dominican Republic, Haiti and Jamaica

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SUPPLIER CREDIT GUARANTEE PROGRAM

ANDEAN REGION:	Bolivia, Chile & Peru
BALTIC REGION:	Estonia, Latvia and Lithuania
CENTRAL AMERICA REGION:	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama
CENTRAL EUROPE REGION:	Czech-Republic, Hungary and Slovakia
EAST AFRICA REGION:	Kenya, Uganda and Tanzania
EAST CARIBBEAN REGION:	Barbados, Grenada, Guyana, St. Lucia, St. Vincent & the Grenadines, Suriname, and Trinidad and Tobago
SOUTHEAST ASIA REGION:	Indonesia, Malaysia, Philippines and Thailand.
SOUTHEAST EUROPE REGION:	Croatia and Slovenia
WEST AFRICA REGION:	Benin, Cote d'Ivoire, Ghana, Nigeria and Senegal
WEST CARIBBEAN REGION:	Dominican Republic and Jamaica

COUNTRIES INCLUDED WITHIN REGIONS:

FACILITY GUARANTEE PROGRAM:	
ANDEAN REGION:	Bolivia, Chile, Peru, Ecuador, and Venezuela
BALTIC REGION:	Estonia, Latvia and Lithuania
CARIBBEAN REGION:	Jamaica and Trinidad and Tobago
CENTRAL AMERICA REGION:	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama
EAST AFRICA REGION:	Kenya, Uganda and Tanzania
SOUTHEAST ASIA REGION:	Indonesia, Malaysia, Philippines, Thailand and Vietnam
SOUTHERN AFRICA:	Angola, Botswana, Burundi, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, South Africa, Swaziland, Democratic Republic of the Congo (formerly Zaire), Zambia and Zimbabwe

SECTION 108

Question. It has come to my attention that "Section 108" resources are being utilized to supplement FAS's resources for market development. Please provide for the record a description of what "Section 108" is; what level of "Section 108" resources are available to the FAS for each of the fiscal years 1999, 2000, and 2001; and for what specific purposes and in what amounts Section 108 funds are being utilized in each of fiscal years 1999, 2000, and 2001?

Answer. "Section 108" refers to foreign currency accruing from the repayment provision of Public Law 480 Title I agreements which financed the sale and exportation of agricultural commodities to Costa Rica, Dominican Republic, Guatemala, Jamaica, Morocco, Sri Lanka, and Tunisia prior to November 22, 1990. At that time, certain Public Law 480, Title I agreements permitted foreign countries to repay the United States in local currencies. The law required that up to 95 percent of these foreign currencies be loaned to financial institutions within the foreign country to support productive private enterprise development, and up to 5 percent be made available to the Secretary of Agriculture for agricultural technical assistance including market development activities that would ultimately increase the consumption of and markets for U.S. agricultural commodities and products. The Agency for International Development (U.S.A.I.D.) carried out this loan program. After the local financial institutions repaid the loans, the law stipulated that the United States could only use the foreign currencies for the following purposes:

(1) to make additional loans to local financial institutions;

(2) to develop new markets for U.S. agricultural products;

(3) to repay U.S. government obligations, e.g., embassy expenses; or

(4) be converted to dollars. However, 10-years after the last delivery of the commodity for which the Public Law 480 loan was made, any unobligated foreign currencies must begin to be converted to dollars and turned over to the U.S. treasury.

Examples of activities for which Section 108 funds were used include local travel and per diem for trade teams, consultants and technicians or local consultant fees, development, translation and publication of printed material, point of sale promotional items, FAS trade promotion activities, market potential surveys, and MAP/FMD related cooperator activities.

Examples of activities for agricultural technical assistance include construction of feed lots, in-country trade and technical symposia, demonstrations, and training seminars or construction, curricula development, and purchase or upgrading of equipment for demonstration projects, baking schools and other training or demonstration facilities.

The Office of the General Counsel for the Department of Agriculture has determined that FAS may use the Section 108 foreign currencies for market development and agricultural technical assistance in addition to any other funds available to it for this purpose. These currencies allow FAS to support market development activities which they would otherwise not be able to support with existing resources.

It is difficult to place an accurate value on these resources because they exist in seven different countries with volatile exchange rates. However, the most accurate assessment of the total accrued value of the foreign currencies in the seven countries amounted to approximately $56 million in U.S. equivalents in October of 1999. Obligations for these funds for 1999 and 2000 were $1.5 million and $5.3 million respectively. There are no funds yet obligated for 2001.

QUESTIONS SUBMITTED BY SENATOR SLADE GORTON

WHEAT SALES TO PAKISTAN

Question. Can you explain why wheat sales to Pakistan are at half the levels they were a year ago? According to the statistics I've reviewed, sales to Pakistan in 1998 hovered around 793,000 metric tons, whereas this year it's projected that the U.S. has sold only 400,000 metric tons. Of the top 10 countries the U.S. promotes and sells wheat to overseas, Pakistan was the one country that dipped so low in sales. Can you explain why sales to Pakistan have slipped? Because Washington soft white wheat is the premier choice of Pakistan purchasers, I am obviously concerned.

Answer. In recent years, Pakistan has usually been a 1.5 to 2.0 million ton market for U.S. wheat producers in the Pacific Northwest. However, so far in the current marketing year, we've only sold about 400,000 tons. It is essentially because Australia has been particularly aggressive in light of a record wheat crop this year which has resulted in enormous exportable supplies. In addition, the country has increased its credit offering to Pakistan and is able to make use of a significant freight advantage to the Pakistan market. Finally, Pakistan's military government appears to be drawing down stocks in anticipation of a good harvest this year, reducing total import needs by 25 percent.

FAS will make maximum use of food aid donations and concessional sales of wheat in order to keep U.S. wheat in Pakistan. In January, we extended the term of our current GSM–102 offering from 2 years to 3 years as a means of increasing our competitiveness against Australia.

Question. Potato growers and other high value and specialty crops in the Pacific Northwest are very concerned about the potential closure of the FAS office in Singapore. Because growers in my state consider Singapore as the gateway into other Asian markets, can you explain why such an invaluable office is being eliminated? As a follow up, I understand USDA might be considering opening other offices in the region?

Answer. When the Agricultural Trade Office (ATO) was opened in Singapore 21 years ago, the city was the major transshipment point for agricultural trade with Southeast Asian countries, particularly nearby Malaysia and Indonesia. Since that time, however, the city's share of trade tonnage for the region has been eroding, a trend that is likely to accelerate in the future. In Malaysia, for example, the opening of Port Klang in 1996 (the first in the country which could handle the larger, Panamax-sized vessels) and of the new Kuala Lumpur International Airport in 1998 have stepped up the trend in displacing transhipments that previously went through Singapore. Upgrades in port and transportation facilities in Indonesia are also displacing trade through Singapore. Indeed, the governments of both Malaysia and Indonesia are pursuing policies which will further favor the use of their own transportation facilities.

FAS has also made substantial gains in its staffing in Southeast Asia during the past few years, opening an Attache Office in Hanoi, Viet Nam in 1996, an ATO in Jakarta, Indonesia in 1997, and an office in Ho Chi Min City, Viet Nam in 1997. Two additional Malaysians were added to staff of the Agricultural Attache's Office in Kuala Lumpur in 1997. Consequently, many of the services previously offered by the ATO in Singapore to these countries are now handled in-country by local staff.

FAS recognizes the continuing importance of Singapore as a regional financial and commodity trading center and will continue to maintain an office with a staff of two Singaporeans to cover these issues as well as trade servicing for this city of 4 million. This office will be supervised by the Agricultural Attache in nearby Kuala Lumpur. In addition, FSN staff from Kuala Lumpur will travel to Singapore to support major events, such as regional trade shows.

With an annual budget of $900,000, ATO Singapore is the 6th most expensive FAS office in the world. Its annual cost is higher than that of several of our most critical posts, including the Minister Counselor's offices in Beijing and in Mexico City. With a budget for administrative costs frozen for the past 3 fiscal years, FAS has been forced to absorb rising costs and to close posts whose costs exceed their contribution to the agency's mission. For the reasons stated above, we believe that

Singapore is one of these posts and that the resources expended there can be better used to support critical needs in other areas.

FAS recognizes the fact that East Asia is likely to be the major growth market for agricultural trade in the next few years and is prepared to add more staff and to open additional offices in the region if its budget is increased enough to support these openings. As you are aware, the 2001 budget proposes increased funding for FAS to support the opening of a new ATO in Manila, the Philippines, one of the most promising growth markets in that region.

QUESTION SUBMITTED BY SENATOR CONRAD BURNS

Question. The expanded trade initiative portion of this plan is supposed to use all of the export programs and to utilize EEP funds and food-aid programs. Yet, almost every single export program received a budget cut this year. How can the USDA promote a trade initiative that does not contain adequate funding?

Answer. While the President's fiscal year 2001 budget does project lower levels of food assistance for fiscal year 2001, this largely reflects the assumption of a return to more traditional program levels after the unprecedented volume of activity in fiscal years 1999 and 2000. The fiscal year 2001 budget continues credit guarantee and market development programs at fiscal year 2000 levels. Additionally, the budget includes increases totaling $4.4 million for FAS, including $.8 million for market access compliance and negotiation activities. If we are to meet the workload challenge facing FAS, it is crucial that FAS receive funding at the level requested in the President's budget.

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

FOREIGN TRADE AND ASSISTANCE

Question. U.S.-China WTO Accession Agreement. The Congress may be asked to consider the U.S.-China WTO Accession Agreement later this year. The impact of this agreement on agriculture will play a strong role in my position on this issue.

I know there is a great deal of support for this agreement within agriculture. But I have to say, I am concerned about whether or not at least with respect to dairy the opening of markets in China will necessarily benefit U.S. agriculture.

The U.S. dairy industry has long been concerned about the impact of state trading enterprises namely the New Zealand Dairy Board on free trade. While I know this Administration has made State Trading Enterprises a top negotiating priority, to date, you've not made much progress in reducing the trade distorting effects of these organizations.

Despite the optimism about the China WTO Accession Agreement, what can U.S. dairy farmers reasonably expect in terms of access to China until we can fully reduce existing trade distortions?

Answer. The direct impact of WTO membership for China on U.S. dairy exports is likely to be relatively modest at least for the first 5 or so years. China has a rapidly expanding domestic dairy industry, but compared to the potential size of the market for dairy products, the domestic industry is very small. Demand is expanding and dairy product imports are growing rapidly. The major items imported on both a volume and value basis are milk powder and dried whey. China's WTO package does not call for reduced tariffs for milk powder and dried whey since duties on whey are already relatively low (6 percent) while domestically produced powder tends to be in surplus at times.

Cheese, ice cream, and lactose are three products where imports have been rapidly increasing and where reduced tariffs might be expected to cause a further acceleration in demand. China's tariff on cheese imports is to drop from 50 to 12 percent and with expanding pizza and fast food restaurants, imports should grow rapidly.

Availability and consumption of ice cream is growing rapidly in the large cities but penetration of more rural markets is difficult. Expanding markets are expected to create demand both for direct imports of ice cream and more imports of ice cream ingredients. The tariff for ice cream is to drop from 45 to 19 percent. A similar situation exists for yoghurt where the tariff will drop from 45 to 10 percent.

A large population with limited incomes means China's food industry is always very interested in sources of low-priced high-quality food ingredients. The already-low tariff on whey products, plus the scheduled reductions for lactose (35 to 15 percent) and dairy based food preparations (25 to 10 percent) should result in a big boost for dairy product imports.

MARKET ACCESS AND FOREIGN MARKET DEVELOPMENT PROGRAMS

Question. Beginning in fiscal year 2000, the Foreign Market Development Program was to secure funding through mandatory spending at levels no less than that available in fiscal year 1999. What levels of funding did the Foreign Market Development Program receive in fiscal year 1999 and what are your estimates for 2000 and 2001?

Answer. The Foreign Market Development Program was funded at $27.5 million for both fiscal year 1999 and 2000, and we anticipate $27.5 million for 2001.

Question. Please provide the levels and description of activities through both the Market Access and Foreign Market Development Programs related to dairy products.

Answer. The U.S. Dairy Export Council (USDEC), has received $703,348 in fiscal year 2000 Foreign Market Development funds, and $1,699,394 in fiscal year 1999 Market Access Program funds. USDEC is a nonprofit industry trade membership organization representing processors, exporters, producers and suppliers to the dairy industry. The Council's activities include market research, technical seminars, trade shows, product literature, and in-country trade servicing. Promoted products include cheese, whey, yogurt, ice cream, milk powder, and fluid milk. USDEC's efforts are concentrated in Japan, China, Korea, Mexico, and Brazil.

WORLD HUNGER/U.S. ASSISTANCE

Question. World news too often reminds us of the tragic consequences of human events and those of nature that take the form of malnutrition and starvation, especially among children. U.S. food assistance provides the double benefit of offering food to those in need and establishing an outlet for U.S. production. It has been suggested by some, such as former Senator and now U.S. Ambassador to the United Nations for Food and Agriculture, George McGovern, that the time has come for the U.S. to provide leadership in the creation of a world-wide program modeled after the School Lunch and WIC programs designed to curb child hunger. Ambassador McGovern has suggested the initial U.S. cost in such an endeavor would be in the $1 billion range. Does such a proposal fit within USDA's vision of providing humanitarian food assistance.

Answer. USDA is a primary agency in the United States' efforts to combat both domestic and international hunger and food security. This effort goes beyond just humanitarian food assistance to development assistance and policy interventions that will create sustainable food security around the world. Last year, in March 1999, we released the *U.S. Action Plan on Food Security.* This document provides a long-term road map for the efforts of both the U.S. Government and civil society. School feeding programs around the world are an important intervention that can help build food security and end hunger, not just for those who attend school, but for the households and the communities in which children live over the long term. These types of programs help address many of the root causes of food insecurity, as well as its most obvious symptom: malnutrition.

School feeding programs encourage school attendance, particularly among women and girls, and when properly structured, can help reduce the costs associated with rural families sending their children to school rather than putting them to work by providing supplemental food for the household. We know that women's education is one of the most important elements in reducing population growth. It also provides greater economic opportunities.

It is difficult to accurately estimate the cost of a global program because it will take a different shape in each country, depending on local conditions and the strength of existing infrastructure.

Question. Assuming a large share of such assistance would serve as an outlet for U.S. agricultural products, what effect, if any, would such a proposal have on U.S. commodity prices?

Answer. To the extent that these programs lead to increased U.S. agricultural exports, this should lead to increases in U.S. commodity prices. This impact, of course, would vary by commodity and would be dependent upon other dynamics taking place in the market. Additional food assistance programs can also support the development of U.S. export markets over the longer term, with an ongoing positive effect on U.S. commodity prices.

EXPORT ENHANCEMENT PROGRAM

Question. Secretary Schumacher's statement suggests that the Export Enhancement Program (EEP) might be a more appropriate tool for U.S. producers should market conditions change. Given the current commodity surpluses and ongoing

trade disputes with many of our trade partners, what change in market conditions need to occur in order to make better use of EEP?

Answer. In order for EEP to be beneficial to U.S. producers, it must be used in a market environment where it would lead to significant improvement in wheat prices without greatly depressing feed grain prices. In the current market environment of large global supplies and low prices for wheat and feed grains, the use of EEP would likely result in only a modest boost in U.S. wheat prices and would undoubtedly lead to increased imports of wheat from Canada and lower U.S. feed grain exports. Furthermore, any increase in wheat producers' incomes would be slight, since higher wheat prices would reduce loan deficiency payments and marketing loan gains. EEP is most effective when feed wheat does not compete with feed grain exports, and Canada, and to a lesser extent Australia, do not have large crops. Under these conditions, EEP would enable us to compete directly against EU subsidized exports and lower world wheat prices would not displace feed grain exports. In addition, reduced crop supplies in Canada and Australia would lessen the displacement in U.S. export sales in non-EEP markets and reduce the surge in imports from Canada following the resumption of EEP. Of course, resumption of EEP has international trade implications that also would have to be considered along with the market environment for wheat and feed grains.

FAS HOUSING

Question. I understand some FAS Agriculture Attaches in foreign missions reside in housing acquired through the use of Public Law 480 proceeds, yet the title for these properties is held by the U.S. Department of State. I further understand that under State Department policy, some of these properties are in the process of being sold with the proceeds not accruing back to USDA from which they came. Please explain how proceeds from these sales will be distributed. Please explain the effect these sales will have on the housing needs of foreign FAS personnel and on other agency's budget. If these sales will have an adverse effect on agency activities, what is USDA doing to negotiate an arrangement with the State Department or elsewhere within the government to correct this problem?

Answer. Through the foresight of the Congressional Agriculture Committees, legislation was included in various DOS appropriations authorizing the acquisition of residences for Agricultural Attaches. Seventeen properties were purchased by the Department of State (DOS) during the years from 1957 to 1979 to provide housing for Agricultural Attaches in specific countries.

Congressional testimony by State's Office of Foreign Buildings Operations (FBO) during those years reflects their intent to acquire pieces of property for the use of these Attaches. Both DOS appropriated funds and excess Public Law 480 currencies were used to acquire the specific properties. The DOS's use of funds to acquire these properties was based on priorities in agreement with USDA for acquisition of a number of residences for occupancy by the senior Attache of the agency.

In the early 1990's, FBO claimed that it could sell some of those residences although they had been occupied by Agricultural Attaches since their purchase, in some cases for more than 40 years. Although FAS contested this view, FBO has subsequently sold four of these residences (in Lima, Peru; Quito, Equador; Santiago, Chile; and Rabat, Morocco) and retained the proceeds for its own purposes. As a consequence, FAS now pays over $85,000 annually for leased housing for these posts. In addition, two FAS residences have been put into embassy housing pools, thus requiring FAS pay for leased housing. These are in Nairobi, Kenya (annual leasing cost in excess of $26,000) and Warsaw, Poland ($43,000).

In total, the impact of the loss of these residences has been additional costs of $680,000 to the FAS budget over the past 5 years. Since the FAS administrative budget has been frozen during the past 3 years, these increased costs have had to come from other FAS programs and activities.

During the past 2 years, FBO has announced that it intends to sell two additional FAS occupied houses, in Vienna, Austria and Stockholm, Sweden. If FBO succeeds in this, FAS will face annual leased housing costs estimated at $70,000 for these two posts. Finally, FBO now claims that FAS has no rights for continued assignment to two long-term FAS houses, in Bangkok, Thailand and Cairo, Egypt. If FAS is forced out of these residences, leased housing costs for the two posts are estimated at over $120,000 annually.

Although FAS has contested this FBO policy for nearly 10 years, we have been unable to deter the plan to sell off FAS houses. Most recently, on December 7, 1999, Secretary Glickman wrote a letter to Secretary Albright regarding the sale of the house in Vienna. The Secretary asked that the proceeds of the sale be used to purchase replacement housing for the FAS officer. In addition, Secretary Glickman

asked that he be advised of any actions which State might take for other dedicated FAS housing.

PUBLIC LAW 480

Question. The budget request for fiscal year 2001 reflects a drop in the program level of all Public Law 480 programs. Title II, for example, drops from $962 million for the current year to $837 million. In addition, the level for fiscal year 2001 is more that $100 million below the level in fiscal year 1999. While use of the 416(b) program has been used in the past to supplement the assistance of Title II, that program can not be relied on as a permanent tool to complement Title II. In fact, use of 416(b) now seems to be quite less aggressive than a year ago. What are the anticipated needs of international food assistance programs for fiscal year 2001 and do the World Food Program or other international organizations concur with those estimates?

Answer. The only annual assessment of future international food aid needs we are aware of is the one prepared by the Economic Research Service. And we believe this assessment is generally accepted by those working in the field of international food aid. The World Food Program provides to donors its estimates of the commodity needs of the projects it is supporting, as well as estimates of emergency needs as they arise.

Question. Why is 416(b) not being more aggressively used now?

Answer. We believe Section 416(b) authority is being both aggressively and responsibly used. At the present time, we expect to program about 4 million tons of food aid under this authority this fiscal year; of this total, 500,000 tons will benefit needy people in Russia. Last year, we programmed about 5.5 million tons, of which 1.7 million tons went to people in Russia.

Question. In the event 416(b) is not practically available, how does the U.S. plan to meet its world assistance obligations in fiscal year 2001 with a reduced program for Title II?

Answer. The United States' international commitment to provide food aid is our commitment to the Food Aid Convention; this commitment is 2.5 million tons on a 12 month basis. Therefore, the combination of Public Law 480 and Food for Progress programs assures that this commitment is met. As is always the case, international food aid needs will vary depending on weather, unforeseen natural disasters, and unfortunately, often man-made disasters. The availability of Section 416(b) commodities does help the United States respond to such situations. However, in addition to the Public Law 480 and Food for Progress programs, there are commodities held by the Commodity Credit Corporation in the Bill Emerson Humanitarian Trust—the Food Security Commodity Reserve—which can also be used to help meet such needs.

DEIP

Question. In my oral questions I expressed concern about the impact of DEIP volume and value reductions resulting from our WTO commitments. I am concerned that the Department hasn't taken steps to ensure the full use of DEIP tonnage by reallocating canceled DEIP tonnage from previous years. This is particularly troubling given that milk prices have fallen to 20 year lows. What are the Department's plans to utilize the canceled tonnage in order to maximize DEIP exports and help relieve price depressing surpluses of milk powder?

Answer. To utilize the DEIP program to the maximum extent possible, and consistent with our WTO commitments, USDA has used the rollover provision in the Agreement on Agriculture to bring tonnage forward from past years. We have reprogrammed an additional 74,861 metric tons of nonfat dry milk powder and 7,500 metric tons of whole milk above our annual WTO commitments during 1997/1998, 1998/1999 and 1999/2000. In using this rollover tonnage, we have fully exhausted our flexibility to program canceled tonnage.

The additional canceled tonnage that the industry is now seeking would require changing the U.S. methodology for reporting our WTO export subsidy commitments. We established and committed to an accounting methodology with respect to our subsidy reduction commitments and should uphold this methodology, just as we would expect other members to do. Changing in the final year of the implementation period would be viewed as disingenuous, and probably subject to challenge by other members. Finally, we believe such an action would undermine our position of leadership as we enter a new round of global negotiations that are of great importance to all of U.S. agriculture.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

FOREIGN TRADE

Question. What steps has the U.S. Department of Agriculture taken to expand markets for West Virginia agricultural products?

Answer. Through the Market Access Program (MAP), funding for international market promotion activities to export-ready companies is offered through the Southern U.S. Trade Association (SUSTA) in marketing SUSTA regional products. West Virginia, 14 other southern states, and the Commonwealth of Puerto Rico are included in the SUSTA region. West Virginia through its representation on SUSTA's Board of Directors and its international marketing representatives, is involved in the development and management of these activities.

FAS also provides MAP support funds through the National Association of State Departments of Agriculture (NASDA) for the U.S. Food Export Showcase (USFES). The USFES is part of the Food Marketing Institute (FMI)'s major trade show for U.S. food products, held in Chicago annually in May. NASDA organizes and supports individual pavilions for State Departments of Agriculture at the USFES every year, including West Virginia, at reduced rates.

Question. What has been the result of these efforts?

Answer. SUSTA has actively recruited in West Virginia to assist the West Virginia Department of Agriculture's Market & Development Division in a renewed effort to take advantage of MAP funding for export-ready companies.

NASDA has assisted West Virginia with its individual pavilion within the Food Export Showcase during the last 3 years. At the Showcase 8–10 West Virginia companies have been participating, and sales have resulted.

Through the Southern U.S. Trade Association (SUSTA) last November, West Virginia contacted FAS about other potential USDA programs concerning its agricultural products. Robert Williams, Director of West Virginia's Market & Development Division, has worked with a program (WV Jobs Investment Trust) in moving foreclosed aquaculture farms in its state and possibly other related entities into an independent cooperative. He submitted a summary of the "High Appalachian Project" to FAS and USDA/Rural Business—Cooperative Service in February. Cooperative Service reviewed this summary in early March, and this group may independently request technical assistance (i.e, business planning, market strategy development) in the near future.

QUESTIONS SUBMITTED TO THE RISK MANAGEMENT AGENCY

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

RISK MANAGEMENT EDUCATION

Question. What amount of current funding is devoted annually to risk management education activities? Are all of these funds discretionary, or are there available funds for these activities in the FCIC Fund? If so, please delineate these.

Answer. During fiscal year 2000, RMA plans to devote $1 million to Risk Management Education (RME) initiatives. All of these funds will be obligated from the mandatory Federal Crop Insurance Corporation (FCIC) Fund.

Question. Please provide a list of outside organizations with which RMA has contracts or cooperative agreements for risk management education activities and the value of each.

Answer. As of February 29, 2000, RMA has obligated $118,874.40 to outside organizations in the form of contracts or cooperative agreements to support RME activities. RMA plans to obligate remaining RME funds over the next 6 months. Please see the attached table.

[The information follows:]

RISK MANAGEMENT AGENCY—RISK MANAGEMENT EDUCATION CONTRACTS AND COOPERATIVE AGREEMENTS FISCAL YEAR 2000

[As of 2–29–00]

Cooperative Agreements: Foreign Agriculture Service with the National Future Farmers of America Foundation	$40,000.00
Purchase Orders/Contracts:	
Pennsylvania Farm Bureau	7,000.00
National Introducing Brokers Association	800.00
Montana Grains Foundation	7,500.00

RISK MANAGEMENT AGENCY—RISK MANAGEMENT EDUCATION CONTRACTS AND COOPERATIVE AGREEMENTS FISCAL YEAR 2000—Continued

University of Nevada	2,000.00
University of Arizona	1,500.00
University of Arizona	4,500.00
University of California	1,000.00
Futures Industry Institute	15,000.00
Oregon State University/Ag Research Foundation	3,000.00
Country Hedging, Incorporated	5,000.00
Washington Association of Wheat Growers	2,000.00
Oregon Wheat Growers League	7,000.00
University of Idaho Cooperative Extension	3,000.00
Ohio State University	2,850.00
Illinois Farm Bureau	1,734.40
Purdue University	5,000.00
Financial Ag Risk Management Services	2,500.00
Alabama Farm Bureau Federation	4,490.00
1Ft. Valley State University	2,000.00
Georgia 4-H Foundation	1,000.00
Total	$118,874.40

INFORMATION TECHNOLOGY (IT) COSTS

Question. The budget includes an increase of $3,717,000 for RMA administrative and operating costs, of which $403,000 is for information technology costs. How much funding is included in the discretionary base for IT costs? In the mandatory base?

Answer. The fiscal year 2001 discretionary base includes $22.1 million for IT costs. A portion of the IT base includes projects that have been unfunded in prior years due to cuts in the budget process. The fiscal year 2001 funding base for IT costs in the mandatory FCIC Fund is $1.5 million.

COMPANY UNDERWRITING GAINS

Question. The budget estimates delivery expenses for fiscal year 2001 of $507,679,000. What are the estimated underwriting gains for fiscal year 2001 between buy-up coverage and catastrophic coverage? What were the underwriting gains for fiscal year 2000?

Answer. Based on the fiscal year 2001 President's Budget, RMA estimated company underwriting gains of $156.5 million for fiscal year 2000 and $163.8 million for fiscal year 2001.

QUESTION SUBMITTED BY SENATOR CONRAD BURNS

Question. The emphasis the Administration has put on conservation in their latest budget proposal appears to leave any real commitment to Risk Management reform out of picture, which is sorely needed across the nation. What changes are you proposing that are significant, and capable of breaking the stagnation we current see occurring? What was the budget score on this proposal?

Answer. The Administration continues its strong desire to improve crop insurance participation and farmer applied risk management tools. The Administration has continued to work closely with Congress to ensure that significant improvements are achieved. Recently, the Senate Agriculture Committee, working closely with the Administration, took a significant step forward by approving its version of a Risk Management improvement bill. The bill was approved by the Senate.

In fact, this Administration's budget request included a continuation of discounts on crop insurance premiums paid by farmers begun in fiscal year 1999 (this year, the administration assumes the cost of these premium discounts to be about $400 million), a proposal that reaffirms our commitment to increasing crop insurance coverage and participation levels. Additionally, the Administration continues to support insurance coverage to support farmers who have suffered multiple years of losses at a level of $100 million, expanding crop insurance to cover livestock at a cost of $100 million, budget to make more flexible NAP, costing $110 million, by eliminating the area trigger and by requesting $40 million of Congress to improve Risk Management Education and $30 million in additional funds for product research and development.

Most of these proposals are contained in all the crop insurance improvement bills under consideration by Congress. All, these proposals could be considered significant by themselves, however, this Administration believes this basic package critical for Congress to enact this year.

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

Question. As you are aware, last year, at my request, Congress directed the Risk Management Agency to perform an actuarial study to determine the feasibility of including salmon in the Federal crop insurance program. I understand that the Agency is proceeding with this study. What is the status of the study?

Answer. Risk Management Agency (RMA) personnel contacted Dr. Ray Ralonde of the University of Alaska, Marine Advisory Program, to review the Alaskan salmon industry and gain an overview of the economic risks. Dr. Ralonde provided information and suggested RMA contact Dr. Terry Johnson, State Extension Agent for the National Marine Fisheries Service, and Dr. Gunner Knapp, Professor of Economics, University of Alaska. RMA also contacted Dr. Johnson and Dr. Knapp to discuss industry concerns as well as the feasibility of developing a crop insurance program based on sound actuarial risk management principles.

Dr. Knapp & Dr. Johnson both verified they would be available and interested in conducting such a study. Dr. Ralonde also expressed willingness to help in whatever way he could but expressed that the study was probably less within his areas of focus. Funds have been budgeted to conduct the study this year.

Question. I want the Risk Management Agency to conduct a pilot program to determine the feasibility of including salmon within the crop insurance program. If it met the actuarial soundness requirement are you prepared to initiate this pilot program also?

Answer. RMA has initiated discussions with several industry experts in terms of identifying sources of both production & economic risks associated with producing salmon.

We are gathering information concerning the main areas of interest so RMA can accurately direct our focus and resources. The results of the feasibility study will determine what crop insurance plan to offer and if any legislative authority is required.

After discussions with your staff (Mr. Butzlaff), RMA is proceeding toward developing a feasibility study and pilot program which focuses our efforts on the commercial fisheries area of Bristol Bay. RMA has advised your office that a change in the Federal Crop Insurance Act is likely necessary for RMA to implement a pilot program that includes premium subsidies. Your office has been furnished information from USDA's Office of General Counsel on this matter.

Question. What funds will the Risk Management Agency need to complete this study and a subsequent pilot program in Alaska?

Answer. RMA is using $75,000 from the fiscal year 2000 Research and Development fund Section 516(b)(2) of the FCIC Act to complete the initial feasibility study. Budget requirements for subsequent fiscal years for pilot program research, development and implementation are estimated at $800,000, however, no commitment of funds have been allocated at this time pending numerous other program requests of RMA and the annual spending limitation placed on these funds within the Act.

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

DAIRY OPTIONS PILOT PROGRAM

Question. During the hearing I asked what the Department is planning to do to ramp up the Dairy Options Pilot Program consistent with Secretary Glickman's commitment on February 10. I am concerned by the Department's response that dairy farmers should be able to participate in the program for no more than one round.

RMA has operated multi-year pilot programs for many other commodities. Moreover, given the complexity of using the options market as a risk management tool, it is reasonable to expect that dairy farmers and USDA would need more than one round to determine the benefits and short comings of options markets as risk management tools in dairy. Finally, it is clear that Congress envisioned the options pilot program operating in a county for multiple rounds since the statute limits participation to no more than 3 years. Congress limited participation to 100 counties concurrently, not in total.

How can RMA resolve the inconsistency between its operation of the DOPP and its unnecessarily narrow interpretation of the authorizing Act with the statements made by Secretary Glickman regarding the Department's efforts to increase use of DOPP?

Answer. The Federal Agriculture Improvement and Reform Act of 1996 says that "the Secretary may operate the pilot program in not more than 100 counties . . . ." It does not say "not more than 100 counties at any one time". The intent of Congress is unclear. As a result, RMA has been advised by USDA's Office of General Counsel that legislative action will be required to expand into more than 100 counties. RMA is currently reviewing ways to expand the Dairy Options Pilot Program.

QUESTION SUBMITTED BY SENATOR ROBERT C. BYRD

IMBALANCE OF USDA ASSISTANCE

Question. Farming in the Northeast (USDA's definition of Northeast includes West Virginia) accounts for 6 percent of U.S. farm numbers and 8 percent of rural agricultural production values but receives just 1 percent of direct payments and federal crop insurane payments to producers. I am concerned that the hardworking West Virginia farmer is not receiving a fair portion of assistance provided by the U.S. Department of Agriculture.

What factors contribute to the discrepancy between amount produced, and assistance received?

Answer. There could be several reasons for differences between the Northeast and the rest of the country. These other reasons would argue against the premise "that the hardworking West Virginia farmer is not receiving a fair portion of the assistance provided by USDA." For example:

1. *Crop income versus livestock income.*—The share of agricultural income derived from crops versus livestock and livestock products (e.g.—meat and milk). Both direct payments and crop insurance focus on crop production rather than livestock production. If the Northeast has relatively more income from livestock than rest of the country, then its share of direct payments and crop insurance, by definition, will be lower than the national average, when measured as a percent of the value of agricultural production.

2. *Crops produced.*—Direct payments are focused on the loan commodities that are of lesser importance to the agriculture of the Northeast than to rest of the country. Crop insurance is not yet available on all crops produced in the Northeast, but RMA's Adjusted Gross Revenue (AGR) insurance program, which is currently in the very early pilot stages, does cover all vegetative crops and provides limited coverage for livestock.

3. *Farmers' choices of coverage levels.*—The portion of farmers who chose to sign up for FCIC's free, basic crop insurance product—called CAT, for catastrophic coverage—compared to the higher coverage levels for which a premium is charged, is higher in the Northeast than the rest of the country.

4. *Participation in crop insurance program.*—If farmers elect not to sign up for crop insurance—for whatever reason—then they and the region in which they farm will have a lower share in the benefits of the crop insurance program.

Question. What can be done to ensure that a farmer who does not live in a larger "farm-state" receives an equitable portion of the assistance available to his fellow farmers?

Answer. It is helpful to think of this problem both from two perspectives—the farmers' and Governments'. One must try to "push" crop insurance benefits to areas of need, the other must try to pull them from the center.

The most important actions from the "pull" side would be for farmers to sign up for the various crop insurance programs that are available and to sign up at higher coverage levels. This, of course, immediately causes the desired benefits to flow. But it also converts potential demand into effective demand and makes money for agents' commissions and insurance company underwriting profits to become available.

On the "push" side, it is important to note that FCIC uses a "for-profit" delivery system—private insurance companies and their agents—to deliver its products to farmers. An increase in effective demand from the "pull" side, as suggested above, convince companies and their agents to be more aggressive in pushing products in agriculturally sparse areas such as the Northeast.

SUBCOMMITTEE RECESS

Senator COCHRAN. We will have our next hearing on Tuesday, March, in this same room, 138, Dirksen Senate Office Building. At that time, we will review the President's budget request for the programs and activities of the Food and Drug Administration. Until then, the committee stands in recess.

[Whereupon, at 4 p.m., Tuesday, February 29, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

TUESDAY, MARCH 7, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:08 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Gorton, Stevens, Harkin, and Durbin.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

STATEMENTS OF:

HON. DONNA E. SHALALA, SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES

JANE E. HENNEY, M.D., COMMISSIONER

ACCOMPANIED BY:

BERNARD SCHWETZ, D.V.M., PH.D., ACTING DEPUTY COMMISSIONER

ROBERT J. BYRD, DEPUTY COMMISSIONER FOR MANAGEMENT AND SYSTEMS, CHIEF FINANCIAL OFFICER

DENNIS P. WILLIAMS, DEPUTY ASSISTANT SECRETARY FOR BUDGET, DEPARTMENT OF HEALTH AND HUMAN SERVICES

JOSEPH A. LEVITT, DIRECTOR, CENTER FOR FOOD SAFETY AND APPLIED NUTRITION

MITCHELL R. ZELLER, DIRECTOR, OFFICE OF TOBACCO PROGRAMS

OPENING STATEMENT OF SENATOR THAD COCHRAN

Senator COCHRAN. The subcommittee will please come to order.

Today we continue our hearings reviewing the President's budget request for fiscal year 2001 for the subjects that come under the jurisdiction of this subcommittee. This morning we are pleased to have witnesses from the Department of Health and Human Services, the Secretary, as well as the Commissioner of the Food and Drug Administration. We appreciate very much your being here. We understand that accompanying the Secretary and Commissioner are Dr. Bernard Schwetz, who is Acting Deputy Commissioner of the Food and Drug Administration, and Mr. Robert J. Byrd, Deputy Commissioner for Management and Systems and Chief Financial Officer of the Food and Drug Administration, and

Mr. Dennis Williams, who is Deputy Assistant Secretary for Budget at the Department of Health and Human Services.

We notice from reviewing the statements that have been submitted, which will be made a part of the record, that the FDA has some high priorities, and we are looking forward to hearing more about those in the testimony this morning.

One area that we are aware of that causes particularly difficult challenges for the agency is the technological advances that continue to be made that have resulted in a proliferation of new products and devices that are designed to benefit the American public in our quest for health and safety. We appreciate the challenge this creates for the Food and Drug Administration. We want to allow safe and effective products to reach the marketplace as quickly as possible, but we realize at the same time that the potential risks have to be monitored, as well as for products that are already on the market.

We will be carefully considering the budget request in this area, along with the other priority areas, and consider the need for adequate resources to inspect more products on the market, to further reduce product approval times, to strengthen adverse events reporting systems, to ensure the safety of foods and imports, and to meet the new challenges, such as the illegal sale of drugs over the Internet.

We are particularly pleased that the Secretary is here this morning. We want to assure her that we will work with her and her Department to address this agency's most critical needs.

We also want to take this opportunity to commend the Commissioner, Dr. Henney, for her excellent service as administrator of the Food and Drug Administration.

Madam Secretary, we invite you to proceed. We look forward to your statement. We will then hear from Dr. Henney. You may proceed.

Secretary SHALALA. Thank you very much, Mr. Chairman. I appreciate the invitation to be here. Chairman Stevens, Senator Gorton, Senator Durbin. I am delighted to join our very distinguished Commissioner who will describe in more detail FDA's first budget of the 21st century.

FDA has earned worldwide respect as a premier public health agency, and the members of this subcommittee know the extensive responsibilities FDA has to ensure the safety of our food, our lifesaving drugs, and medical devices. And you know the work of this agency has created a quality and safety standard that many similar agencies around the world use as a benchmark.

I would like to discuss with you today some of the specific areas where FDA is an essential partner in the progress we hope to achieve.

First, we have made great progress on a bipartisan basis to improve the safety of our food supply, but we have farther to go. I look forward to your continued support on this critical issue.

Second, the Nation faces a potentially dangerous threat from terrorists who would use disease agents rather than bullets or explosives to harm us. The administration and the Congress have been working to guard against this threat. We need the Food and Drug Administration to ensure that we have new vaccines to protect

against these threats and powerful pharmaceuticals to protect us in the event of an attack.

Third, we need a bipartisan effort to reduce the preventable deaths and injuries resulting from medical errors. We need better information on which drugs and medical devices are the most prone to error so that we can help physicians and medical personnel to use them more effectively and safely. A stronger adverse event reporting system at FDA is essential to our success in the area of medical errors.

Fourth, we know that the Internet can help us to improve health and medicine. But we want to make sure that when Americans use the Internet to order pharmaceuticals, they can be sure that the drugs they receive are safe and effective and that they are the drugs they need. I hope you will support our initiative to make Internet drugs safe.

Fifth, assuring products are safe and effective before they get to market is essential to our public health. Doing so quickly is necessary to a strong and innovative medical industry. We need to increase the resources that we make available for premarket review.

We also request funding to support compliance checks of those who would sell tobacco products to our children.

Sixth, one of my top priorities this year is to ensure that our scientists have the facilities they need. I have made similar requests for the Centers for Disease Control, for example, and the NIH. For FDA, this means replacing the dilapidated laboratory in Los Angeles with a state-of-the-art facility on the campus of the University of California at Irvine.

Finally, Mr. Chairman, during his State of the Union address last month, the President noted that innovations in science and technology will be the key to miraculous improvements in the quality of our lives and advances in the economy. He discussed the remarkable fruits of the major expansion we have provided in taxpayer funded research that promises to improve our health and the way health care is delivered.

However, as you know, these new breakthroughs, whether drugs or vaccines or medical devices or food additives, must come through the FDA review process to ensure their safe and effective exposure to millions of Americans who will use them. So, I would ask you to consider how we can strengthen FDA's capacity to oversee the entry of these products to market.

These new products will change health care in America forever and will help us all to lead longer and healthier lives. In other words, Mr. Chairman, this is really a warning, perhaps the last one that I will give to this Congress. This is possibly my last testimony. We are about to see breakthroughs in American science that were unbelievable decades ago, but they will get clogged up in the FDA process if FDA does not continue its modernization process. So, investing in the science at FDA and smoothing out the review processes and making sure FDA has the kind of facilities it needs will be important so that there is a seamless system of the breakthroughs in basic science to the development of product to approval by FDA.

Both Republicans and Democrats in this Congress have worked very hard on FDA reform. We have, in fact, made FDA the model

agency of the world from the point of view of scientists around the world, but also from the point of view of those that produce the products that get to market that improve our health. But we are in danger in this age of breakthroughs in biomedical science of again getting clogged up in the process unless FDA also has the proper investments. That is what we need to do and that is what I believe this committee will see as one of its major priorities.

PREPARED STATEMENT

Mr. Chairman, again I want to thank you and members of this committee for your past support for FDA funding, and again thank you for considering the important investments we have proposed for the agency for the next fiscal year.

[The statement follows:]

PREPARED STATEMENT OF HON. DONNA E. SHALALA

Mr. Chairman, Senator Kohl and members of the subcommittee, I am delighted to join Commissioner Henney, who will describe in more detail FDA's first budget of the 21st century.

FDA has earned worldwide respect as a premier public health agency. The members of this subcommittee know the extensive responsibilities FDA has to ensure the safety of our food, lifesaving drugs and medical devices. And you know that the work of this agency has created a quality and safety standard that many similar agencies around the world use as their benchmark.

I would like to discuss with you today some of the specific areas where FDA is an essential partner in the progress we hope to achieve.

We have made great progress on a bipartisan basis to improve the safety of our food supply. But we have farther to go. I look forward to your continued support on this critical issue.

The nation faces a potentially dangerous threat from terrorists who would use disease agents rather than bullets or explosives to harm us. The Administration and the Congress have been working to guard against this threat. We need the FDA to ensure that we have new vaccines to protect against these threats, and powerful pharmaceuticals to protect us in the event of an attack.

We need a bipartisan effort to reduce the preventable deaths and injuries resulting from medical errors. We need better information on which drugs and medical devices are the most prone to error, so that we can help physicians and medical personnel to use them more effectively and safely. A stronger adverse event reporting system at FDA is essential to success.

We also know that the Internet can help us to improve health and medicine. But we want to make sure that when Americans use the Internet to order pharmaceuticals, they can be sure the drugs they receive are safe and effective, and that they are the drugs they need. I hope you will support our initiative to make Internet drugs safe.

Assuring products are safe and effective before they get to market is essential to our public health; doing so quickly is necessary to a strong, innovative medical industry. We need to increase the resources that we make available for premarket review.

We also request funding to support compliance checks of those who would sell tobacco products to children.

One of my top priorities this year is to ensure that our scientists have the facilities they need. For FDA, this means replacing the dilapidated laboratory in Los Angeles with a state-of-the-art facility on the campus of the University of California at Irvine.

Mr. Chairman, during his State of the Union address last month, the President noted that innovations in science and technology will be the key to miraculous improvements in the quality of our lives and advances in the economy. He discussed the remarkable fruits of the major expansion we have provided in taxpayer-funded research that promises to improve our health and the way health care is delivered.

However, as you know, these new breakthroughs—whether drugs or vaccines or medical devices or food additives—must come through FDA's review process to ensure their safe and effective exposure to the million of Americans who will use them.

So I would ask you today to consider how we can strengthen FDA's capacity to oversee the entry of these products to the market.

These new products will change health care in America and will help us all to lead longer, healthier lives. They also will bring enormous economic benefits, both in lowering health care costs and in returning profits on the investments that are being made in research. And these advancements are not just theoretical. They are moving—now—from the laboratory into clinical trials and on to general availability. But if FDA does not have the increasingly complex scientific capacity needed to get safe and effective technologies to the market expeditiously, and monitor their safe use after approval, both patients and the industry will suffer.

Again, I want to thank you for your past support for FDA funding. And thank you for considering the important investments we have proposed for the Agency for the next fiscal year.

Senator COCHRAN. Thank you very much, Madam Secretary.

We know you have another commitment, but before you leave, I am going to give Senators an opportunity to make any comment or reaction to your statement. Senator Durbin.

Senator DURBIN. Mr. Chairman, I have several questions I would like to save the time for those questions and waive an opening statement. I would like to thank the Secretary and Dr. Henney for being with us today.

Senator COCHRAN. Senator Gorton.

STATEMENT OF SENATOR SLADE GORTON

Senator GORTON. Mr. Chairman, my statement is directed more at Commissioner Henney than it is at the Secretary. But, of course, it has to do with what seems to me to be the emergent and most troubling issue of all, and that is the price of prescription drugs to the citizens of the United States, something that I know that these two heard and discussed when they were before the House committee.

We are the only free market in the world in prescription drugs, and other countries have imposed the kind of price controls that cause Americans to bear overwhelmingly the burden of cost for the research and development of new drugs. I think it is absolutely unconscionable, Mr. Chairman, that the American taxpayer essentially subsidizes the research and development of new drugs for other countries in three ways.

First, we put almost $18 billion a year through the NIH.

Second, we of course grant a very important research and development tax credit.

And finally, we subsidize a third time around at the pharmacy in the form of higher prices.

Prescription drug costs, as the Commissioner and the Secretary well know, are becoming an increasingly important part of the cost of health care, and we need all of our best possible thoughts put to the proposition as to how we at least equalize this burden and cause our neighbors, both to the north and south, to pay their fair share of those costs.

I represent a border State, bordering on Canada. A family, noted in the newspapers recently, from Tacoma saved $600 by going to Canada to buy a 3-month supply of blood pressure, stomach, and sinus medications. One of the cancer treatments cost $15 for a 1-month supply in Canada, $95 if you are simply on our side of the border. I may say I myself take Zocor, very much advertised; $3.16 a pill here, $1.65 in Canada. Other different prices are as much as

5 or 6 to 1 between the United States and Canada or the United States and Mexico.

I think this is just simply unconscionable. At this point I am not aiming my comments so much at the drug companies that obviously have to pay at least their share of these development costs, but it seems to me entirely and totally unfair and inappropriate that our drug developers and manufacturers—and I am sure Commissioner Henney can speak to this, if she will—who do the overwhelming lion's share of the research and development throughout the world, that we are, in effect, letting almost every other foreign country ride on that research, sell these prescription drugs at much lower prices than are charged to people here in the United States.

We hear much about this being a problem for seniors, and of course, it is. But it is a problem for everyone, not only everyone who pays cash for prescription drugs, but it is reflected undoubtedly in the cost of health insurance where health insurance plans in the United States provide for a drug benefit. I very much hope that Commissioner Henney will speak to this issue during the course of her testimony.

Senator COCHRAN. Thank you very much, Senator Gorton.

Senator Stevens.

Senator STEVENS. Well, I do want the Secretary to be able to leave and make her other appointment.

I am constrained to say, do you know something I do not know? You said this may be your last appearance before our committee.

Secretary SHALALA. I have finished my appropriations testimony for this year, and I do not expect to be here next year, Senator.

Senator STEVENS. I expect you to be back before us this year.

Secretary SHALALA. Senator, at your request, I will always be there.

Senator STEVENS. We look forward to that pleasure.

I do thank you both for the work you are doing. I will have some comments later, but I am extremely pleased, as I told you personally, with the progress now being made on the PET scan and other imaging systems and having them being properly considered by the Medicare and Medicaid programs.

I do have a comment later addressed to Dr. Henney about the seafood monitoring provision in this bill, but for now, thank you very much for being here, Madam Secretary.

Secretary SHALALA. Thank you.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Madam Secretary. We appreciate your presence and we look forward to working with you on these proposals.

Senator STEVENS. Senator Cochran and I can arrange for you to have a trip here for other activities whenever you are ready. She is one terrific tennis player, I will tell you.

[The statement follows:]

PREPARED STATEMENT OF SENATOR TED STEVENS

Good morning Secretary Shalala and Commissioner Henney (Hay-nee). It's a pleasure to have you here today before the subcommittee. The FDA'S budget request for fiscal year 2001 of $1.4 billion is a 13 percent increase over fiscal year 2000. I certainly appreciate the importance of the work that the FDA does, but, as I have

said in other budget hearings, I believe the President's budget request represents an unrealistic spending level when we consider Congress' commitment to keep a balanced budget and to not dip into the Social Security surplus to finance current government operations.

I note that the administration will be proposing legislation to consolidate the seafood monitoring activities of the Federal Government in the FDA, including the Commerce Department's Seafood Inspection Program. That program provides voluntary inspections and certification services for fish and fishery products on a fee-for-service basis. The seafood industry is of critical importance to Alaska, and I will be watching carefully how this proposal develops.

On another subject, I'd like to commend Commissioner Henney and the Secretary for the way that FDA has worked cooperatively with the pet community to come up with a reasonable framework for regulating the radiopharmaceuticals used in pet scans. I understand that FDA will be issuing a notice within the next couple of weeks approving the radiopharmaceutical "FDG" for use in pet scans to diagnose a wide range of cancers and heart disease. I'm pleased at FDA'S cooperation with the pet community.

I know that both the Secretary and Commissioner Henney are aware of my strong support for pet and for obtaining broad coverage for pet scans under the Medicare program. I would urge both of you to help FDA and HCFA work more closely together so that we can bring new technologies into the Medicare program to benefit seniors much more quickly than is the case today. I ask you both to join me in working towards this goal.

Senator COCHRAN. Dr. Henney, we are prepared to hear your statement now. We welcome you to the committee, and thank you for your cooperation with us.

STATEMENT OF JANE E. HENNEY

Dr. HENNEY. Thank you, Mr. Chairman and members of the committee. It is a privilege today, as Commissioner of Food and Drugs, to present FDA's plans and expectations as reflected in the administration's proposed budget for fiscal year 2001.

Patients, researchers, health professionals, manufacturers, educators, grocers, public sector administrators, or just ordinary citizens want a public health regulatory agency such as the FDA to be fair, competent and, above all, credible. I have heard this message in different words on many occasions in many settings this past year. I believe that the accomplishments of this year will demonstrate that FDA has done a remarkable job in maintaining the public's confidence and credibility even though we face numerous unpredictable issues on a day-to-day basis.

It may be far too easy for Americans to assume FDA's competence and credibility because we have long enjoyed public confidence in the past. However, from listening to my European counterparts, public confidence, once lost, is not easily or quickly restored. A series of highly publicized crises in Europe over the past several years have caused my counterparts to ask: What is FDA's secret and how does FDA utilize science and build consensus answers to so many inherently contentious issues? The answers are not found in FDA's organizational diagrams or job titles.

We find ourselves explaining modern versions of two very old history lessons, what Alexis de Toqueville reported long ago in Europe about the uniquely open processes of American lawmaking and its modern derivative, rulemaking; and Dr. Harvey Wiley's discussions with President Theodore Roosevelt at the beginning of the last century about the importance of science-based regulatory decisions. From a world perspective, FDA's utilization of public issue meetings, access to agency information, voting advisory committees, re-

quirements for scientific evidence and reliance on scientific facts in its decisionmaking processes are more uniquely American than we may realize. The interplay of these features into an independent regulatory function that coexists with prescribed congressional and judicial roles constitutes the most envied regulatory model in the world.

Today I want to share with you my priorities for preserving this capability and for preserving the agency's commitments to and credibility with the American public. As we begin the 21st century, fiscal year 2001 will be critically important for FDA because so much of our environment is changing rapidly and our capability to understand, adapt, and respond will be stretched to new limits. To maintain our strength, we must strengthen our science; we must address the highest priority risks; we must engage in effective collaborative and leveraged activities; and we must design ever more predictable, timely, and transparent regulatory processes.

Stronger science. FDA's commitment to assuring safe products rests squarely on our ability to keep pace with the explosion in scientific advances and then to use our knowledge to assure safe products. We must apply our intellectual capital at every point in the life cycle of the product. We can apply this science at the point when the new technology arrives and when it is absolutely essential to steward these products, many of them lifesaving, to the market.

FDA is the regulatory gateway through which an estimated $50 billion in annual biomedical research and development investment must pass and be judged. You and your colleagues in the Congress have overseen a major expansion of Federal research, biomedical research in recent years, and those investments will pay dividends many times over for all of us.

FDA can deliver when properly resourced. Congress' authorization and support of the Prescription Drug User Fee Act and its recent reauthorization is a prime example. Review of drugs and biologics in the United States is now as fast or faster than anywhere in the world and this has been accomplished without lowering our very high standard for safety and effectiveness. We want to be able to perform this well in all of our products that require premarket evaluation. But this will require being adequately resourced.

Assuring safety by managing risk. A strong FDA science capability is equally critical in understanding and managing risks associated with products that are already in the marketplace. Each year hundreds of thousands of adverse experiences are reported in association with foods, drugs, and medical devices. In managing risk, FDA has always adhered to the principle that the most serious risks should be addressed first. The idea takes on added meaning, given the complexities of our 21st century environment. You will see evidence throughout our budget that the most serious problems are on the top of the list.

To illustrate, the medical error initiative in the budget emphasizes FDA working with other agencies across the Government as part of the President's new and comprehensive plan to improve health care through the prevention of medical errors or misadventures.

Second, drugs marketed and sold from rogue Internet pharmacy sites present real risk for the American consumer. These have been made a priority for fiscal year 2001.

And we have addressed the most serious risks first as part of the Food Safety Initiative. If provided the funding requested, we will be able to inspect the high risk food firms at least once a year. We would continue the work supported by the Congress in the past which focuses our efforts in the import arena by targeting imported produce that contain microbiological pathogens.

Let me speak for just a moment about collaboration and leveraging opportunities. Working with FDA's assets alone is not sufficient to address the complex risk management challenges that we face. Many of the initiatives in our budget require our agency to work in concert with a broad spectrum of stakeholders to strengthen the safety net for the American consumer.

Because we regulate in a global marketplace, our collaborative efforts must extend beyond our domestic borders. In this regard, we collaborate with our foreign regulatory counterparts in joint efforts that include setting standards to reduce the risk of products to the consumer. Whether it is within our domestic border or beyond, FDA undertakes collaborative initiatives because all parties can unify behind goals that are in the best interest of public health and safety. With such efforts, we will be able to move our world to better health outcomes.

Open, transparent, and predictable regulatory processes. Another key provision of the FDA Modernization Act of 1997 directed our agency to consult with our many stakeholders on an ongoing basis, to keep them apprised of our strategies and new product decisions, and to generally make them an informed participant in our regulatory processes. The relevant principle here is that a confident and well-informed individual or industry also becomes a partner in shouldering the management of risks.

We intend to keep these communication channels alive and humming. This spring we will listen at two additional formal stakeholder forums, the first at Stanford University in March and the second at Duke in April. At both of these sessions, we will no doubt receive suggestions on how to improve our programs and further strengthen our working relationships with our constituencies.

These 21st century ways of doing business—strengthening science, addressing the highest risk priorities, collaborating effectively with our partners and leverage our resources, and using open, transparent regulatory processes—must be applied across the entire spectrum of product development, review, and post-market monitoring. When we are able to play all these roles effectively, bolstered by science and augmented by partners who share our goals, American citizens can be confident that an effective safety assurance system is in place. FDA's budget proposals for fiscal year 2001 move us toward that desirable state of affairs.

Before I close my remarks, I would just like to briefly highlight for you the key elements of our budget request.

$42 million to enhance the science-based review of new health-giving products so that they can more rapidly enter the marketplace.

$30 million to enhance the safety of the food supply through strengthening the key elements of the President's Food Safety Initiative.

$20 million to replace the FDA's obsolete Los Angeles laboratory facility. I would contrast the pictures before you. Our L.A. lab with a modern facility of Cincinnati that you provided the funding for us a few years ago. We need this kind of facility in Los Angeles. This lab is the critical linchpin in assuring the safety of a major portion of the U.S. imports, particularly food, that enter this country.

$15.9 million to strengthen our systems which report on and correct medical errors. This is an interagency cooperative effort designed to reduce those 100,000 annual deaths that occur from medical misadventures or mistakes.

$13.5 million to focus on domestic inspections of our firms in order to target high risk violators and come closer to meeting the agency's statutory inspection requirements.

$10 million to stop the illegal sale of drugs over the Internet.

And $11.5 million as part of the President's comprehensive response to possible bioterrorist attack.

$5 million to further the administration's efforts to reduce smoking by the youth of our Nation.

In summary, Mr. Chairman and members of the committee, fiscal year 2001 is the year in which FDA must cope with the maturation of two of the most massive and significant change forces the agency has ever faced. In 2001, the increasing impact of molecular science, genetics or genomics in particular, and the information revolution, especially the Internet and its linkage to an array of real-time data and as a new vehicle of commerce will combine their forces to change how FDA regulated products are discovered, researched, manufactured, distributed, marketed, and advertised. When the world around us changes this much, we must be prepared to respond in order to assure that products are still safe for American consumers. Our credibility to provide valid assurance is at risk without strong science, effective collaborations and consultation, and even greater openness and transparency in our processes.

I wish to thank the members of this committee, their staff, and the staff of the individual subcommittee members for your support during this past year. This committee has many legacies from improved agricultural production to safer consumer products to protection of the American farmer. I ask you to add another critically important one to the list, bringing forth the technological promise of the 21st century. If you provide FDA the resources to do the job, I will commit to you that those funds will be well and wisely spent.

PREPARED STATEMENT

I look forward to our discussions with this committee today to ensure that we are able to fulfill our mission in this ever-changing and challenging environment.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF JANE E. HENNEY

Mr. Chairman and members of Congress, it is my privilege today as Commissioner of Food and Drugs to present FDA's plans and expectations as reflected in the Administration's proposed budget for fiscal year 2001. One year ago, I told you that I was lured to renewed public service by the dedication, energy and commitment of the talented people in FDA. I was equally attracted by the enormity of the changing demands upon the Agency and the difference this agency can make in improving the public health.

Patients, researchers, health professionals, manufacturers, educators, grocers, public sector administrators or just ordinary citizens want a public health regulatory agency such as the FDA to be fair, competent and, above all, credible. I have heard this message in different words on many occasions in many settings this year. I believe that the accomplishments of the past year will demonstrate that FDA has done a remarkable job in maintaining the public's confidence and credibility even though we face numerous unpredictable issues on a day-to-day basis.

It may be all too easy for Americans to assume FDA's competence and credibility because we have long enjoyed public confidence in the past. However, from listening to my European counterparts, public confidence, once lost, is not easily or quickly restored. A series of highly publicized crises in Europe over the past several years have caused my counterparts to ask: What is FDA's secret and how does FDA utilize science and build consensus answers to so many inherently contentious issues? The answers are not found in FDA's organizational diagrams or job titles.

We find ourselves explaining modern versions of two very old history lessons—what Alexis de Toqueville reported long ago to Europe about the uniquely open processes for American lawmaking (and in its modern derivative—rulemaking), and Dr. Harvey Wiley's discussions with President Theodore Roosevelt at the beginning of the last century about the importance of science-based regulatory decisions. From a world perspective, FDA's utilization of public issue meetings, access to agency information, voting advisory committees, requirements for scientific evidence and reliance on scientific facts in its decision-making process are more uniquely American than we may realize. The interplay of these features into an independent regulatory function that coexists with prescribed Congressional and Judicial roles constitutes the most envied regulatory model in the world.

Today, I share with you my priorities for preserving this capability and for preserving the agency's credibility with the American public. As we begin the 21st Century, fiscal Year 2001 will be critically important for FDA because so much of our environment is changing rapidly and our capability to understand, adapt and respond will be stretched to new limits. To maintain our strength: We must strengthen our science; we must address the highest priority risks; we must engage in effective collaborative and leveraged activities; and, we must design ever more predictable, timely and transparent regulatory processes.

Stronger science.—FDA's commitment to assuring safe products rests squarely on our ability to keep pace with the explosion in scientific advances—and then to use that knowledge to assure safe products. We must apply our intellectual capital at every point in the life cycle of the product. When consumers buy food items, drugs or medical devices, they're purchasing not only the product itself, but FDA's implicit assurance that the product is safe. To give them such assurance in a world with so many new products, FDA must quickly understand these sophisticated new products and the science within them and judge their suitability for the market place. Timing is everything! Wayne Gretzky, of ice hockey fame, was asked to tell what made him a successful player. He said: "I skate to where the puck will be." FDA is in a similar position. We must be able to anticipate and access the cutting-edge science that will be needed to regulate the products of future technology. When this is possible, we can apply this science at the point when the new technology arrives, and when it is absolutely essential to steward these products, many of them life-saving, to the market.

FDA is the regulatory gateway through which an estimated $50 billion in annual biomedical research and development investment must pass and be judged. During the President's State of the Union address last month, he noted that innovations in science and technology will be the key to miraculous improvements in the quality of our lives and advances in the economy as we enter the 21st Century. He discussed the remarkable fruits of research—much of it taxpayer funded—that promise to improve both our health and the way health care is delivered. You and your colleagues on other appropriations committees have overseen a major expansion of Federal research in recent years, and those investments will pay dividends many times over for us all.

If FDA is not in a state of scientific readiness when applications are received, then we must either delay regulatory decisions on important new applications until we have adequate knowledge or make very conservative decisions in order to err on the side of caution. Neither of these choices is good for the American people because they delay the availability of critically needed treatment as well as result in increased health and economic costs. A recent industry survey by Pricewaterhouse Coopers concerning FDA's relationships with its regulated industries reinforces the need for FDA to be scientifically prepared. The survey concludes that FDA must invest in recruiting and training exceptionally qualified personnel at all levels. So I would urge your careful consideration of our resource needs as they relate to FDA's scientific strength.

FDA can deliver when properly resourced. Congress' authorization and support of the Prescription Drug User Fee Act and its Reauthorization in the FDA Modernization Act is a prime example. Review of drugs and biologics in the U.S. is now as fast or faster than anywhere in the world and this has been accomplished without lowering our very high standard for safety and effectiveness. We want to be able to perform this well in all of our products that require premarket evaluation.

ASSURING SAFETY BY MANAGING RISK

A strong FDA science capability is equally critical in understanding and managing risks associated with products that are already in the market place. Each year, hundreds of thousands of adverse experiences are reported in association with foods, drugs and medical devices. When we can apply cutting edge science to these problems, particularly in cooperation with our health and regulatory partners, as well as those in the regulated industry, we can quickly identify significant risks and minimize them.

In managing risk, FDA has always adhered to the principle that the most serious risks should be addressed first. This idea takes on added meaning, given the complexities of our 21st Century environment. You will see evidence throughout our budget that the most serious problems are at the top of our list. To illustrate:

The medical error initiative in our fiscal year 2001 budget emphasizes FDA working with other agencies in the Department of Health and Human Services and with Departments across the Federal government as part of the President's new and comprehensive plan to improve health care through the prevention of medical errors and enhancement of patient safety.

Drugs marketed and sold from illegitimate Internet pharmacy sites present real risk for the American consumer. These have been made a priority for fiscal year 2001. FDA will use prevailing Internet hardware and software to focus on suspect web sites, and will convey a rapid response team to deal with these sites. FDA also intends to work very closely with State authorities and other Federal agencies in order to expedite the elimination of this fraudulent activity. We also plan to step up our efforts to educate consumers about the risks involved and what types of sites or practices they should avoid.

Again, we have addressed the most serious risks first as part of the Food Safety Initiative. If provided the funding requested, we will be able to inspect the high risk food firms at least once a year. We would continue the work supported by the Congress in the past which focuses our efforts in the import arena by targeting imported produce that contain microbiological pathogens. Your support has also allowed us to invest in new science-based tools like PulseNet, a collaborative project between CDC, FDA, USDA and state health departments, which uses rapid analysis of bacterial DNA fingerprints to pinpoint the exact source of food borne illness outbreaks. More of these detection tools will revolutionize our ability to detect and prevent a wide range of adverse experiences and to focus on the most serious ones first; but we need resources to do this.

While we have identified the aforementioned as investments that would be focused on high risk in each of our product review centers, we must also focus and invest in applications that have the greatest potential for providing widespread health benefits. A critical provision provided by FDAMA is our ability to delegate to third parties the responsibility for reviewing medical device applications in lower risk categories. In this year's budget request, a Device user fee is proposed to further encourage reviews to be performed by third parties which will result in greater efficiencies for both FDA and the industry. This allows our Agency's scientific review resources to be dedicated to the more complex new products that often carry significant risks but have the potential for great health benefits.

COLLABORATION AND LEVERAGING OPPORTUNITIES

Working with FDA's assets alone is not sufficient to address the complex risk management challenges that we face. Many of the initiatives in the fiscal year 2001 budget require our Agency to work in concert with a broad spectrum of stakeholders to strengthen the safety net for the U.S. consumer. A prime illustration of this approach is in Food Safety.

Because we regulate in a global market place, our collaborative efforts must extend beyond our domestic borders. In this regard, we collaborate with our foreign regulatory counterparts in joint efforts that include setting standards to reduce the risks of products to the consumer. Whether it's within our domestic boundaries, or beyond, FDA undertakes such collaborative initiatives because all parties can unify behind goals that are in the best interest of public health and safety. With such collective efforts we will be able to move our world to better health outcomes.

Open, transparent and predictable regulatory processes.—Another key provision of the FDA Modernization Act of 1997 directed our Agency to consult with our many stakeholders on an ongoing basis, to keep them apprised of our strategies and new product decisions, and to generally make them an informed participant in our regulatory processes. The relevant principle, here, is that a confident and well-informed individual or industry also becomes a partner in shouldering the management of risks.

A recent example of this principle in action is the success FDA is enjoying in the "Take Time to Care" Initiative. This involves a partnership between FDA, the National Association of Chain Drug Stores, senior citizen groups, professional associations, business/labor women's organizations and other health organizations. This partnership effectively delivered an important message about safe drug use by distributing a brochure titled "My Medicines" through more than 20,000 pharmacy outlets to millions of citizens. The intent was to positively affect their use of medications. A national evaluation has revealed that 99 percent of both men and women found the drug information they received to be useful and 86 percent indicated an intention to speak with their physician or pharmacist about their medication.

We intend to keep these communication channels alive and "humming." This Spring we will listen at two additional stakeholder forums—the first at Stanford University in March, and the second at Duke University in April. At both of these sessions, we will no doubt receive suggestions on how to improve our programs and further strengthen our working relationships with our constituencies.

These 21st Century ways of doing business—strengthening science; addressing the highest risk priorities; collaborating effectively with our partners and leveraging our resources; and using open, transparent regulatory processes—must be applied across the entire spectrum of product development, review and postmarket monitoring. The total safety assurance system requires FDA's best performance at several critical points. It starts with effective communication with industry prior to the submission of applications, thus improving the quality of submissions received and helping to reduce product development times. Next, we must monitor the progress of new therapies as they are developed, including the important responsibility of overseeing clinical trials. Once a product is approved for the market place, we must continue to assess and manage risk through regular plant inspections and analysis of adverse event reports. Feedback from our monitoring and analysis activities also influences future pre-market review decisions and appropriately informs us so that directed intervention can take place in the postmarket arena should threats to the public health and safety arise. Interventions can take several forms, including education, technical assistance and when necessary, enforcement actions and product removals. When we are able to play all of these roles effectively—bolstered by science and augmented by partners who share our goals—American citizens can be confident that an effective safety assurance system is in place. FDA's budget proposal for fiscal year 2001 moves us toward that desirable state of affairs.

FDA Accomplishments

When I appeared before you last year I outlined five issues that I considered to be my highest priorities. These were implementation of FDAMA, strengthening the Agency's science base, implementing the Food Safety initiative, assuring the safety of the U.S. blood supply, and reducing young people's use of tobacco products. I am pleased to report to you today that thanks to your continued support we have made significant progress in each of these priority areas:

FDAMA IMPLEMENTATION

Last year I committed to you that FDA's energies would be dedicated to carrying out both the spirit and letter of the Law. I am pleased to report another year of exceptional accomplishments in this regard.

To meet the letter and spirit of FDAMA, a scientifically strong and efficient FDA must join forces with other organizations to address increasingly complex challenges in order to protect the public health. While consultation and collaboration with our constituents is not a new practice for FDA, the FDA Modernization Act made the collaborative principle so central to the agency's operations that its implementation required a fresh look at some of our long-standing practices. The Agency's record this past year provides demonstrable evidence that FDA is meeting FDAMA's expectations for outstanding effort and bold new thinking.

FDA has continued working to implement the many specific requirements of FDAMA. Last year I reported that the Agency had completed over 80 FDAMA-related actions. To date, the Agency has completed over 110 FDAMA-related actions with more expected; all within statutory deadlines. Some of the initiatives completed within the past year include: the OTC final monograph for sunscreens, a final rule to exempt selected class I medical devices from pre- market notification, a final rule that governs requirements associated with reporting adverse events for medical devices, and guidance that grants market exclusivity to drug sponsors who provide information relating to the use of the drug by children.

Another key provision of the FDA Modernization Act was the reauthorization of the Prescription Drug User Fee Act of 1992. I am proud to report once again that FDA has met or exceeded practically all performance goals required. As I mentioned earlier, FDA has demonstrated that if we are provided adequate resources, we meet or exceed our goals.

Patients receiving safe and effective therapies they need in a timely fashion is the primary public health benefit of this program. The median approval times for NDA submissions in calendar 1999 was 13.8 months, but if the current rate of first review approvals is sustained, 2001 and 2002 median approval times may drop significantly. Median approval times for priority applications submitted in calendar 1999 dropped to 6 months, which is more than twice as fast as the corresponding times before PDFUA.

This shortening of development times also results in incredible savings to the pharmaceutical industry. A report released this past summer by the Tufts University Center for the Study of Drug Development shows that clinical development times for new drugs in 1996–1998 dropped 18 percent from the period of 1992–1995; thus saving industry up to $2 billion for the $140 million annual PDUFA investment. This savings is realized not only because important new products go to market more rapidly, but also because drug firms are able to operate in a more predictable regulatory climate—one that makes their own product development planning more efficient.

It is also heartening to note that several new products that received approval this past year represented significant advances over those previously available.

For patients with HIV and AIDS FDA's work in 1999 added several new products to the growing number of treatments. One of them is Amprenavir (Agenerase), a new protease inhibitor that received an accelerated approval for use in children as young as four. Amprenavir attempts to prevent HIV from making new copies of itself by interfering with HIV protease enzyme.

For the elderly FDA approved new medications and indications added to the treatment options for many of the 18 million Americans—mostly senior citizens—affected with rheumatoid arthritis and osteoarthritis. The Agency also approved a combination of aspirin and extended- release dipyridamole (Aggrenox) to reduce the risk of stroke.

For people with diabetes three new products approved last year will bring benefits to many of the 16 million Americans affected by diabetes, a disease that can cause damage to the eyes, kidneys, heart and peripheral circulation.

For people with hepatitis C FDA approved several new treatments for the almost four million people in the U.S. who suffer from this disease. Hepatitis C, is the nation's most common blood-borne infection that poses a serious risk of cirrhosis, liver cancer and liver failure.

For people with rare diseases I am pleased, also, to report major progress in our Orphan Products Program, a key program developed after the passage of the Orphan Drug Act of 1983. Orphan products are those that treat diseases or conditions affecting fewer than 200,000 people. That program reached a major milestone last year by approving the 200th designated orphan product. In 1999, 78 drugs and biological products received designation as orphan products—a 16 percent increase over

1998. We estimate that past levels of sponsor orphan designation applications may soon be doubled. Nineteen designated orphan drugs were approved for marketing in 1999, including treatments for neoplastic meningitis, ovarian cancer and hemophilia.

STRENGTHENING FDA'S SCIENCE BASE

As I have mentioned previously, strong science is critical for FDA to safeguard the credibility of its regulatory decisions made at every stage during the life span of the product. Science must underpin every one of our activities including our consultation with product sponsors, review of commercial applications, the establishment of product and process standards, and the identification and correction of hazards in the market. FDA science must also provide the foundation for all of the Agency's negotiations on product standards in the international arena. In each of these facets of FDA responsibility, the Agency must keep pace with the incredible pace and complexity of new science developments. The biomedical science community is developing novel approaches to detect, treat, and prevent disease. If FDA does not keep pace, our judgements and decisions may become risk averse and at times slow, possibly wrong—or both. Neither of these is an acceptable outcome. The Agency must build its own capabilities and have the ability to leverage talents and expertise of scientists and scientific organizations outside of the organization.

Let me provide a few examples of the importance of science to our regulatory role:

FDA scientists have developed a single rapid technique (rapid screen) that identifies as many as 13 common foodborne pathogens, including Salmonella spp., Shigella spp., and Escherichia coli 0157H7 from one sample in a test that takes only 8 hours to complete. This method is permitting faster hazard detection and removal of potentially dangerous foods from the marketplace.

Our scientists also developed a test system that would help to determine the extent of interference of cardiac pacemakers caused by cellular telephones. This research has formed the basis of a standard for implantable cardiac pacemakers and defibrillators that are being proposed by the Association for the Advancement of Medical Instrumentation.

FDA scientists have developed a transgenic model that can be used to screen for toxicities. By using this model, scientists are learning more about how specific chemicals cause toxicity in humans, and how to extrapolate results from animal species to the human. Some of our molecular epidemiologists have also worked with academia and industry to develop and validate a microchip product designed to identify individuals at risk for cancer and/or adverse drug interactions. The significance of this chip technology is that it allows for researchers to screen large numbers of people simultaneously for different types of biomarkers, or potential disease vulnerabilities.

FDA has successfully launched the Product Quality Research Institute Initiative (PQRI). PQRI is a non-profit corporation whose mission is to conduct research to support science-based regulatory policy regarding product quality.

FDA has also taken action to assure that our scientists keep pace with and effectively monitor products that are produced by state-of-the-art manufacturing and quality control technologies. This past fall FDA launched a new joint training program focused on emerging technologies of relevance to the Agency. The training is conducted in cooperation with the regulated industry. The first of these courses brought together more than 30 FDA field investigators, Center scientists and field lab analysts to a Merck manufacturing plant in Pennsylvania to address state-of-the-art sterilization methodologies. Similar advanced courses are planned for the future.

These selected examples illustrate the direct and immediate value of applying FDA's science expertise at critical junctures in the regulatory process.

To remain a strong science-based agency, we must continue to assess emerging technologies well in advance of their arrival on FDA's doorstep. We must prepare for and remain prepared to meet not only the public health challenges of today, but also the future challenges of a rapidly changing science and technology environment.

FOOD SAFETY INITIATIVE

FDA, in collaboration with the Centers for Disease Control and Prevention (CDC), the U.S. Department of Agriculture (USDA), and State and local governments, continued progress towards developing an integrated national food safety system. Your support has also provided for mechanisms in the shortening of several significant outbreaks of food borne illness, translating into fewer deaths and illnesses. In 1999, FDA placed particular emphasis on enhancing the safety of imported food products.

At the border, FDA initiated a 1,000-sample survey of high volume fresh produce imports. Overseas, FDA doubled the number of foreign food establishment inspections, conducted five assessments of foreign food safety systems, and provided extensive education and technical assistance on use of the Good Agricultural Practices/ Good Manufacturing Practices guidance for produce.

Other accomplishments in the food safety arena include the following:

FDA and the U.S. Customs Service developed an Imported Foods Action Plan to further enhance border surveillance. The Plan will be implemented this year.

FDA conducted the second year of seafood HACCP inspections, with priority to processors with implementation problems. FDA found clear progress by most seafood processors, but also issued warning letters to those firms with significant, unaddressed deficiencies.

FDA issued two guidance documents to enhance the safety of sprouts, including guidance for microbiological testing.

FDA published a proposed rule that would require refrigeration of shell eggs at retail and safe handling statements on labels of shell eggs.

In collaboration with USDA, EPA and the Department of Commerce, FDA completed an Egg Safety Action Plan that identifies the systems and practices that need to be implemented to sharply reduce eggs as a source of human Salmonella enteritidis illness. Implementation will begin in fiscal year 2000.

FDA completed revisions to the Food Code to enhance the safety of food prepared outside the home, including restaurants, nursing homes, hospitals, and day care centers. The Food Code was adopted by agencies in 15 states.

FDA continued the expansion of the National Antimicrobial Resistance Monitoring System (NARMS), a collaborative effort among the FDA, USDA, and CDC that monitors susceptibility to 17 antimicrobial drugs in food borne pathogens from human and animal clinical specimens, healthy farm animals, and carcasses of food-producing animals at slaughter. Important augmentations of the NARMS were funded from the Food Safety Initiative during fiscal year 1999.

FDA also provided educational materials to farmers regarding how to prevent future outbreaks and the spread of the multi-resistant organism, Salmonella typhimurium DT104, among animals and to human beings. This was accomplished through collection of information from a field study, several farm-based efforts, and molecular genetic research on a Vermont dairy farm. On-farm poultry studies were initiated in five States in collaboration with USDA to determine the management, production, and drug use practices that influence the development of resistant zoonotic pathogens. Studies examining the effect of the prudent use of antimicrobials on chicken farms began in association with the University of California and Michigan State University.

FDA and USDA collaborated with medical microbiologists from hospitals in Mexico and Guatemala who are interested in initiating an antimicrobial resistance monitoring program. This collaboration between the U.S. NARMS officials and the Mexican antimicrobial surveillance group represents the beginning of the first international human and animal monitoring system for food borne antimicrobial drug susceptibility surveillance in the Americas. The collaboration will lead to improvements in the Mexican Surveillance Program, which will reduce the possibility that contaminated food products will be shipped to the U.S.

ASSURING SAFETY OF THE U.S. BLOOD SUPPLY

Last year I shared with you that more than 3.5 million Americans receive blood from volunteer donors. The most serious risk that these citizens face is the possibility of transmitting undetected diseases. Blood shortages, however, can also present a life-threatening situation. In February 1999, the National Blood Data Resource Center (NBDRC), a corporation affiliated with the American Association of Blood Banks, published a projection that the Nation's demand for blood could exceed the available supply in the foreseeable future. FDA has the responsibility for balancing the need for greater blood supplies with the increased risk associated with more diverse sources of blood and wider access.

Last year I indicated that FDA had developed a Blood Action Plan to address these issues. I can report to you now that with your support the Agency has continued successful implementation of that Plan. The Plan is being jointly carried out by FDA, the Centers for Disease Control, the National Institutes of Health, and the Health Care Financing Administration. The Plan addresses highly focused areas of concern such as emergency operations, response to emerging diseases, updating and reinvention of regulations, monitoring the blood supply, and ensuring compliance with blood regulations. Last fiscal year, the Agency satisfied several key elements of the Plan:

The Agency completed a systematic update of the blood regulations. As a result of this update, obsolete blood regulations were eliminated; and guidance documents are now focused on those standards that are enforceable.

Under the Blood Action Plan, FDA is harmonizing its new Biologics License Application for blood products with its New Drug Application. In addition, FDA, CDC, and NIH representatives have formed an Emerging Infectious Diseases Committee that has developed plans for responding to emerging infections that threaten the blood supply.

The Agency met its statutory requirement of inspecting all registered blood banks and source plasma operations within the past two years. Compliance of these establishments with current Good Manufacturing Practice requirements now exceeds 95 percent.

Agency scientists responded to challenges by blood-borne pathogens for which there are no vaccines or adequate therapies. Blood supplies are often exposed to the dangers posed by such pathogens as HIV, Hepatitis B & C, and Transmissible Spongioform Encephalopathies (TSE). Because these pathogens have evaded known therapies, our strategy is to test and disqualify donors and blood donations found to be contaminated with these pathogens.

Assuring the safety of the blood supply is paramount; but FDA also recognizes that assuring the availability of safe blood is also a major public health challenge. To that end, FDA participated in a workshop this month sponsored by the National Heart Lung and Blood Institute, entitled: "National Strategy to Increase Blood Donation." Several initiatives were reviewed at this workshop, including: considering the use of previously deferred blood donations—e.g., therapeutic hemochromatosis donations, using computers to simplify blood donor interviews, and generally increasing donor incentives for participation.

Challenges to the safety of the U.S. blood supply remain ongoing. One of the Agency's most effective responses is to join forces with its fellow health and regulatory partners to stem these threats. The Blood Action Plan demonstrates such a united effort. I will keep you apprised of further developments fulfilling this critical Agency priority.

REDUCING YOUNG PEOPLE'S USE OF TOBACCO

I reported to you last year that over 400,000 Americans die from tobacco-related illnesses each year. Virtually all of these people began the use of tobacco as children. Thanks to funds you and your colleagues appropriated in fiscal year 1998 and fiscal year 1999, FDA, in cooperation with its federal and state partners, and with the retail community, has been able to launch an effective enforcement and outreach effort. We have early indications that these combined efforts are starting to have an effect. The University of Michigan's Institute for Social Research reported that although accessibility to cigarettes by 8th graders was still very high (72 percent) that figure has been falling since 1996.

Let me cite a few highlights of the program efforts in 1999 that are contributing to this hopeful turn-around in youth smoking:

In the enforcement area, FDA now has contracts in place with all 50 states and 3 territories to conduct compliance checks of retail establishments. This establishment of a comprehensive compliance network exceeded all of our expectations. As a result, in 1999 we achieved a 166 percent increase in the number of compliance checks conducted. Existing contracts resulted in a total of 107,200 compliance checks completed.

We also provided retailers with a mediation procedure to resolve civil monetary penalty complaints and avoid litigation. Many of the violators were small businesses such as convenience stores or gasoline stations. During a mediation conference call, the mediator offers the retailer suggestions for preventing future violations. This process has resulted in almost all cases being settled to the satisfaction of the retailer. They have been very favorably impressed. FDA has also capitalized on information technology by designing and installing a computer system to automate the program's processes and to develop and maintain a list of retailers selling tobacco in each state. This is of tremendous benefit to the states because it gives them a way of tracking up to 1.5 million retailers who may be selling tobacco. It also provides the States with the legal record that may be necessary for later civil monetary penalty proceedings.

FDA has also been active in attempting to reach retailers through a broad scoped advertising and education campaign. In addition to reminding retailers and sales clerks not to sell to minors and to check young peoples' photo identification, the campaign also urges customers to cooperate with retailers to help keep young people

tobacco-free. Last year, FDA received the marketing industry's highest honor for effective advertising, the EFFIE Award, for its advertising and education campaign.

In addition to the priority areas I have outlined above, we have also undertaken work in a variety of high profile and controversial areas—bioengineered foods and dietary supplements, to name a few. We are making strides in these areas, but each is a work in progress.

A final issue I raised with the Committee last year as a recently confirmed Commissioner, was my desire and intention to restructure and streamline the Office of the Commissioner in order to realign resources and functions. I appreciate the Committee's support of my plans. The reorganization is now complete. We are now undertaking an additional step to reinvent many of our processes to make the Office of the Commissioner and the Agency programs which it supports operate in an efficient and effective manner. During the course of this past year I appointed two people to key leadership positions in the Agency. Dr. David Fiegel is our new Director of the Center for Medical Devices and Radiological Health. He brings with him an extensive background in the academic sector as well as managerial experience in two of our other product centers—Biologics and Drugs; Dennis Baker is our Associate Commissioner for Regulatory Affairs. Mr. Baker was Chief of the Bureau of Food and Drug Safety within the Texas Department of Health . and while he was in that position he established a strong reputation for being a regulatory 're-inventor.' He will be a very valuable resource to me as we work closely with the states to achieve our mutual public health and safety goals.

Now, let me discuss our fiscal year 2001 request before you for your consideration.

FISCAL YEAR 2001 BUDGET REQUEST

No matter how many or laudable our accomplishments may be, there still is much to do. This year's budget is reflective of the high priority areas where we need your support to assure that strong science will guide our decisions and ensure a strong safety net is in place for the American Consumer. The fiscal year 2001 President's budget request for FDA is $1,390,831,000—an increase of $176 million over FDA's fiscal year 2000 enacted level. This budget targets improvements that will: bring new products to market through strong science; and assure a strong safety net for products on the market through strong science.

By strengthening both of these areas, FDA is assuring safety throughout the life cycle of the product.

In addition, the budget identifies major initiatives of special note and interest to the President and the Congress including Food Safety, Youth Tobacco Prevention and Bioterrorism. The budget also targets critically needed improvements to FDA's Infrastructure—specifically replacement of the Agency's Los Angeles regional laboratory facility, completion of the Center for Food Safety and Applied Nutrition in College Park, Maryland and continued support for the Arkansas Regional Laboratory.

Let me briefly highlight our major initiatives in each of these areas:

Bringing New Products to Market Through Strong Science

(1) $42 million to enhance the science-based review of new health-giving products so that they can more rapidly enter the market place.

(2) Improving pre-market review of products submitted and accelerating the process of generic drug review thereby reducing the cost of medical care to the public.

(3) Expanding the scientific expertise to meet increasing demands while maintaining FDA's high standards.

Assuring A Strong Safety Net Through Strong Science

(4) $15.9 million to reduce the number of Americans who die annually from medical errors, currently estimated at 100,000. We would significantly upgrade and make more comprehensive our adverse event report systems, including those for dietary supplements and animal drugs. With our labeling initiative we would also be able to reduce the errors made because names of drugs sound similar.

(5) $13.5 million to better ensure the safety of products on the market by conducting more inspections to support statutory compliance.

(6) $10.0 million to protect consumers from illegitimate Internet pharmacies that inappropriately prescribe medications, increase the risk of dangerous drug interactions or sell potentially counterfeited or contaminated drugs. Our rapid response team would be supported with upgrades to our computer technology used to identify, investigate, and prosecute illegitimate Internet pharmacies. In addition, we would enhance our public education campaign on safe ways to purchase pharmaceuticals over the Internet.

Initiatives of Special Note and Interest to the President and the Congress

(7) $30.0 million to enhance the safety of the food supply through strengthening key elements of the President's Food Safety Initiative by increasing inspection frequency for high risk food firms; implementation of an Egg Safety Action Plan; developing nation-wide standards for food safety; and expanding the research activities necessary to support the entire initiative.

(8) $11.5 million to ensure expeditious development and licensure of vaccines to be used in response to possible bioterrorist attacks; and to respond to foodborne contamination.

(9) $5.0 million to promote and protect the health of our nation's youth by reducing the number of young people who begin to use tobacco products. Compliance checks and compliance-based outreach efforts would increase with these funds.

FDA Infrastructure Improvements

(10) $20.0 million to replace our outdated and unsafe Los Angeles laboratory facility. This facility is the site that must test many of the products imported from foreign countries, particularly food products.

(11) $5 million in one-time costs to move the Center for Food Safety and Applied Nutrition into a new facility at the University of Maryland in College Park.

(12) $3 million to continue the next phase of the plan for the Arkansas Regional Laboratory.

In addition, the Agency is requesting $14.2 million in proposed existing user fees; and $19.5 million in proposals for new user fees.

Each of these requests is described in more detail which follows:

BRINGING NEW PRODUCTS TO MARKET THROUGH STRONG SCIENCE

New products entering the marketplace will change the face of health care and will help us lead longer, healthier lives. They will also bring enormous economic benefits, both in lessening the cost of health care and in returning profits on the investments that are being made in research.

We are requesting $42 million to enhance the review of new health-giving products so that they can be considered in a timely fashion for entry into the market place. FDA efforts will focus on: direct food additive petitions; generic drugs; animal drugs; children's vaccines; the blood supply; pandemic flu; and medical device reuse. The requested funding for direct food additive petitions, together with funds provided in fiscal year 2000, would provide full funding for this important program.

FDA will use new funding to develop a focused effort in the rapidly evolving field of food biotechnology. FDA requires scientific expertise capable of reviewing products developed through the tools of biotechnology and for providing public assurance of their safety.

ASSURING A STRONG SAFETY NET THROUGH STRONG SCIENCE

Medical Errors ($12.8 million).—One of my first initiatives as Commissioner was to establish a Task Force to evaluate the system for managing the various risks of FDA-approved medical products. The task force issued a report in May 1999, entitled, "Managing the Risks from Medical Product Use". The report confirmed that the high standard of premarket review has been maintained even as our reviews have become more timely. However, several key areas were identified where the safety net for consumers and patients could be strengthened. This report has led to a bold initiative in which FDA is a key participant along with other major health agencies in the public sector as well as health practitioners, hospitals, and states. In a related study the Institute of Medicine (IOM) estimates that close to 100,000 Americans may be dying each year as a result of preventable medical errors because of failures within the complex systems of modern health care. The aim of FDA's initiative in response to its own report and the IOM study is to aggressively deal with the medical errors and adverse events that are reported annually in the U.S.

Patients, doctors, nurses and other health professionals represent a key human component of our health care delivery system. This same system also includes a vast array of drugs, medical devices, blood and other biological products that are regulated by FDA. While the causes of medical error cover a broad spectrum, many involve the use of medical products. Preventing the errors can save people's lives and the health care system and society billions of dollars annually in unnecessary costs. FDA is working with agencies within DHHS and across the Federal government to develop and implement strategies to prevent medical errors.

Features that contribute to errors in actual product use are not always identifiable before FDA approval. Once products are widely used in today's complex and fast-paced healthcare delivery system, these "human factors" can emerge as safety

risks. The Agency has a number of surveillance systems to identify harm resulting from use of FDA-regulated products. We receive problem reports from hospitals, other health-care facilities and individual health care professionals. When the FDA is alerted to problems with a medical product, we conduct a thorough safety analysis using medical and scientific experts to identify critical factors causing the problem, and to identify problematic product features and safety procedures. To prevent further harm to patients, FDA takes actions necessary to minimize problems including communicating with doctors, other health professionals, and patients and requiring changes to the medical product. The "lessons learned" about safe product features are incorporated into the Agency's review of future products.

Recent and dramatic increases in the complexity and numbers of newly-approved medical products, the trend toward their increased patient use, and increased time and cost pressures on health care providers, have raised the level of risk for human error in the use of medical products. While FDA receives over 300,000 reports each year, it is known that the vast majority of incidents are not reported.

The estimated costs for these medical errors are as high as $29 billion a year. Increased resources will allow the agency to elicit more complete reporting as well as analyze report data in a timely manner and to invest in information technology to develop more effective systems. The Administration has set the goal to reduce preventable medical errors by 50 percent within the next 5 years. FDA's request includes an additional $12.8 million. If provided these funds we will:

(1) Improve the reporting systems for blood errors and accidents.

(2) Implement Phase II pilot of the Medical Device Surveillance Network (MeDSuN) to address under-reporting and incomplete user facility reporting of medical device errors. To accomplish this, FDA will recruit over 150 hospital reporting sites into a national reporting network. This system has the potential to be extended to drugs and other areas in future years.

(3) Increase FDA's capacity to conduct multi-factor analyses to correctly identify the sources of safety problems and potential solutions. This includes establishing links to safety databases maintained within community healthcare delivery systems and regional safety surveillance systems as well as augmenting our expertise in medical epidemiology and statistical analysis.

(4) Develop new standards to ensure that pharmaceuticals are packaged and labeled in a manner that promotes patient safety.

(5) Increase FDA's capacity to act on safety findings, through better risk communication to providers and patients who use medical products; and partnerships with other health agencies and health care organizations.

Adverse Event Reporting Systems ($3.1 million).—In addition to the adverse events discussed as part of medical errors, FDA monitors adverse events related to dietary supplements and animal drugs.

The dietary supplement industry is one of the fastest growing industries in the world. Dietary supplement sales have nearly doubled in the past five years and one study estimates that sales will increase by over 90 percent over the next six years. Surveys show that over half of the US population now uses some type of dietary supplement, spending over $12 billion per year for these products. FDA estimates that the industry markets approximately 29,000 of these products which are sold under 75,000 distinct labels.

The number of adverse event reports related to animal drug products has risen from about 1,000 per year in the early nineties to over 12,000 for 1999. Because FDA does not have the resources to process these reports in a timely manner, they must be triaged and only those showing the most serious health hazards are evaluated.

Consequently, a substantial backlog exists in reviewing adverse event reports in both of these important areas. This budget request will improve our Adverse Event Reporting System (AERS) for animal drugs and dietary supplements. This will enable us to provide greater assurances to consumers that problems will be identified and action taken promptly.

Inspectional Activities ($13.5 million).—FDA inspections, laboratory analysis, and related surveillance activities are the primary means of assuring industry compliance and thus consumer safety once products are in use. New technologies, international regulatory commitments, and increasing coordination with State partners require new and challenging expansions of FDA's traditional inspection role.

FDA's ability to physically verify the safety of domestic and imported products has eroded considerably in all product areas, even as consumer expectations continue to rise. We are falling significantly short of the minimum inspection obligations required by the FDC Act.

Import entries alone increased 14 percent in fiscal year 1999, and over all, less than 1 percent of import entries are physically examined. Even in conjunction with

its State regulatory partners, FDA is able to annually inspect less than a third of the domestic firms within its purview. The number of foreign and domestic inspections for foods, drugs, and devices (excluding mammography), has decreased from 28,000 to 22,000 between 1991 and 1999. This decrease of 6,000 inspections, or 21 percent, is due to the impact of the time required to perform the increasingly complex science based inspections, the almost static level of investigative personnel in the past eight years, and the increases in imports. The total volume of FDA-regulated imports is estimated to exceed $50 billion per year and imports continue to grow in volume, complexity, and diversity of sources.

FDA requests $13.5 million in additional funding to improve statutory inspection coverage for Human Drugs, Biologics, Animal Drugs and Medical Devices, where the law requires specific inspection frequency. The requested funds will keep the FDA from falling behind the fiscal year 2000 level of inspectional effort. Through the use of leveraging and expanding existing state contracts, FDA will make modest gains in inspection coverage. Specific performance improvements are identified in FDA's fiscal year 2001 Performance Plan. These funds will also allow FDA to enhance laboratory testing for pesticides, chemical contaminants and dietary supplements.

Internet Sales of Drugs ($10 million).—The number of people who use the Internet for the purchase of medical products is growing rapidly. Many consumers, including those in rural or remote areas, those that can not leave their homes because of disabilities or who are elderly, greatly benefit from the access and convenience features of this option. However, on-line sale of prescription drugs also poses risks for the consumer. When buying from a brick and mortar pharmacy, a corner drug store, a strong safety net of State and Federal laws exists. Prescription drugs are to be dispensed only with a valid prescription, because they are not safe for use without the supervision of a licensed health care practitioner and dispensed from a licensed pharmacy. The availability of pharmaceuticals from the Internet can greatly disrupt this safety net. Patients who buy prescription drugs from Internet websites operating outside the law are at increased risk. During fiscal year 1999, illicit or illegal operated sites grew dramatically and we anticipate this trend to increase. This initiative will enable us to track down illegitimate operations and educate consumers by coordinating efforts with the states.

For fiscal year 2001, FDA seeks $10 million primarily to conduct investigations and to carry out a public education campaign on safe ways to purchase pharmaceuticals over the Internet. FDA would use part of this request to support a rapid response team and to upgrade our computer technology to identify, investigate and prosecute illegitimate Internet pharmacies.

INITIATIVES OF SPECIAL NOTE AND INTEREST TO THE PRESIDENT AND THE CONGRESS

Food Safety Initiative ($30 million).—The world of food has changed significantly over the past 50 years. Consumers' diets are more varied and include foods that are more susceptible to foodborne pathogens. A much larger percentage of meals are prepared and consumed outside the home. Vulnerable populations have increased by as much as 25 percent of the U.S. population to include pregnant women, children, the elderly, and immuno-compromised persons. Finally, the number of identified pathogens found in food has more than tripled. More to the point, these pathogens are more deadly.

The Food Safety Initiative represents a multi-year, inter-agency effort to respond to these changes and to improve food safety for the Nation. This initiative has successfully built a strong foundation for a state-of-the-art, science-based food safety system, and has promoted partnering among the key Federal agencies (FDA, USDA, and CDC), States, academia, industry, and consumers. A total of $218 million, representing a $30 million increase, is requested for FDA for fiscal year 2001. With this $30 million increase in funding we will:

(1) Expand research and risk assessment activities that provide the cornerstone for a science-based food safety system. Food safety research is critical for the rapid and accurate identification of foodborne hazards; for regulatory enforcement; for the development of effective intervention techniques; and for better detection of antibiotic resistance. Risk assessment activities provide the information necessary to allocate food safety resources to the highest risks in the food supply.

(2) Develop consistent nationwide food safety standards. Standards development includes technical standards for particular products or processes, as well as product and/or process-specific guidance documents and regulations. Such standards provide consumers with increased assurance regarding the uniformity and safety of the food they consume. In addition, by providing current, clear and understandable expectations for industry, food safety standards provide a "level playing field" for food producers and processors.

(3) Begin implementation of the Egg Safety Action Plan to sharply reduce eggs as a source of human Salmonella enteritidis (SE) illness in the U.S. While eggs are an important source of protein in the diet, an estimated 1 in 20,000 eggs in the U.S. contain the SE bacteria and can cause illness if eaten raw in food or not thoroughly cooked before consumption. The Egg Safety Action Plan presents a comprehensive nationwide strategy to address this important food safety and public health concern.

(4) Expand domestic inspections to ensure annual inspection of all establishments producing food that is at high risk of microbiological contamination or high risk of causing severe disease. There are approximately 6,250 such firms. By "high risk" we mean: infant formula; ready-to-eat foods; heat and serve products; seafood; and low acid canned foods and acidified foods. The new resources would also be used to enhance FDA's oversight of state inspection programs, as well as to enhance laboratory capabilities for the analytical support associated with these inspections.

(5) Complete the National Antimicrobial Resistance Monitoring System (NARMS) by adding national and international data collection sites. At this fully operational level, NARMS will provide an effective early warning system to detect the emergence of antimicrobial resistance among foodborne pathogens. Also, develop new methods for routine surveillance of fluoroquinolone resistant Salmonella and Camploybacter to gather the data needed to make informed risk decisions concerning the use of quinolone-based antimicrobials in poultry and antibiotic resistance.

(6) Develop new methods for routine surveillance of fluoroquinolone resistant Salmonella and Campylobacter to gather the data needed to make informed risk decisions concerning the use of quinolone-based antimicrobials in poultry and antibiotic resistance.

Food Safety Initiative investments for the past three years have paid tremendous dividends. Foodborne outbreaks have been shortened. The risk of foodborne illness and death related to microbiological contamination of both domestic and imported foods has decreased. With the resources requested in fiscal year 2001, we will continue to provide the U.S. with a consistent, uniform system to respond to foodborne illness that will contribute significantly to shortened outbreaks and reduced incidence of illness and death.

Countering Bioterrorism ($11.5 million).—Preparing for and responding to an attack involving biological agents is critical. Our task is made more complex by the large number and characteristics of many of the potential agents, many of which are rarely encountered naturally and have the ability to remain undetected for long periods of time. There is often potential for secondary transmission as they could be genetically engineered to resist current therapies and evade vaccine-induced immunity. While there is a clear and unquestionable need to develop specialized vaccines for these biological agents, there are limited commercial interests or market incentives addressing this problem. Thus, it falls upon the Federal government to ensure that such vaccines are developed.

FDA is an important contributor to the Nation's capability to respond to potential chemical and biological threats from bioterrorism. The FDA's critical role in bioterrorism includes assuring that new vaccines and drugs are safe and effective, safeguarding the food supply, and conducting research for diagnostic tools and treatment of disease outbreaks. Whether the issue is the development and use of rapid diagnostics to quickly identify a suspected biological agent or the capability to make available and administer large quantities of a vaccine, immune globulin, or drug to counter the effects of a bioweapon, FDA's research is the linchpin that makes it possible for the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the Office of Emergency Preparedness (OEP), the Department of Defense (DOD), and others to effectively respond.

FDA's research includes the development of new analytical approaches and methodologies to determine if new products provide needed benefits without causing adverse side effects that would outweigh those benefits. This research includes both laboratory and non- laboratory investigations to address FDA's regulatory responsibilities.

Due to the highly toxic nature of the agents identified as potential bioterrorist agents, specialized equipment and facilities are necessary and needed in the FDA to understand these agents to prevent, diagnose and treat outbreaks.

Other Bioterrorism activities that support FDA's efforts are:

(1) Vaccine development in collaboration with NIH, CDC, DOD, academia, and private industry to ensure expeditious development and licensure of vaccines for smallpox, anthrax, plague, tularemia, Q-fever, encephalitis-causing alpha viruses, and botulinum; Coordination of vaccine, drug and device stockpiling and preparation for emergency response including rapid detection and decontamination procedures.

(2) Development of new diagnostic products, rapid methods development, and comprehensive reviews for new drugs, therapeutics, and vaccines including new uses of existing products; development and stockpiling of specialized immune globulins; expansion of research to identify toxicity indicators associated with biological warfare agents; and, initiation of a monitoring system for chemical and biological agents in feed for food-producing animals.

*(3) In collaboration with NIH, CDC, DOD, academia and private industry, ensure that rapid methods are developed to detect biological agents that may contaminate the food supply.

The fiscal year 2001 request is $11.5 million. This funding will allow the Agency to expeditiously review and approve every drug, therapeutic, vaccine, and anti-toxin to be administered to humans; complete the FDA review process for safety and efficacy of the pharmaceuticals, rapid diagnostics, and vaccines that are needed in the event of a bioterrorist attack; and, to educate vaccine manufacturers on the information needed for FDA approval.

Preventing Tobacco Use Among Children ($5 million).—Tobacco products are responsible for more than 400,000 deaths annually due to cancer, respiratory illness, heart disease, and other health problems, representing five million years of potential life lost each year. Each day, nearly 3,000 young people across the country begin smoking regularly. Of these 3,000 young people, 1,000 will die prematurely because as a child they decided to smoke. Conservative estimates are that children and adolescents illegally purchase tobacco products 250 million times each year.

The Agency has devised a three-pronged approach of enforcement and evaluation, compliance outreach, and product regulation. The $5.0 million in this request will be used to increase leveraging contracts with State and local tobacco stakeholders to allow more compliance checks of age and ID restrictions, and 100 percent rechecks of violators. It will also be used to develop a reliable, national list of tobacco retailers and complete installation of an information technology system to automate the program's business and communications processes, as well as increase the scope of the media campaign aimed at increasing retailer awareness of, and compliance with, the tobacco regulation.

Our overall goal—to reduce young peoples' use of tobacco—is a goal upon which we can all agree. We will continue to work with other organizations within the Department of Health and Human Services, other agencies, the States, and other stakeholders.

FDA INFRASTRUCTURE

Los Angeles Laboratory ($20 million).—FDA's field laboratories provide critical laboratory and analytical support to the domestic and import inspection effort and are a key element in the science base of FDA. The Los Angeles District annually reviews nearly 1.2 million import line entries, almost 24 percent of the Agency total. In fiscal year 1999 alone, the Los Angeles laboratory analyzed 22.9 percent of the imported Foods samples taken by FDA. This laboratory facility is over 40 years old, outmoded and unsafe.

FDA simply cannot remain in the present Pico Boulevard facility in Los Angeles. We have the land and construction plans to relocate the laboratory to Irvine, California. This will assure that products are safe, provide the ability to partner more effectively with State laboratory personnel, and provide a safe working environment for FDA employees.

FDA requests $20.0 million to fund a portion of the construction of the Los Angeles Laboratory and Office project. The request also includes $23.0 million as an advance appropriation in fiscal year 2002 to complete the project. This construction will consolidate all three Los Angeles district sites into one location, replacing three existing leases totaling $2 million annually. The new construction will concentrate the scientific talent available to permit better management of the analytical workload and will provide significant improvement in operational efficiency, especially during emergencies.

If funding is not provided, the Agency will be forced to shift work to labs in other states, further from the point of entry. This will obviously have an impact on FDA's import surveillance capability, the southern California food import industry and our consumers.

College Park Relocation ($5 million) and Arkansas Regional Laboratory ($3 million).—In 2001, the Center for Food Safety and Applied Nutrition (CFSAN) will be moving to a newly constructed facility in College Park, Maryland. Funds are needed to pay for one-time costs associated with equipping and occupying this facility. The fiscal year 2001 funding will support: telecommunications equipment and necessary

network connections, files consolidation and moving costs. We will also continue construction of the next phase of the Arkansas Regional Laboratory.

CONCLUSION

In summary, Mr. Chairman, fiscal year 2001 is the year in which FDA must cope with the maturation of two of the most massive and significant change forces the agency has ever faced. In 2001, the increasing impact of molecular science—genomics in particular—and the information revolution—especially the Internet and its linkage to an array of real-time data that was unimaginable only a few years ago—will combine their forces to change how many FDA regulated products are discovered, researched, manufactured, distributed, marketed and advertised. When the world around us changes this much, we must be prepared to respond in order to assure that products are still safe for American consumers. Our credibility to provide valid assurance is at risk without strong science, effective collaborations and consultation, and even greater openness and transparency in our processes.

I wish to thank the members of this Committee, their staff and the staff of the individual subcommittee members for their support this year. This subcommittee has many legacies, from improved agricultural production to safer consumer products to protection of the American farmer. I ask that you add another critically important one to the list—bringing forth the technological promise of the 21st century. If you will give FDA the resources to do the job I will commit to you that those funds will be used wisely. I look forward to discussions with this committee to ensure that we are able to fulfill our mission in this challenging environment.

RECRUITMENT AND TRAINING

Senator COCHRAN. Thank you very much, Dr. Henney, for your statement.

I noticed that the first point you make in your statement is about the scientific strength of the agency and how important it is to maintain that strength and to be prepared to deal with the challenges of regulating industries who are utilizing the newest developments in science. You also point out that there was a study by an independent industry with regard to the relationship of FDA and its regulated industries and concluding that FDA must invest in recruiting and training exceptionally qualified personnel at all levels.

My question is, is FDA successful in its recruiting and training efforts?

Dr. HENNEY. Well, Mr. Chairman, I would say that when provided the funds, we have been very successful in recruiting the kind of scientists and medical officers we need into the agency. I would cite in particular those funding patterns provided by the Prescription Drug User Fee Act and those provided particularly through the Food Safety Initiative. In very short periods of time, we have been able to recruit very highly qualified people.

The trick is retaining them and keeping them at the top of their game because this requires close attention to professional development while they are with us. I would say that particularly in the area of drugs and biologics reviews, to meet those very tight performance standards that we are held to, it becomes somewhat of a sweatshop for our reviewers to keep to those time constraints, and the limitations on time away to do the kind of training and reinvestment we need has not been adequate in the past. Across the board in the agency science is needed in our other centers, our Center for Devices, our Center for Foods and other parts of the Center for Biologics as well.

This, therefore is an overall issue for the agency in terms of a time commitment and a funding commitment. We really have to

think about our reviewers as a 110 percent FTE, if you will, rather than a 100 percent FTE if you are going to provide them with time away for sabbaticals, retraining courses, and the like so that they keep current.

STRENGTHENING SCIENCE BASE

Senator COCHRAN. You mentioned in your statement that you have launched a product quality research institute initiative. That is a training program focused on emerging technologies of relevance to the agency. How are these initiatives working to strengthen the agency's science base?

Dr. HENNEY. Those are two separate initiatives, Mr. Chairman. The product quality research institute was launched this past year. It really is a leveraged or a partnership opportunity that we have entered into with both professional groups and industry to investigate more efficient methods of answering research questions about drug quality and manufacturing. They are particularly looking at issues related to stability studies and bioequivalence measures. So, this is using our resources in a leveraged capacity to look at issues that benefit all parties.

We have also launched this past year, after the appropriate reviews for conflict of interest and the like, educational sessions, training sessions, if you will, jointly with industry. We have had two successful training sessions where we have taken investigators and reviewers from several of our centers to an on-site location within industry that is looking at an emerging technology so we will know what is going on in their plant operations and that they will know what we will be looking for as we would develop or inspect against standards. These have been extremely productive sessions and we plan to continue them in the future. One was held at Merck on barrier isolation technology and one was held in Minnesota on issues related to food and food safety.

PREPARED STATEMENTS

Senator COCHRAN. I am going to yield to other Senators for questions at this point, and I am going to recognize Senators for questioning in the order at which they arrived at the hearing. My notes indicate Senator Gorton arrived first, Senator Durbin, and Senator Stevens who has left his opening statement for inclusion in the record and already made one comment, and Senator Harkin.

Senator Kohl and Senator Burns have previous engagements to attend, therefore I will submit each of their respective statements for the record.

[The statements follow:]

PREPARED STATEMENT OF SENATOR HERB KOHL

Mr. Chairman: I am glad to welcome our distinguished guests this morning. Secretary Shalala, I am especially pleased to see you here today. While most of the agencies under the jurisdiction of your Department are funded through appropriations subcommittees other than this one, the Food and Drug Administration is, of course, an exception. Still, in all the years I have served on this subcommittee, the Secretary of the Department of Health and Human Services has never appeared before us. I interpret your being with us today a welcome departure from protocols of the past and a statement on your part of the growing importance of programs under the purview of the FDA.

Dr. Henney, it is good to welcome you back. A year ago you appeared before us not long having been appointed as Commissioner of the Food and Drug Administration. Since that time, you have made great progress settling in as head of that agency. My congratulations to you.

I will not here go into all the programs under the FDA nor attempt to catalogue their importance for maintaining the health and safety of the American people. The evidence of that is apparent on its face. I would mention, however, the changing nature of the challenges before your agency. A global economy means a greater chance that food or disease harmful to us may be introduced on our shores either inadvertently or otherwise. The ever-rising costs of health care, prescription drugs in particular, is fast becoming one of the highest priorities of an aging and demanding public. Even the unfortunate specter of bioterrorism now hangs over our heads with new demands for proper and rapid responses in the event such a cataclysm should ever occur.

Your budget request calls for an increase above last year. I hope we will be able to accommodate that need. As we proceed through this year's budget process, and as we establish the level of resources available to this subcommittee for all our responsibilities, I will continue to place a focus on the importance of your mission.

I look forward to your comments.

PREPARED STATEMENT OF SENATOR CONRAD BURNS

Mr. Chairman, Thank you. I would like to first thank those who are presenting testimony before the Committee today. We all appreciate you taking the time to be here today.

It is quite possible that the Food and Drug Administration plays a larger role in day-to-day life in America than any other government entity. For this reason it is vital that we regularly re-evaluate the methods and practices of the FDA to ensure the best interests of Americans are being appropriately addressed.

Prescription drugs present ever-expanding medical opportunities. The advances in medications mean continued development of non-invasive treatments, enhanced quality of life, and expanded options in preventative medicine. Just reading over short descriptions of today's research initiatives gives us a glimpse of the future of patient care, disease treatment and, most importantly, even the elimination of the illnesses that have plagued us for centuries. It is truly exciting.

But is this to be a future that all Americans can afford? Is Montana going to have the opportunity to take advantage of cutting-edge advances in medicine? Our current course leaves behind those who lack the financial resources to purchase the new generation of pharmaceuticals. The same holds true for those who live in rural areas. The pharmaceutical revolution is leaving them behind.

I am encouraged to see that the average time period for FDA approval of a new drug has decreased since the enactment of the Pharmaceutical Drug User Fee Act. But in the aftermath of PDUFA, just as approval times have dropped the costs of drug approval have increased. These increases are, of course, passed on to consumers, with Senior Citizens bearing the brunt of the increasing prices.

I am very concerned about access to affordable drugs. Every day there are new stories about people choosing between food and pharmaceuticals. I represent a district where these problems aren't just stories in the newspaper but reality. I don't think that Americans should have to make this choice.

Generic competition makes drugs more affordable. They are as safe and effective as brand name drugs, but cost much less. My concern is that FDA is not helping to bring these products to the market as expeditiously as possible. In fact, the statutory review time for generic drugs is 6 months, but your actual review is 19.9 months. Review of pharmaceuticals in a timely fashion is a central part of FDA's core mission, but FDA is not meeting that mission. This is very worrisome, especially when I hear that the review process is predicted to lengthen to almost 21 months. How will FDA address this problem?

I believe it is time to change the system of dis-incentives which discourage FDA approval of new, innovative drugs. I call for a return to the concentration on the most important person in the health care equation—the patient. I look forward to seeing these changes and the positive results they will carry for all Americans.

Senator COCHRAN. Senator Gorton.

IRRADIATED FOODS—LABELING

Senator GORTON. Thank you, Mr. Chairman.

Before I get to the subject of my opening statement, a couple of questions on your direct responsibilities. As I had worked in that direction for more than a decade myself, I was delighted when the Food and Drug Administration approved the petition to irradiate red meat. Even more satisfying is the fact that the petition just reached the implementation phase and several beef processors have employed that technology.

As prescribed by law, your agency was to formulate a new label for irradiated food at the inception of implementation, but that has not happened. Why not?

Dr. HENNEY. Mr. Gorton, we have, as you note, been working in this issue of irradiation and labeling for some time. If you will indulge me, I will ask Mr. Levitt to join me—he is the Director of the Center for Food Safety and Applied Nutrition—to give you an update of where we are on that issue.

I think that we have also, in addition to this labeling issue, been trying to attack another problem that may be related and that is consumer confidence in irradiated products. To that effort, we have joined with many partners in terms of developing educational and informational material about that, and perhaps Mr. Levitt could share both of those initiatives with you.

Mr. LEVITT. Thank you.

In terms of food irradiation, we did put out a brochure, which really is an interim measure, not the rule you are speaking of, jointly with a number of private organizations, the American Meat Institute, the Food Marketing Institute, the Grocery Manufacturers Association, the National Food Processors Association, among others, to be sure that we educate consumers about this important technology, what it is, why it is safe, and why we believe it is making food safer for the American public. This will be distributed widely throughout the country as a way to get the communication to consumers, which really is what the rule was trying to get at.

We did put out, as directed by the Congress, an advance notice of proposed rulemaking last year to solicit public comments and get the right views. Really the issue is should we call it "food irradiation" on the label or should we use an alternative term. Things like "cold pasteurization" have been suggested.

What we found from the public comments is we really have widely divergent views. There is one view that we ought to use alternative terms because they view food irradiation as too scary. The alternative is, as Dr. Henney said, in terms of public confidence. We get a lot of comments from consumers. They say, no, please tell us what it is. Tell us what it is, educate what it is, and let us make our choice. So, I think we are struggling, in terms of going ahead with a final rule exactly, with what the right balance is to strike. That is why the interim measure. We are working jointly with other groups, as I said, on consumer education.

We also have instituted our expedited review for new technologies, including irradiation, and we have a number of petitions before us that we are trying to move through rapidly.

Senator GORTON. You are working hard on this then.

Mr. LEVITT. Yes.

GENERIC DRUGS

Senator GORTON. Good. Thank you.

Again, Dr. Henney, on another subject, perhaps the single step that FDA has taken in the last decade and a half has been to implement the Hatch-Waxman Act on generic drugs. Obviously, our people have saved billions and billions of dollars on this.

You were directed, as I understand it, to get the time for moving drugs from a laboratory to patients down to 6 months. It has come down, but it is still three times that length of time. What is being done to reduce that time lag even further?

Dr. HENNEY. Mr. Gorton, actually I think this speaks well or a bit to the first point and statement that you gave because I have long learned that there are some things I can control and others that I can only try to influence. On the issue of pricing in the marketplace and making sure that there are alternatives out there, this is one way in which FDA can be exceedingly helpful to the American consumer who is concerned about the price of prescription drugs; that is by running an efficient and effective generic drug program.

I think that we have invested over the last 2 years in terms of increasing our staffing in this area by some 15 percent. Some 10 FTEs were added in fiscal year 1999 and another 11 this past year. I think you should also know that we approved nearly 198 generics last year. 40 were first-time generics, and we have some 68 sort of waiting in the pipeline for other products to go off patent. So, this is a very vigorous program.

Could it be better? Certainly any system always can be. It always takes resources to do that.

PRESCRIPTION DRUG PRICING

Senator GORTON. Well, let us go on to the other question then. Obviously, this is not your direct responsibility, but speak to me to this price discrimination and to the most unjust burden, it seems to me, that is being imposed on all Americans in the cost of their prescription drugs by the kinds of price controls in other countries that simply seem to me to be designed to say that they will not contribute to the research and development. They will pay the cost of the pill after it has been developed and not much more than that. We do all the work in the United States and our reward is that our people either pay way more for many prescription drugs at least or, if they are fortunate and live close to a border, they can get onto a bus and go to Canada or Mexico and come back with those drugs at a much lower price. Just speak to that proposition in general, will you? It is hard to come up with a greater injustice in the field of health care than that one.

Dr. HENNEY. Mr. Gorton, I would speak to you in two ways. As a doctor and as a daughter, I am very concerned about this pricing issue. I see its impact not only on the patients that I used to care for that would make not good decisions because of the price of medication, and as a daughter who has—I cannot classify them as elderly parents, even though they are both in their eighties. They run around too much to be called elderly but they are concerned

about this whole issue of the price of prescription drugs and the constraints that it puts on decisionmaking.

But speaking to you as both a doctor and a Commissioner, I also have to be concerned about safety, particularly as people make choices about purchasing products from other countries and whether that is a safe practice or not. So, I would just get that out as a general premise.

I would also say that while the FDA Commissioner is given a lot of responsibility and much authority, pricing is not one of those issues that we play in directly except in the area of, as I have said, generics and, except in the area of our support of the administration's position on a prescription drug benefit. We can only try to influence some of the other areas. What goes into drug companies' decisions as they set their price on any particular product is not something that we are necessarily privy to, nor do we have much influence on.

But I would agree with your statement that there is much to be questioned here in terms of the impact that pharmaceutical drug prices ultimately have on the American consumer who needs these products.

FOREIGN PURCHASE OF PRESCRIPTION DRUGS

Senator GORTON. I have one more followup then. Is there a question of safety with respect to people who cross, let us just say in this case, the Canadian border and buy a prescription drug by its brand name? Is there any question as to whether that is not identical to what is manufactured and sold in the United States?

Dr. HENNEY. Mr. Gorton, I think when people point to Canada as a possible purchase site for products, and knowing the strength of their regulatory system as well in our interactions with them, there is perhaps a lessened concern about safety, but still a concern. We do know that in Canada some medications that are manufactured are manufactured at a different potency or equivalence than they might be here. That could cause a risk for an American consumer.

The trackability of a pedigree of a drug is more than in question. Where did bulk product come from? How was it manufactured? One is just put at increased risk when you do not know all of those things.

I think as we have listened to our Canadian counterparts—and it had already been a concern of our own—there is this whole issue driving Canada to somehow be used as a front port, if you will, for counterfeit or, in many ways, contaminated product becoming available. So although I could not point to any statistics in this regard, one has to be concerned about a safety issue here.

Senator GORTON. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Gorton.

Senator Durbin.

BIOTECHNOLOGY FOODS

Senator DURBIN. Thank you, Mr. Chairman.

I have a series of questions and I will try to make them concise and hope that we can elicit some answers for better understanding. But let me start by thanking you, Dr. Henney, and your team at

the Food and Drug Administration. I have the highest respect for your agency and your leadership. The American taxpayers and consumers are well served by what is, by Federal standards, a relatively small agency with a huge impact on everyone's life in our country and beyond. So, thank you again for dedicating your time to public service, as well as the people who join you today.

We are blessed in this country to have a Food and Drug Administration. Europe is now talking about establishing one and it is long overdue. They are in the midst of an international panic within Europe over genetically modified organisms that find their place in the food supply. It has created a ripple effect across the globe. The farmers in Illinois and Iowa and other places are planting their crops based on the concerns of European consumers.

I guess the bottom line question, since the FDA also considers food safety is this, do you have any indication or evidence that any genetically modified organism in America's food supply is unsafe?

Dr. HENNEY. Mr. Durbin, I would respond to you by agreeing that some of the issues that have been very hot items in Europe, specifically with respect to food safety and now to the issue of does the technology also create an issue of food safety, have drifted a bit into our own country, although coming to us first because of the trade issues that you implied.

When we started hearing this level of concern last summer, we decided to hold a series of three public meetings to reexamine whether our policy, with respect to foods developed using the tools of biotechnology, appropriately serves us. We heard much at those meetings. We received over 25,000 comments from those sessions. And we are now weighing all of those things.

Let me just give you a glimpse I think of what we heard. We essentially posed two issues.

One: Was there any science out there that should give us a pause or cause for concern that would lead us to change our current policy, which in essence has companies coming to us in a consultative process if they intend to market a food that has been developed using the tools of biotechnology? To date, our experience had been that we have seen over 40 such products. Issues that were raised were resolved, and we do not see any issues with respect to safety of those that have been reviewed and are on the market.

I think with respect to new safety issues, in general there were none raised at these meetings, but I think that there was some consistency of thought that the complexity of the science that will be used in the future should be weighed as we reevaluate this policy. And we are doing that.

The second series of issues really revolves around how does one communicate best to consumers information that they may want to know. Is an appropriate way through a website, through disclosures at a point of purchase; or is it through a labeling kind of process? Therefore, we opened up that question.

Again, just to give you a thumbnail sketch of what we heard: We have heard four distinct messages.

One message was from one group who felt that it was not a matter of food safety necessarily, but this group wants to do anything they can to make sure that the environment is safe, and because of environmental concerns more than food safety concerns, want

this kind of information available to them so they can make those choices.

A second group clearly was more concerned about food safety, and it was expressed not in terms of evidence that could be pointed to in terms of an ongoing food safety issue, but what might potentially happen in future generations. This is a much more precise concern, but still more ill-defined in terms of scientific basis.

A third group basically was saying—and this is a less vocal group and yet a fairly sizable group—I am not really concerned about a food safety issue here, but I am an American who likes information. If there is some information out there, I would like to have it. In some way I would like to know more about these products.

A fourth group represented a minority at our meetings and in our responses, and yet I hear, as I have traveled in Europe and many of my colleagues have as well, that voice as a strong voice from the developing countries who say do not do anything to limit or constrain this technology. We need this technology to bring both real health to our people and economic health to our countries.

That gives you a glimpse into what we heard. We are still looking at our policy knowing this kind of information.

DIETARY SUPPLEMENTS

Senator DURBIN. Your answer, I am sure, reflects the attention that you have given to this issue. I do not know of a Senator or a Member of the House or anyone in public service who would compromise the safety of our food supply. I am looking to your agency, as I have for so many years, to lead the way in telling us the bottom line. If there is danger attached to genetically modified organisms of any kind, I trust that your agency is prepared to tell us as much, and if so, to take action against such things in our food supply.

I have a series of questions, and I am sorry I do not have more time. I promise the chairman I will be as concise as I can be.

Let me address another issue that is growing in interest among American consumers: dietary supplements. In 1994, we changed the law. We basically changed your responsibility in the Food and Drug Administration. Dietary supplements are now extremely popular in the United States—their sales have nearly doubled in the past 5 years, and estimates are that they will grow by over 90 percent over the next 6 years. Over half of the American people now take some form of dietary supplement.

We changed the law in 1994 and said that basically your agency did not have the authority to decide before these supplements were put on the market as to whether they were safe, but rather to monitor any reported bad incidents or bad experiences.

You also, under that law, do not have the authority, as I understand it, to establish a production or good manufacturing standards. So, those who want to advertise that they are selling certain supplements really do not have to prove at any point along the process that they are, in fact, selling what they purport to sell, the purity of what they sell, for example.

I would like to know what you think about instituting production standards or good manufacturing standards for dietary supple-

ments so that consumers would, in fact, be at least getting a known product of a known standard without potential contamination.

Dr. HENNEY. Mr. Durbin, yes, the Congress did pass in 1994 the Dietary Supplement Health Education Act, and it was signed into law. As with any law that you pass, we must develop an appropriate regulatory framework for that law, and we are busy about the business of doing that. We have completed this past year, under Joe Levitt's direction a comprehensive strategy that looks at how we put in place an overall regulatory framework for dietary supplements. It will take some time to complete that work.

I would just give you an example. When we were given the Safe Medical Devices Act in the early 1990's or the Medical Device Amendments of the 1970's, it took nearly 15 years to see the full impact of that law in place. So, we are working on this, slogging it out bit by bit in terms of putting this into place.

The issue with respect to GMP is that it is on our A list for this year, and we intend, by the end of this year, to have such a proposal completed.

SINGLE USE MEDICAL DEVICES

Senator DURBIN. Thank you.

One of the issues that I raised at last year's hearing and you responded to was the question of the reuse of single-use medical devices. For those who are not familiar with it, there are many hospitals across America which buy such important and medically sensitive devices as heart catheters which are labeled for single use only. Of the hospitals across America 30 percent pay no attention to that label and reuse that device, sometimes on five and six occasions. In between, it is to be sterilized and reprocessed, but patients are totally unaware of the fact that the device in most instances was sold to be used once and is being used over and over again.

A 32-year-old woman in Kansas had a heart catheter which had been reused multiple times. In the course of a procedure, the tip broke off and is now lodged in the right atrium of her heart. The manufacturer of the catheter had never before had to report one of the catheters breaking.

Now, what we tried to get across to you at the last hearing was the importance of collecting data on how often this happens across America with the thousands of single-use medical devices that are being reused mainly without the patient's consent or knowledge. Your MedWatch form, which your agency has produced, is designed to really, on a voluntary basis, collect this information as it relates to medications and medical devices. And we asked if you could make special note of this on future forms so that we could collect the data. But I am sorry to report, doctor, that we have not quite reached that point. I wonder how soon will your MedWatch form include a request for information as to whether the faulty medical device was in fact a single-use device that had been reprocessed and reused.

Dr. HENNEY. Mr. Durbin, with respect to the forms, when a device is faulty, it clearly is reported to us. Although it sounds simple, the issue of revising the form is not easily done. We have taken the burden really on ourselves to track back and see if a device was

originally labeled for single use or not. We still take your point that this change might be helpful, but in the meantime, we are tracking back to see what the labeling might have implied before.

Senator DURBIN. I will suggest to you that since we had our last hearing, you—at least your agency has exchanged correspondence with the association representing these medical device reprocessors, really admonishing them that they have overstated the FDA's approval of their processing. So, at least it is fair warning that this industry may not be following standards that we would like. Consumers are totally vulnerable, unaware of the fact that these devices are being used repeatedly, and we have had some awful experiences. I do not know what it takes, but I hope that we can move more quickly to at least start reporting whether these are single-use devices being reprocessed, reused at the peril of the patient that is involved.

Dr. HENNEY. Mr. Durbin, I was only speaking to your issue about the form. FDA has been quite active in this area during the past year. We have developed a strategy which has been published to look at the different risk levels of reuse. We have published two companion guidances, one looking at this whole issue of reprocessing and reuse, looking at the high, moderate, or lower risk issues such as the likelihood of disease transmission, and the likelihood of a performance deterioration with reuse.

We also have guidance out with respect to our enforcement priorities in this area, and we have been issuing warning letters to reprocessors as well.

We have worked very actively with the Joint Commission on Hospital Accreditation to engage their involvement with us in this whole area of reuse. There are many activities going on with respect to reuse and its appropriate use.

Senator DURBIN. I am going to quit at this point but tell you that I have two questions or observations that I will make a matter of record here. One relates to the orphan drug program, which I believe needs additional funding. I hope to persuade my fellow members of the subcommittee to join me in seeking that and, secondly, to some language that I included when I was a Member of the House on this same subcommittee in 1994, when it came to the question of clinical trials. My particular interest now is in gene therapy and the requirement that was included in our report to your agency many, many years ago that you track the individual patient data on these clinical trials. I think that the emergence of this issue of gene therapy and some of the sorry or sad results of the last few months really, I think, call into question whether we should revisit that and whether the 1994 advice to your agency should be followed.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Durbin.

Senator Harkin.

Senator HARKIN. Mr. Chairman, I just first thank you and ask that my statement be made a part of the record.

Senator COCHRAN. It will be, without objection.

[The statement follows:]

PREPARED STATEMENT OF SENATOR TOM HARKIN

Thank you, Mr. Chairman, and thank you, Secretary Shalala and Commissioner Henney, for being here today to discuss the Food and Drug Administration's appropriations for fiscal year 2001. I am looking forward to hearing your priorities for the year.

I would like to especially thank FDA for its quick turn around on FSIS's request to allow the use of plastic packaging for e-beam pasteurization on an experimental basis. I think this is an excellent sign of FDA's commitment to making new food safety technologies available as rapidly as possible. I trust that FDA will continue to move as efficiently on the other petitions for new food safety technologies it has before it.

On FDA's budget requests, I am pleased to see that the Administration has requested an additional $30 million in funding for FDA under the President's food safety initiative. This funding is absolutely vital to increasing FDA's food safety inspection and research activities. My staff has been visiting border inspection facilities and FDA-inspected establishments, and I can tell you that FDA is still greatly underfunded relative to the number of food products it covers. This money will be another step towards giving FDA the resources it needs.

I note that FDA also has requested $20 million for renovation and relocation of its Los Angeles laboratory facility. This facility analyzes 23 percent of all the imported food samples taken annually by FDA. It is the primary laboratory for all produce coming across the border from Arizona and southern California, and is therefore very important to ensuring the safety of imported produce coming into the U.S. My staff has visited this facility as well, and I can vouch that this request is greatly needed.

Lastly, I am also happy to see the President's budget request includes a $5 million increase for the FDA's tobacco program. This critical program does an excellent job getting enforcement dollars to local law enforcement to reduce tobacco purchases among teenagers, and includes important outreach and education efforts for retailers.

I look forward to working with the Chairman and members of the Committee to ensure that the FDA's efforts in these areas are funded at the President's request.

FDA-TYPE STRUCTURE IN EUROPE

Senator HARKIN. I appreciate that.

Commissioner Henney, again I first want to thank you and the FDA for its quick turnaround on the Food Safety and Inspection Service's request to allow the use of plastic packaging for e beam pasteurization on an experimental basis. I think this is an excellent sign of FDA's commitment to making new food safety technologies available as rapidly as possible. I trust that FDA will continue to move as expeditiously on the other petitions for new food safety technologies before it. But I want to thank you for that rapid response on that.

A couple of questions I was going to ask have been covered basically by Senator Gorton and Senator Durbin.

I am very happy to see that you are looking at, as you testified, new terminologies and new phraseologies and how that might work with respect to food irradiation. I think that is also very encouraging.

Last fall a number of us met. I think you were there too, Mr. Chairman, with Mr. Prodi, the president of the EU Commission, and a number of us I know met with him, and the EU trade minister from France, Mr. Lamy. But anyway, he committed to us that they were going to set up an FDA type structure in Europe. My question to him was, well, when? 10 years from now? No, they were going to move on it right away.

As I understand, they have sort of moved on setting up an FDA type of a structure in Europe, although I understand it is going to be just sort of an advisory nature only. It was my understanding,

when we talked with the members of the EU last fall, that it was going to have sort of a jurisdictional umbrella over all of the member countries. That does not seem to be the way that it is proceeding.

I am just wondering, have you been consulted? Has the FDA been involved at all in helping resolve these regulatory issues in Europe as they are trying to wrestle with this new structure? Are you involved in that at all?

Dr. HENNEY. Senator Harkin, we have been very involved with our counterparts in Europe as they started to discuss particularly the issue related to food safety or a food agency for the EU. I think that they were hoping in large part to implement a model like the FDA that has a strong legal framework, makes its decisions based on science, has both standard setting and enforcement capabilities, and can inspect and enforce against those standards.

As I understand it, their final framework is not reflective of all of those elements as you have just stated. I think that they at this point want to put this new model to use and modify it as they get more experience. But our folks at both a policy level, as well as a scientific level, were consulted by the Europeans about how we do our business, and we tried to give them the best advice that we could give.

I think the other thing that European countries, as well as others in the world, are always struck by is how open our processes are in terms of how we go about deliberating and decisionmaking. Many of them were in the Washington, DC area when we held our hearing on biotechnology or the bioengineered food issue. They were the people in the rows with their mouths open. They could not really fathom, I think, a governmental agency really seeking a wide range of opinions and being willing to listen to concerns across the board about a very controversial issue. It is just not how they do their business.

Senator HARKIN. So, you have been consulted. They are looking at FDA as a model then.

Dr. HENNEY. Yes.

Senator HARKIN. That has been done.

Dr. HENNEY. We are also supplying to the European Community a summary of how we ensure protection at all levels of our food safety system so that it is more of an open document rather than just a private conversation with them as well.

DIETARY SUPPLEMENTS—EPHEDRA

Senator HARKIN. Good.

The last thing I have a question about that I wanted to cover with you is about dietary supplements. I was very pleased to see that the agency recently pulled the part of its ephedra regulation that was heavily criticized by the GAO, that dealing with dosage limits. I know you are planning on shortly releasing adverse event reports received since your original proposed rule, and I understand that these will be accompanied by an analysis of these reports.

One of the reasons the GAO was highly critical of your old proposal is because they found that FDA failed to do causal analysis,

that is, to ensure that the taking of the ephedra had, in fact, caused the adverse event.

My question basically is, will your new analysis include this type of analysis in the new reports?

I am also told that as many as 3 billion servings of ephedra products are consumed each year. Will your analysis include this fact to put any adverse events in context? In other words, if there are seven adverse events, put it in the context of 3 billion servings or however many there are per year?

Dr. HENNEY. Senator Harkin, as you note, we had a very critical report from GAO with respect to ephedra. I think that while the report reflected that they agreed that there was a public health issue, the methodology that was used could certainly use improvement.

We have, for that reason, undertaken an analysis of the adverse events that have been reported since that time, looking at them with respect to many of the issues that you raised. We do intend to publish those, as well as the analysis that we did in-house and was done by consultants to the agency. We then intend to hold a public forum on this matter to see what all of these analyses mean, not with the intent to have them necessarily direct a regulatory action, but to really get this information out into the public arena.

I think with the other point that you raise in terms of amount of product consumed, we have widely varying ranges of what that might be, and we will try within what we publish to give a sense or a feel. But I do not know that we necessarily know the right number. We do know that it is an increasing amount over time. I would be interested if you could supply us with the data that you have and the source of the information.

Senator HARKIN. We can do that. It is again relying upon industry tabulations of sales of ephedra-containing products every year. I can only take their word for it. They have no reason that I can think of to manipulate the figures, but I will be glad to give you all that information we have on how many servings there are because I think it really should be put in a contextual framework.

Thank you very much, Dr. Henney.

Thank you, Mr. Chairman.

MEDICAL ERRORS

Senator COCHRAN. Thank you, Senator Harkin.

Dr. Henney, with respect to the medical errors initiative that Senator Durbin raised, could you tell us what FDA's current adverse events reporting systems include and whether there are plans in this budget to strengthen the systems to prevent medical errors and enhance patient safety?

Dr. HENNEY. Mr. Chairman, within the context of our medical errors reporting system, we have systems in place at the FDA for adverse reports to come into the agency. The systems, however, are in serious need of upgrading to make them both state-of-the-art and to make them comprehensive throughout the agency so that it would include the adverse events that may be related to drugs, biologics, blood, and the like.

Regarding adverse events that may be related to devices, a few years ago, we piloted an approach called a Sentinel Reporting Sys-

tem. That proved to be a strong and good way for us to track adverse events in that area. Unfortunately, because of limitations of funding, we did not go forward with expanding that program.

Our request to you this year is really to lay the groundwork for developing a comprehensive system. It would call for $12.8 million to do that. That would allow us to get the kind of systems in place that we need, upgrade some of the systems that we have, be able to hire some of the types of analysts, epidemiologists or biostatisticians, that we need to make sense of the reports so that when we take actions based on them that these decisions are wisely made.

GENE THERAPY

Senator COCHRAN. In light of the recent death of a young man who died as a result of gene therapy treatment and the admission by the National Institutes of Health that it did not track adverse events in gene therapy, what is the FDA doing, if anything, to reevaluate its oversight process to ensure safety compliance by institutions conducting these trials and to expand public disclosure of gene therapy clinical trials?

Dr. HENNEY. Mr. Cochran, the events that you cite have prompted us to do several things. One is, although we are in receipt of adverse events as they relate to many of our gene therapy IND's, and we have standard operating procedures for our interactions with NIH, we on a routine basis now, are sitting down with our colleagues from NIH to make sure that they know what we know and can act upon it as they should. We are two agencies charged with doing different things, but we must interact well to benefit all patients in these trials.

The other thing that we will be doing specifically with respect to gene therapy is requesting that all investigators engaged in this scientific area provide us with their plans for clinical trials monitoring. We need to assure that they have appropriate plans in place for that monitoring.

We also intend, along with NIH, to hold a series of conferences on safety issues specifically related to gene therapy. Some of those will be done in concert with their Recombinant DNA Advisory Committee. Some of them will also be done through our advisory committees within our Center for Biologics.

There are a number of steps I think that both institutions are taking to make sure that we do all that we can do and should do to assure the safety of these trials and to assure that patients have confidence in the system.

TOBACCO

Senator COCHRAN. In the conference agreement on the appropriations bill last year, we included a directive to the FDA to evaluate the feasibility of using automated identification systems to try to reduce the sale of tobacco to minors and the effect of compliance that such automated systems might have.

My question is, what is the status of FDA's compliance with this study requirement, and do you expect a report would be made to the committee as suggested in the conference report within 180 days of the enactment of the law? That would be in late April of

this year. Or when could we expect to receive the report, if you know?

Dr. HENNEY. Mr. Chairman, with your indulgence, I would like to call on Mitch Zeller who heads our Office of Tobacco Programs to respond.

Mr. ZELLER. Mr. Chairman, we put the report into clearance and assuming clearance goes smoothly, you should get it probably before the deadline.

Senator COCHRAN. Just as a matter of curiosity, what does that mean, put it into clearance?

Mr. ZELLER. It has to go through clearance within FDA and the Department before it can come to Congress. Therefore, we are confident that you are going to get it by the deadline or you may even get it before.

DIETARY SUPPLEMENTS

Senator COCHRAN. Great. Thank you. Thank you very much.

There are questions about the dietary supplements that have been raised at this hearing. When you came by the other day for a visit prior to the hearing to talk about some of the issues that we might ask about, I raised this as a question about whether or not it would be appropriate to include in this bill some funding for scientific studies on dietary supplement products, those that are on the shelf, to assess their quality, to strengthen the scientific understanding that we have about the overall quality of supplements and how they may affect those who are using them.

Dr. HENNEY. Mr. Chairman, as we develop the strategic plan, if you will, or framework for implementing an appropriate regulatory approach to dietary supplements, one of the key elements of it was to develop such a capacity. When it came to making choices within our budget and picking out the element most in need in the dietary supplement arena, what we have requested in the context of this budget is to upgrade our adverse event reporting systems for dietary supplements.

Certainly the whole issue of undergirding a science base or a research base for this program is something that we support in principle. It was a matter of choices and priorities in terms of risk that we used when we developed our budget proposal.

Senator COCHRAN. Could some of these studies be conducted by university laboratories that have proven expertise and experience in this research area?

Dr. HENNEY. Absolutely.

Senator COCHRAN. Are you including in this budget request any funds specifically for the purpose of exploring possible improvements in the quality of dietary supplements or understanding about microbiological contamination of dietary supplements or related questions?

Dr. HENNEY. Most of the money that is in this particular budget is directed at the adverse event reporting. I think that there is about $200,000 within our total request that would go for the kinds of issues that you raise.

Senator COCHRAN. Do you have any recommendations that you have made to the National Institutes of Health or others for funding clinical trials on certain dietary supplements?

Dr. HENNEY. Mr. Chairman, we have had, between our Center for Food Safety and Applied Nutrition and myself, interactions with our colleagues at NIH, particularly through their offices or center for alternative medicines to let them know where we have issues that might need to be addressed. I would like to provide for the record any specifics of those discussions.

FEW USER FEES

Senator COCHRAN. Thank you very much.

We notice the proposals in the budget for new user fees. I think in this budget you assume the enactment by the Congress of legislation to impose user fees that would amount to $19.5 million for premarket review of direct food additive petitions, food export certificates, and the review of medical device premarket notifications.

Do you have any reaction from the industry that they are going to support these proposals, or do you know what their position is? Are there legislative proposals that have been submitted to the Congress on these subjects?

Dr. HENNEY. With respect to your last question, there are legislative proposals under development. They have not been submitted as yet.

With respect to the first question in terms of industry reaction, I do know that they react to the words "user fees" and like the term "review fees" a bit better. I also know that they are very hopeful of what we will be able to do with respect to food additive petitions overall and probably would appreciate a bit more track record on our part before additional review fees might be imposed.

MEDICAL DEVICE USER FEES

Senator COCHRAN. The budget proposal contains a suggested device user fee to encourage reviews to be performed by third parties. I understand that an obstacle to the success of the third party review program is that FDA has made only 154 product types eligible for the third party program and the list of eligible products has not been expanded since May 1999.

What is the best way for FDA to encourage the industry to use third party review? Is it to expand the list of products to include more complex devices or not to impose a user fee?

Dr. HENNEY. Mr. Chairman, the third party review experiment that is really outlined within the Modernization Act is something that we are very committed to and want very much to work. While the number that you cite is correct in terms of categories, there were some 1,200 510(k) applications that we received in fiscal year 1999 that would have been eligible for third party review, but only a handful of these actually went to the third party review. While third party review does require a payment on behalf of a company, and there may be some issue there, the third party review takes much less time to do, some 57 days, as opposed to 107 days if the company chooses to come in to the FDA, simply because we are also working on other things.

We are looking at ways to expand the list of devices that might be eligible for third party review. We took first the low and moderate risk devices, as was intended by Congress, and those for which we already had standards developed so that those standards

could be used by the third party in terms of going about their review.

Our proposal here really looks at FDA in part as a conduit for payment of the third party review and then would both simplify and reduce our regulatory cost. And it also allows us to tap additional expertise from scientists outside the agency.

SEAFOOD INSPECTION

Senator COCHRAN. The budget request proposes a new administrative provision to transfer seafood inspection functions and authorities, the personnel of the Seafood Inspection Division and all related assets and liabilities from the Department of Commerce to the Department of Health and Human Services. It seems that this is something that would require the approval of the legislative committees of the Congress, and I am curious to know why the administration is proposing that the authority for the program transfer be provided in the appropriations bill and whether the administration is also submitting legislative language to the Congress to authorize the program transfer.

Dr. HENNEY. Mr. Chairman, yes, such a proposal will be developed and submitted. This is an administration proposal that would consolidate all of the Seafood efforts within the authorities of the Food and Drug Administration. I would go on the record that I am very interested in the assets, but perhaps not the liabilities.

Senator COCHRAN. Do you agree with one suggestion we have heard that combining these programs might undermine the objectivity and credibility of FDA's seafood HACCP program?

Dr. HENNEY. I have not heard that. This program has traditionally been of a voluntary nature, if you will. I think that we would use it to complement what we do in our HACCP program.

SEAFOOD EQUIVALENCY

Senator COCHRAN. Last year FDA indicated that it is working to improve the safety and sanitation of imported seafood by establishing equivalency agreements to ensure that exporting countries have seafood inspection systems equivalent to those of the United States. It also indicated it was in the process of evaluating submissions for equivalency agreements from numerous countries, including the European Union, and had plans to visit six countries, including Australia, Canada, Chile, Iceland, New Zealand, and the European Union before the end of the year.

What is the status of the FDA's effort with regard to seafood equivalency agreements?

Dr. HENNEY. Well, Mr. Chairman, as you know, this whole issue of equivalency is a very lengthy process. It involves doing a preliminary, side-by-side comparison of the different regulatory systems to make an initial determination. Many countries end up realizing, after they see the system that we use, that perhaps they need to upgrade their systems, or if we are not equivalent to theirs, we do some work ourselves. It usually goes the other way, however.

The second is when we do an analysis of the two systems. We then do this third step of the on-site site visits, which I believe you are alluding to. We are required to do a preliminary determination

and then a final determination, both of which need to be published. Then we go into negotiating the final agreement.

Our determinations for Canada, New Zealand, Australia, Norway, and Japan are all in their furthest state of development, and they have all had their first site visit. Canada's has been delayed about a year as they implemented some major system changes, but we do intend to site visit and review those changes sometime this spring.

Senator COCHRAN. Are any additional resources needed to complete the planned work? Is the current level of resources sufficient for that purpose?

Dr. HENNEY. Mr. Chairman, as I alluded to, these do require very intense work, but I would ask Mr. Levitt to give you some sense of actual resources required and resource needs.

Mr. LEVITT. Congress did provide us, I am sure you will recall, some resources specifically for this purpose I believe in the 1999 budget. Part of this is that it takes time to go through the steps. What we have done in this year's budget request is to focus more on coming back to domestic inspections, being sure that we are able to do those on an annual basis as well, which will in turn help us with the equivalency agreements. So, there is nothing in the budget that specifically requests an increase in this area, but we do have people who are dedicated to this work and will push it ahead as the pace will allow.

INTERNET DRUG SALES

Senator COCHRAN. In the prepared statement submitted, Commissioner Henney, you indicate that during fiscal year 1999, illicit or illegally operated drug sales sites grew dramatically. What was the growth in illicit or illegally operated sites?

Dr. HENNEY. Mr. Chairman, the area of consumer use of the Internet clearly has grown overall in terms of many product lines, prescription drugs being one of those. We know that there are several hundred sites now offering the sale of prescription drugs. How many of them do this illicitly or illegally is something that we have under active investigation.

Senator COCHRAN. The President announced that he would submit new legislative proposals to Congress to address the problem of illegal Internet drug sales. I understand the proposal will establish a new Federal requirement to enable consumers to identify legitimate Internet pharmacy sites, strengthen the current penalty structure for illegal pharmaceutical sales over the Internet, and provide new authority to FDA to ensure rapid and effective investigation of on-line sites.

To what extent is enactment of this new authority required before FDA can utilize the $10 million requested in the budget for next year, and has the legislative proposal been submitted to Congress?

Dr. HENNEY. Mr. Chairman, the $10 million request is, in essence, to provide us funding for the work we are doing in this area already. Because we saw this as an increasing issue and a matter of risk, we have been using hundreds of hours of investigative time. Our budgetary request before you is to focus on this as an identifi-

able issue and allow our investigations to go forward as well. It is largely that.

There is also part of this program that is education and public outreach in terms of the agency providing information to the public about how to find a site or what to look for when trying to use the Internet to purchase prescription drugs. The budget proposal really stands on its own.

The legislative proposal, which would be forthcoming and would have in it many of the elements that you mentioned, really speaks to additional tools that we might need either to aid our investigations or enhance the consumer's ability to find a site that is selling products and is selling them with all of the State or Federal laws in place.

Right now we clearly know that the Internet provides many benefits, the access, the convenience, the privacy, but there is no easy way for a consumer to tell whether the site they are using is complying with all State or Federal laws. It is not like going into your corner drugstore where you can see that the pharmacy has been licensed, the pharmacist has been licensed, and you know the doctor who wrote your prescription. The Internet essentially cuts out that part of the safety net system. We need to make sure that we have an equivalent safety net for those who choose to use the Internet as well as for those who choose to go to their corner drugstore to buy drugs.

FOOD BIOTECHNOLOGY

Senator COCHRAN. Another emerging scientific dilemma that you mentioned in your statement is the need for new funding on the rapidly evolving field of food biotechnology. What is actually planned by the agency for the use of funds that are requested in this next fiscal year as compared with what has been done in this year for this new effort?

Dr. HENNEY. The area of food biotechnology has not been an area where we have traditionally done the research. The research that has been done to develop specific crops, is either supported by the Department of Agriculture or industry.

As we focus more and more on a stronger regulatory position, however, and we have research questions related to those regulatory issues and bioengineered foods, we need to build this kind of a capacity. This would be done primarily by joint efforts between our Center for Food Safety and Applied Nutrition and our National Center for Toxicological Research where work in terms of regulatory matters related to bioengineered foods would be done.

GENERIC DRUGS

Senator COCHRAN. There is also a suggestion in your statement that you propose to accelerate the process of generic drug review. I wonder how you propose to accelerate this. Can you compare, for example, how you are going to use the additional resources that are requested? Are you going to increase staffing and funding levels for the generic drug review, as compared to the current fiscal year or last year?

Dr. HENNEY. FDA is requesting in the drug area $2.3 million to improve scientific knowledge and skills across the board. That

would include the generic drug area. We do not have, within the context of our budget, targeted money for the Office of Generic Review. We feel that reviewers across the board need to be supported because both those medical officers or scientific officers in generic drugs or innovator are reliant on the capacity of the reviewers. We have not targeted this request, but it is a more general request of $2.3 million to increase our skill base across the board.

IMPORTED FOODS ACTION PLAN

Senator COCHRAN. You also mentioned in your statement that FDA and the U.S. Customs Service have developed an imported foods action plan to enhance border surveillance. Could you tell us more about this surveillance effort?

Dr. HENNEY. Well, what we have done overall with the Customs Service was really modeled by our two agencies at the port site in Miami. We had several meetings during the course of this past year in terms of what we could do as two organizations to use the breadth of our authorities to make sure that imported products coming into this country are safe.

Therefore, using some of Customs authority, we are looking at the ability to refuse shipments, to mark shipments so that we can decrease what we have faced for many years that is port shopping, destruction of food products that pose serious public health risk, the standard setting for importers, contractors, or private labs that are going to analyze samples. The bond has been increased for imported foods to full market value of the product to deter illegal entry into the country, and also uses of civil money penalties.

EGG SAFETY

Senator COCHRAN. The budget suggests that an egg safety action plan at FDA, just completed in conjunction with the Department of Agriculture and the Environmental Protection Agency and Commerce, is to be implemented this year. I am curious to know how this is going to work to prevent illness and what level of funding is included in the FDA budget request for next year as compared with the current fiscal year.

Dr. HENNEY. Mr. Chairman, within the budget request for this year, I believe there is $30 million for our Food Safety Initiative, of which $5 million would be targeted toward the implementation of the egg program.

The issue of the safety of eggs and egg products really centers around the issue of Salmonella enteritidis. We know that there are some 300,000 cases of disease due to Salmonella enteritidis every year. We also know that eggs and egg products are consumed at quite high volume by the American consumer, some 234 eggs per person per year. So, this is a very real issue in terms of making sure that eggs and egg products are safe.

We held a public meeting on this last fall. We intend to hold two other additional meetings. One will be at the end of this month in Columbus, OH and one in Sacramento, CA on April 6. We are looking at this issue with the USDA, to provide an integrated approach to the regulation of egg safety and really a farm-to-table approach. We are also looking at how we communicate safe practices to the consumers so that they know that cooking eggs thoroughly, not

using raw eggs, is a strong and good preventative practice for this problem.

Senator COCHRAN. That was going to be my question. Does it take all of this to make us all understand that in order to guarantee your safety, you need to cook an egg before you eat it, and if it smells bad, do not cook it?

Dr. HENNEY. These may seem like very simple messages, but clearly we have not gotten these messages across yet because there are still many people who like their eggs sunny side up and who still like to make their Caesar salad with a raw egg. The issue remains.

BIOTERRORISM

Senator COCHRAN. I know that one of the serious biological threats, bioterrorism is causing us to look at how we are prepared to deal with this new threat including the development of new vaccines and drugs, safeguarding food supplies, research into the questions of diagnosing and treating disease outbreaks.

Can you give us an update on your agency's efforts in these areas and the level of resources currently being devoted to them and whether additional funding is needed in the next fiscal year?

Dr. HENNEY. Yes, Mr. Chairman. I am glad to. I would point out that we got caught a little bit on this issue last year as we made our request, through the Department. Clearly it went to the labor appropriations committee which did not feel that they needed to fund an agency in the agriculture appropriation committee. As a result, we did not receive funding in this area last year.

Nevertheless, we have received some one-time funding from the Department to proceed with some matters related to vaccine research in anthrax, smallpox, and the VIG, or that which is associated with immunoglobulin.

You have in the budget request before you this year—and we did convince our colleagues in the Department to let us ask you rather than them—an $11.5 million request for our efforts in bioterrorism. This would largely go for the vaccine issue and vaccine development, but also for the important issue of stockpiling antibiotics that would require the efforts of the Center for Drug Evaluation and Research and the National Center for Toxicological Research in terms of looking at important research issues either related to food as a vehicle for a bioterrorist attack or neurotoxicity related to some of the products that may be used by a bioterrorist.

Senator COCHRAN. You mentioned the Department of HHS and Labor appropriations bill confusion. I wonder to what extent are FDA's activities in this area dependent on those of other Federal agencies and the funding that other agencies get for their part of the obligation?

Dr. HENNEY. Well, in the matter of bioterrorism, we are coordinated at really the highest level. But our efforts and plans really require us seeking the funding from, of course, the appropriate and separate committees of Congress. In terms of what we do in this area, however particularly our knowledge and interaction with the other agencies of our own Department, as well as those of the Department of Defense, is critical if we are to make an appropriate

response to a bioterrorist attack or to prevention of such an attack. Clearly, that kind of coordination needs to continue.

Senator COCHRAN. Dr. Henney, I do not have any other questions. I do want to repeat my commendation of you and the work you are doing at the agency. I am impressed with the commitment that you have made to improving the work at the agency, strengthening the scientific base. I agree with you. It has to be a top priority. We hope that we can find funds in the budget to help you with some of the laboratory problems that you have so graphically demonstrated for the committee this morning.

Secretary Shalala's presence here indicates the commitment of the administration and her Department to this area. We agree that it is a very high priority for our Government, the many areas that come under the jurisdiction of this agency.

ADDITIONAL COMMITTEE QUESTIONS

We will have additional questions to submit that others might be interested in learning about. So, we hope that you will be able to respond to those written questions in a timely way.

We thank you very much for your continued cooperation with our committee.

Dr. HENNEY. Thank you, Mr. Chairman.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing.]

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

STRENGTHENING FDA'S SCIENCE BASE

Question. Commissioner Henney, you have stressed the need to protect FDA's science base to keep pace with technological advances. Please discuss what specific increases are requested in the fiscal year 2001 budget to do this.

Answer. FDA needs to be able to respond to a rapidly changing environment and maintain the capability to understand, adapt and respond. To do this we must we must strengthen our science; address the highest priority risks; and engage in effective collaborative and leveraged activities, and design ever more predictable, timely and transparent regulatory processes.

We must be able to keep pace with the explosion in scientific advances and then use that knowledge to assure safe products. FDA must apply our intellectual capital at every point in the life cycle of the product. We must be able to anticipate and access the cutting edge science that will be needed to regulate the products of future technology. When this is possible, we can apply this science at the point when the new technology arrives and when it is absolutely essential to steward these products, many of them lifesaving, to the market.

A strong FDA science capability is equally critical in understanding and managing risk associated with products that are already in the market place. When FDA can apply cutting edge science to these problems, particularly in cooperation with our health and regulatory partners, as well as those in the regulated industry, we can quickly identify significant risks and minimize them.

Congress' authorization and support of the Prescription Drug User Fee Act and its reauthorization in the FDA Modernization Act is a prime example. Review of drugs and biologics in the U.S. is now as fast or faster than anywhere in the world, and this has been accomplished without lowering our very strict and high standard for safety and effectiveness.

FDA has always adhered to the principle that the most serious risks should be addressed first. To illustrate, the medical errors initiative in the budget emphasizes FDA's working with other agencies in the Department of Health and Human Services and with other departments across government as a part of the President's new comprehensive plan to improve health care through the prevention of medical errors and the enhancement of patient safety.

Second, drugs marketed and sold from rogue Internet pharmacy sites present real risk for the American consumers. Again, we have addressed the most serious risks first as a part of the food safety initiative, provided funding, we will be able to inspect high risk food firms at least once a year. We would continue to do the work supported by Congress in the past which focuses our efforts in the important arena of food safety by targeting imported produce that contain microbiological pathogens.

Many of our initiatives in this budget require our agency to work in concert with a broad spectrum of stakeholders to create a safety net for the U.S. consumer. A prime illustration of this approach is in food safety. In this regard, we collaborate with our foreign regulatory counterparts in joint efforts that include setting standards to reduce the risk of products to the consumer. Whether it is within our domestic borders or beyond, FDA undertakes collaborative initiatives because all parties can unify behind goals that are in the best interest of public health and safety.

The budget request is for $1.4 billion which is a $176 million increase over the fiscal year 2000 enacted level. The request includes $42 million to enhance the science based review of new health giving products so they can more rapidly enter the marketplace and $30 million to enhance the safety of the food supply through strengthening key elements of the President's food safety initiatives. These elements include increasing inspection frequency for high risk food firms, implementation of an egg safety action plan developing nationwide standards for food safety, and expanding the research activities necessary to support the entire initiative. The request also includes $20 million to replace FDA's obsolete Los Angeles laboratory facility. $15.9 million is included to strengthen our systems which report on and correct medical errors. This is the interagency cooperative effort designed to reduce the estimated 100,000 annual deaths that occur because of medical misadventures or mistakes. $13.5 million is to focus on domestic inspections of our firms in order to target high risk violators and to come closer to meeting the agency's statutory inspection requirements. $10 million is to help stop the illegal sale of drugs over the Internet. And finally, $11.5 million is part of the President's comprehensive response to possible bioterrorist attacks.

Fiscal year 2001 is the year in which FDA must cope with the maturation of two of the most massive and significant forces the agency has ever faced. In 2001 the increasing impact of molecular science, genomics in particular, and the information revolution, especially the Internet, and its linkage to an array of real time data and as a new vehicle for commerce that was unimaginable only a few years ago, will combine their forces to change how products are discovered, researched, manufactured, distributed, marketed, and advertised.

ILLEGAL INTERNET DRUG SALES

Question. Commissioner Henney, you indicate in your prepared statement that during fiscal year 1999, illicit or illegal operated drug sale sites on the Internet grew dramatically. What was the growth in illicit or illegal operated sites?

Answer. In an attempt to better comprehend the universe of web sites selling drugs, FDA's Office of Criminal Investigations reviewed thousands of web sites early this year and identified approximately 326 web sites involved in the sale of drug products. Because new web sites are put up everyday and old ones are taken down, the total number of these sites is subject to change and will not be consistent over time. Also, due to differences in methodology and access to advanced technology search tools, our information may not coincide with data provided in studies produced by other organizations.

Many sites focus on selling prescription drugs and have been referred to by some as "Internet pharmacies." These sites offer for sale, in some cases, unapproved, illegal versions of prescription drugs. Some drug sale sites offer for sale other unapproved drug products, products making fraudulent health claims, drugs for recreational use such as products containing gamma hydroxy butyrate (GHB), unproven cancer therapies, or drug products illegally marketed as dietary supplements. While the increase in "Internet pharmacy" sites engaged in illegal sales is seen by some as a particularly potent threat, FDA considers the non-pharmacy sites to be just as harmful, or in some cases more so, and we have made efforts to step up regulatory actions taken or initiatives by FDA, which include both civil and criminal enforcement actions.

Question. How many Internet drug sale sites are there currently?

Answer. FDA's Office of Criminal Investigations reviewed thousands of web sites early this year and identified approximately 326 web sites involved in the sale of drug products. Because new web sites are put up everyday and old ones are taken down, the total number of these sites is subject to change and will not be consistent over time. Also, due to differences in methodology and access to advanced technology

search tools, our information may not coincide with data provided in studies produced by other organizations.

Question. Funding of $10 million is requested for FDA to stop illegal Internet drug sales. How will this funding be utilized? How much will be spent for investigations; how much will be for upgrading FDA's computer technology; and how much for a new public education campaign on the dangers of buying pharmaceuticals over the Internet? Please provide level of funding and full-time equivalent staff years included in the request for each.

Answer. Included in the President's fiscal year 2001 budget is $10 million for Internet drug enforcement. Because FDA's systematic review of Internet websites began in mid-fiscal year 1999, this enforcement work is still a relatively new undertaking, and we are learning more about our resource requirements as we proceed. Approval of this funding request would allow FDA to establish a significant and permanent presence concerning Internet drug sales enforcement and redirect its current resources back to its other enforcement priorities. Presently, FDA supports its Internet investigations and enforcement efforts with redeployed resources, at the expense of other critical FDA enforcement priorities, and this trade-off cannot continue indefinitely.

Specifically, the $10 million funding request will be distributed as follows: $9.7 million to fund 75 FTE positions in the Center for Drug Evaluation and Research—CDER, and the Office of Regulatory Affairs—ORA. These 75 FTE would work in field, laboratory, compliance and support positions to provide for the investigation and analysis of Internet sites suspected of engaging in unlawful drug sales, distribution or marketing; take appropriate enforcement actions, as required; and carry out public education campaigns on safe ways to purchase pharmaceuticals over the Internet. Also included in the $10 million is $250,000 to fund two FTE positions in the Office of Chief Counsel—OCC, to work with CDER, ORA—including the Office of Criminal Investigations, or OCI—and the Department of Justice—DOJ, to bring civil and criminal enforcement actions involving illegal Internet drug activity. FDA has already begun a public education campaign to educate consumers on the dangers of buying pharmaceuticals over the Internet and will continue this campaign through fiscal year 2001.

Question. What attention, in terms of dollars and FTEs, is FDA currently giving to the problem of illegal Internet pharmaceutical sales?

Answer. Since mid-fiscal year 1999, when FDA began its systematic review of Internet web sites, we have identified increases in the types of web sites, as well as the range of activities, that appear to violate the Federal Food, Drug, and Cosmetic Act. In approximately 6 months, FDA has devoted almost 40,000 staff hours to investigate hundreds of Internet sites. The Food and Drug Administration devoted approximately $1.92 million in fiscal year 1999 to investigate internet drug sales practices. The Center for Drug Evaluation and Research expended approximately $0.2 million and the Office of Regulatory Affairs, principally its Office of Criminal Investigations, expended approximately $1.7 million. The internet drug work was conducted with resources in the Human Drugs program. Therefore, no resources were shifted from other FDA programs; these resources were redirected from other Human Drugs work.

ABSORPTION OF MANDATORY COSTS

Question. The fiscal year 2001 budget request for FDA salaries and expenses requests increased funding to support an additional 416 full-time equivalent (FTE) positions, yet the budget indicates that FDA will have to absorb 106 FTEs as a result of mandatory cost increases for which funds are not requested. If the budget request level is recommended by this Committee, in what areas will FDA make these staffing reductions to protect the priority areas for which funds and additional staff positions have been requested? Please indicate specific funding and staffing reductions by Center, program and activity.

Answer. Since 1994, the agency has had to absorb pay raise and other inflationary costs. The cumulative total through fiscal year 2000 equals $207 million, including $43.4 million in fiscal year 2001. The agency has cut non-payroll operating costs as much as possible, limiting travel, supplies, equipment, and significantly reducing extramural research and methods development. These actions alone have not been sufficient to absorb cost increases and maintain the same staffing level. While the agency does use tools like delaying recruitment for vacancies, overall the agency has had to cut staffing in all programs except those supported by user fees. However, these reductions fall far short of making available the amount required to maintain staffing levels. From fiscal year 1994 though fiscal year 1999, non-user fee FTE have declined from nearly 9,000 to about 8,100.

Although FTE increases were provided in the fiscal year 2000 appropriation, they were targeted to specific program areas. Current services absorption reduces the FTE available to perform at the Agency's core activities of premarket review and postmarket assurance. This has eroded the agency's ability to assure safety through strengthened science and meet our public health mission. The agency has had to limit research program and methods, limit staffing that can be devoted to new product application review, and particularly in the field, to reduce the numbers of inspection and sample analyses that can be conducted. As a result, FDA staff, whether they are reviewers or inspectors have not kept pace with the knowledge explosion in their particular field of expertise.

The fiscal year 2001 request reflects a reduced staffing level of 160 FTE. Fewer FTE translate into fewer people to perform FDA's core activities of premarket review and postmarket assurance. This hampers FDA's ability to assure safety through strengthened science and meet our public health mission. For the record we will include a chart which depicts FDA's fiscal year 2001 payroll and inflationary costs by activity and the FTE absorption.

[The information follows:]

CURRENT SERVICES ABSORPTION

[Dollars in millions]

Project	Total current service absorption	FTE absorption (FTE)
Foods	$12,289	48
CFSAN	5,257	18
Field Activities	7,032	30
Human Drugs	10,250	38
CDER	6,943	24
Field Activities	3,307	14
Biologics	4,800	16
CBER	3,810	12
Field Activities	990	4
Animal Drugs & Feeds	2,478	9
CVM	1,802	6
Field Activities	676	3
Device & Radiological Products	7,331	29
CDRH	5,316	20
Field Activities	2,015	9
NCTR	1,384	5
Tobacco	978	
Other Activities	3,255	15
Other Rent & Rent-related Activities	609	
Rental Payments to GSA		
Total, Salaries & Expenses	43,374	160
Non-Field Activities	29,354	100
Field Activities	14,020	60

Question. What success has PulseNet had in the past year in pinpointing the source of food borne illness outbreaks?

Answer. PulseNet had a very successful year in rapidly identifying common source clusters. This faster identification of the problem permitted quicker interdiction and regulatory action, hence preventing a significant number of additional cases. I would like to tell you about some of the more noteworthy successes.

Pulsed Field Gel Electrophoresis—PFGE, patterns linked the Salmonella Munchen isolates from orange juice and illnesses in multiple states in 1999. PFGE by Washington State Health Department confirmed the link after epidemiology detected the outbreak and the possible association. This finding added to the realization that unpasteurized juices pose a significant risk and spurred regulatory action in this area.

Epidemiologic investigations linked several clusters of *Salmonella Munchen* to a common seed source used to produce sprouts. Thereafter PulseNet confirmed the ep-

idemiology and helped to link other cases. This was part of the evidence used to foster the new regulations on testing sprouts.

Public Health Laboratory Information System—PHILIS, and *Salmonella* Outbreak Detection Algorithm—SODA, detected the 70 cases of *Salmonella Newport* illness in 10 states. PulseNet was used to confirm the link. This information and additional information obtained by CDC implicated imported Mangoes as the source of the infection.

PulseNet supported the establishment of the connection between liver pate and cases of *Listeriosis* in a number of northeastern states while extricating other possible food items.

In ongoing cases, PFGE technology is being used to determine the potential link between recalled product and human illness and death.

Epidemiologists have used PulseNet to confirm links, and tie in other sporadic cases, that have been made with other standard epidemiology approaches. It has been useful in providing supporting evidence in identifying a common source of infection.

PulseNet linked *Salmonella* from ill persons in the USA with those found in imported dog treats made from pig ears. This finding highlighted the role that certain non-human food items can play in foodborne illness and provided direction for FDA's surveillance activities.

The linkage established by PulseNet between lettuce and *Escherichia. coli* O157:H7 infections in elderly humans in two U.S. States helped identify the contaminated batches and hence prevent further illnesses.

MEDICAL ERROR INITIATIVE

Question. Commissioner Henney, your acknowledge in your prepared statement that the complexity and numbers of newly-approved medical products have raised the risk for human error and that the majority of incidents are not reported. How is FDA proposing to strengthen its adverse events reporting to elicit reports and to assure more complete reporting?

Answer. We currently rely on reporting—both mandatory and voluntary—to find risk signals. FDA's current programs are designed primarily to serve as a "backstop" for the approval process—to find rare, unexpected side effects that could not be discovered in the clinical trials. They are not intended to, and cannot, uncover the incidence of adverse events, their prevention, or the overall health and economic impact on Americans. Of the 400,000 reports received by FDA, 21,000 of these describe fatalities and another 11,000 life-threatening events. Over 60,000 additional reports describe problems that required hospitalization or a prolonged hospital stay and 32,000 other reports concern medical device malfunctions. Despite the large number of reports, studies indicate that 90 percent of adverse events are not even reported to FDA at all.

MedWatch is FDA's program to encourage consumers and health care practitioners to report serious and unexpected adverse events associated with all FDA-regulated products. MedWatch adds this information to the AERS and other databases and, if warranted, disseminates new risk information directly to patient organizations and subscribers and to the general public through the Internet.

Ideally, a fully funded program that actively enlists health professionals in seeking out and reporting events is needed, as are other types of data sources (for example, reports from poison control centers). FDA pilot studies indicate that these are high-yield strategies for finding product safety risks. Ideally, we believe key steps in identifying and quantifying the risks associated with medical products require full-scale operation of MedWatch, to include full-scale, interactive, on-line reporting for health professionals and implementation of MedSun, the Congressionally-mandated sentinel program for medical devices. MedSun will actively enlist hospitals and associated health professionals in problem reporting. Ultimately, MedSun should expand to include reporting for all medical products. Additional key steps include expansion of reporting to health care settings other than hospitals; e.g., outpatient clinics, nursing homes, and home health care providers; development of additional data to monitor risk: accessing numerous additional sources of data already collected for other purposes (e.g., emergency rooms, poison center reports, organ transplant databases) to provide insight into the clinical context of product use and problems encountered; development of specialized systems for particular product risks—establishing patient registries for novel products or those with potential long-term safety risks; and identification of key obstacles and strategies to improve problem reporting—conducting the needed research to lead to improved reporting rates and quality. The fiscal year 2001 $12.8 million request will be used to begin to address this issue.

Question. You mention that the additional resources requested will enable FDA to analyze report data in a timely manner. Is there a problem with this currently?

Answer. The Agency receives about 400,000 reports of adverse events associated with medical products yearly; 250,000 reports are for drugs alone. We estimate that more than one-third of these adverse events are preventable. However, the databases currently in place are not sufficient to achieve this task. Current systems are not designed to evaluate the rate or the impact of known adverse events. FDA is requesting an increase of $12.8 million to address medical errors in fiscal year 2001. With this funding, FDA will discover and act to prevent more injuries that affect patients. The agency will complete construction of its state-of-the-art computerized drug injury reporting system. FDA also will begin construction of a hospital-based system to detect medical device errors. In addition, the agency will enhance the safety of the nation's blood supply by extending error reporting to local blood banks.

Question. You also indicate that FDA will implement Phase II of the Medical Device Surveillance Network. When was Phase I of this network implemented and what is Phase II? Please describe how the Medical Device Surveillance Network works.

Answer. FDA Modernization Act—FDAMA—allowed the option of replacing mandatory user facilities reporting with a National Sentinel Reporting Surveillance System, currently referred to as MeDSuN. FDA initiated a pilot study to determine whether a select group of highly trained reporting facilities could provide a statistical sample of adverse event reports that would represent all user facilities. Phase I of the network, called DeviceNet, was implemented in September of 1996. A small business, CODA Inc., was awarded the contract to conduct the study to evaluate the feasibility and effectiveness of a sentinel reporting system for adverse event reporting of medical device use in user facilities. Phase I involved 24 facilities.

Under Phase II, the reporting and feedback features of the network would be refined and tested. The number of facilities would be expanded to approximately 200–250 hospitals in three regions of the country, out of 6,000 hospitals currently required to report. The results of Phase II would be evaluated before FDA publishes a Proposed Rule, which will describe the plan for a national MeDSuN program. The plan for the national system will be based on lessons learned from Phases I and II. So if refinements need to be made, it will be easier and less expensive to make the changes at the initial stages of implementation, before the system runs nationally. If MeDSuN is successful, FDAMA authorizes FDA to discontinue user facility reporting other than sentinel reporting.

A comprehensive explanation of Medical Device Surveillance Network or MeDSuN, and the Phase I Pilot Study was provided in the September 1999 Report to Congress "Designing a Medical Device Surveillance Network". The report also described the goal of MeDSuN, to improve the protection of the health and safety of patients, users and others by reducing the likelihood of the occurrence of medical device related adverse events and, if they do occur, reducing the likelihood that they will be repeated. This system would increase both the quantity and quality of reporting of adverse events and enable FDA to be proactive in preventing injuries from medical devices. Both FDA and users would have a better understanding of the causes of adverse medical device events and be better positioned to identify ways to minimize their occurrence and impact. MeDSuN would also create a two-way channel of communication between FDA and the user facility community by enhancing the quantity and quality of the reports that came in from designated user facilities and by ensuring feedback to reporters.

A copy of the 1999 Report to Congress "Designing a Medical Device Surveillance Network" can be found on the Internet at http://www.fda.gov/cdrh/postsurv/medsun.html.

Question. How does FDA propose to improve the reporting systems for blood errors and accidents in fiscal year 2001?

Answer. FDA proposes to improve the blood error and accident reporting systems in fiscal year 2001 by publishing a final rule that will: (1) expand the reporting requirement to include all establishments engaged in the manufacture of blood and blood products, which includes licensed and unlicensed blood banks, transfusion services and Source Plasma collection centers; (2) establish a time frame in which reports need to be submitted to FDA; and (3) replace the terminology of "errors and accidents" with "biological product deviations" to more clearly describe the types of events that must be reported. In conjunction with the final rule, FDA will publish a document that provides additional, more specific guidance regarding the types of events that must be reported.

In addition, FDA will provide a web-based electronic standardized format for the industry to use in submitting reports to FDA. FDA's ability to track and trend events will be enhanced by the use of a standardized format, which will assist FDA

in providing information to industry in an effort to reduce deviations. The information obtained by tracking and trending these events will also assist FDA in focusing the inspections of the blood industry. FDA will continue to post on its website, the summaries of biological product deviation reports.

Question. The fiscal year 2001 budget proposes to implement adverse events reporting systems for both dietary supplements and animal drugs. What backlog exists in reviewing adverse event reports in both these areas now, and how will the systems proposed to be funded for fiscal year 2001 improve the review of these reports?

Answer. In fiscal year 2001, FDA is requesting $2.5 million and 2 FTE to begin the process of modernizing the Adverse Event Monitoring System for Dietary Supplements, including upgrading and automating record management and improving signal and report generation capabilities. Included in these efforts also are the clinical reviews and follow-up. We estimate that our current backlog would require approximately 6 FTE, over a significant period of time, to properly organize, paginate, redact each file and finally scan or rescan these files into the new system.

Specific program goals have been identified and will focus on four strategic areas. The first of these strategic areas is Systems Enhancement. This will improve adverse event report monitoring system capability by enhancing the data systems and integrating them into the Agency-wide adverse event report monitoring system program. The second of these strategic areas is Timely Release of Reports. This will reduce CFSAN's response time to Freedom of Information Act inquiries. Another area is Clinical Evaluation and Follow-up. This will institute an efficient system for the monitoring, clinical evaluation, and timely regulatory follow-up of significant adverse event reports. The fourth area is Outreach, designed to educate consumers and health care professionals on how to use the adverse event reporting system. These changes will be implemented as resources allow.

FDA is requesting $0.6 million and 3 FTE to provide contractor staff, and provide for maintenance and data entry and evaluation enhancements for Adverse Event Reports and Drug Experience Reports for drugs given to animals.

We currently have a backlog of 6,000 adverse event reports on animal drugs. Currently, FDA only triages about 40 percent of the 12,000 annual incoming animal drug adverse event reports. FDA triages these reports because there simply are not enough resources to thoroughly review all reports. Triage allows us to review those that pose the most serious potential of risk or harm. About 20 percent of the total 12,000 reports received are thoroughly reviewed and evaluated. The additional funds would be used to increase our triage level from 40 to 60 percent and our thorough review level from 20 to 30 percent. This greater level of review would mean that more actual hazards would be identified, and corrective action taken. This would result in greater protection of human and animal risks, and increase public confidence.

In the Center for Food Safety and Applied Nutrition—CFSAN, all initial reports are reviewed—about 50 to 60 per month. Additional information is requested on all serious adverse events, which account for 45 to 50 percent of reports received. There is a current backlog of about 50 initial adverse events that are awaiting follow-up information. Current resources do not permit us to perform certain routine clinical evaluation components on each adverse event, including preparing clinical summaries, coding and classification of adverse events. In addition, we are unable to perform more in depth analyses and risk assessments of adverse events grouped by particular product or type of ingredient.

The preparation of dietary supplement adverse events information for CFSAN and Freedom of Information—FOI, process includes records management procedures, such as scanning and redacting, so that the records can be publicly released. The current backlog in this area consists of approximately 2,000 out of nearly 3,500 adverse events that FDA has received for dietary supplements. The FOI backlog for dietary supplement adverse events dates back to requests from 1998.

Upgrades to the database system, elimination of the clinical review backlog and timely public release of adverse event information are important because they affect FDA's ability to take timely actions to protect the public health.

FOOD SAFETY

Question. Commissioner Henney, you indicate that the additional funding requested for FDA food safety activities for fiscal year 2001 will enable FDA to be able to inspect the high risk food firms at least once a year. What is a "high risk" food firm and how often is FDA conducting such inspections currently?

Answer. High-risk establishments are those establishments that produce foods with the greatest risk for microbial contamination and those foods requiring specific

components for a safe and nutritious product. One example is an establishment that produces infant formula. Another example is an establishment that produces ready-to-eat food. FDA defines ready-to-eat foods as products that will undergo no or minimal processing such as heating, freezing, washing that would eliminate a pathogenic organism on the food. These products include fresh fruits and vegetables, bakery goods, cheeses, and cooked pasta dishes. Yet another example of a high risk establishment is one that produces heat and serve products, that is, products which normally receive a heat treatment, such as microwave, prior to final consumption by the consumer. Such products are hazardous if the recommended heat treatment is insufficient to eliminate pathogenic organisms which may be in the product.

Establishments that produce seafood products, particularly scrombotoxics, such as mahi mahi, pompano, tuna, salmon, swordfish, and those susceptible to cigueterra are also considered high risk establishments. Also included are establishments that produce molluscan shellfish, which are eaten uncooked. Seafood not considered high risk would be raw fish, not of the scromboid species, which require cooking before consumption, such as trout, catfish and shrimp.

All low acid canned and acidified foods which if not properly processed may present a potential hazard to health in the form of botulism and are considered high risk. Examples of low acid canned food include not only foods in traditional tin and aluminum cans, but glass jars, and hermetically sealed pouches. Products which are usually low acid include canned vegetables, seafood such as tuna and sardines, and mushrooms. Acidified foods are low acid food products to which an acid, such as vinegar, is added for preservation. Examples of these products include barbecue sauces, salsas and pickles.

We want to be certain that we are including all firms that would be appropriately considered to be high-risk. Therefore, FDA has convened a working group from both the Center and Field components of the Foods program to delineate the optimal operational definition of a high-risk food establishment. We expect their definition by early summer. We expect to inspect a total of 4,200 firms producing high-risk products in fiscal year 2000. We plan to inspect all 6,250 firms currently identified as high-risk firms in fiscal year 2001.

Question. What improvements has FDA made in the past year to inspect imported food, particularly imported produce that contain microbiological pathogens?

Answer. One of the improvements FDA has made in the last year to inspect imported food, particularly imported produce that contain microbiological pathogens, was to conduct a 1000-sample survey for imported produce in fiscal year 1999. The primary focus for this sampling survey was to ensure public health and the safety of the food supply. Through sample collection and analysis, we established the incidence and extent of bacterial pathogen contamination for selected fresh imported produce to assist in the development of additional policy for the Produce Safety Initiative. As of March 4, 2000, 689 samples were collected and analyzed and 95 percent were found negative for the presence of *E. coli* O157:H7, *Salmonella*, or *Shigella*. The final data analysis in addition to other data sources will be used to help focus Agency efforts toward research and risk assessment needs; industry training needs; providing advice to industry on best practices that have been instrumental in minimizing microbial contamination; and emphasizing the importance of implementing and following good manufacturing and good agricultural practices.

This 1000 sample imported produce survey focused on eight imported products: loose-leaf lettuce, cantaloupe, celery, strawberries, scallions or green onions, parsley, cilantro and broccoli. These commodities were analyzed for *Salmonella, Shigella*, and *E.coli* O157:H7. The criteria used for selection of these commodities were based on epidemiological outbreak data, such as involvement in outbreak; attributes of the product, or structure, such as leafy; growing conditions, such as grown near the ground; processing and consumption data, as in normally cooked or cleaned; and the volume of product imported.

FDA is focusing greater efforts on preventing contamination by increasing education and outreach efforts to promote good agricultural practices—GAPs, and good manufacturing practices—GMPs.

Furthermore, FDA developed with the United States Department of Agriculture—USDA, and in consultation with industry and other stakeholders, a guide *"Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables*." This guide details a broad approach to minimize microbial contamination of produce through the control of water, manure, worker health and hygiene, field and facility sanitation and transportation of produce.

In addition, FDA established criteria for assessing food safety systems of individual countries by evaluating data from FDA and USDA import information systems on fresh and frozen produce shipments by tonnage, FDA Import Alerts, and known foodborne illness outbreaks. Criteria for priority products are based on ex-

pected eating patterns, such as fresh or cooked; and whether the produce has a protective mechanism, such as skin or rind, that is normally not eaten. Based on these criteria, FDA separated produce into three tiers, in order of priority. The first tier includes all minimally processed produce eaten raw with no protective rind or skin. This tier includes most produce growing in or close to the soil. The second tier includes most tree-grown fruit. And the third tier is produce that is normally cooked before ingestion and those with a protective skin. Based on these criteria, FDA generated a list of countries with a listing of key exports: Mexico, Canada, Chile, Guatemala, the Netherlands, New Zealand, Honduras, Costa Rica, Peru, Dominican Republic, Israel, Spain, and Nicaragua. For food safety evaluations, training and technical cooperation, FDA focused on those countries that have gaps in their food safety system and require training and technical assistance.

Another improvement included increasing inspections of high risk imported products that are susceptible to pathogen contamination. These high risk imported products included ready-to-eat products such as fresh fruit and vegetables and cheeses; heat and serve products, seafood products such as mahi mahi, tuna, and swordfish); low acid canned and acidified food (canned vegetables, pet foods, sardines, barbeque sauces, and salsas) and infant formula.

I would like to provide you with a table that lists the foreign foods inspections FDA accomplished in fiscal year 1999.

[The information follows:]

FDA FOREIGN FOODS INSPECTIONS, FISCAL YEAR 1999

Country	Product	Date
Mexico (6)	Cheese	2/99 thru 8/99
France (5)	Cheese	2/99 thru 8/99
Canada (1)	Cheese	2/99 thru 8/99
Germany (1)	Cheese	2/99 thru 8/99
El Salvador (1)	Cheese	2/99 thru 8/99
Singapore (1)	Cheese	2/99 thru 8/99
Ecuador (11)	Seafood	6/99
Taiwan (9)	Seafood	7/99
Philippines (9)	Seafood	5/99
Vietnam (9)	Seafood	4/99
Equador (5)	Low Acid Canned Food	4/99
Brazil (6)	Low Acid Canned Food	6/99 thru 7/99
Canada (9)	Low Acid Canned Food	8/99
Malaysia (1)	Low Acid Canned Food	3/99 thru 7/99
Philippines (1)	Low Acid Canned Food	8/99
Indonesia (1)	Low Acid Canned Food	5/99 thru 6/99
India (1)	Low Acid Canned Food	6/99 thru 8/99
Vietnam (1)	Low Acid Canned Food	4/99

Question. Commissioner Henney, you mention in your prepared statement that FDA and the U.S. Customs Service have developed an Imported Foods Action Plan to further enhance border surveillance. Would you please tell us more about this surveillance effort?

Answer. On October 27, 1999, FDA and the U.S. Customs Service submitted their joint report to the President that delineates action steps to target "bad actor" importers who violate regulations for importation of food into the United States, and work to subvert the system by moving unsafe food into the U.S. markets. There are several action areas for both FDA and U.S. Customs Service. The first of these is preventing distribution of imported unsafe food by requiring secured storage of products offered for entry by importers with a history of distribution prior to release, mis-declaration or substitution of product. The next is destroying imported food that poses a serious public health threat. This is followed by developing a regulation that would require the marking of shipping containers and/or papers of imported food that is refused admission for safety reasons. Another action item is proposing regulations to set standards for importers who use private laboratories for the collection and analysis of samples of imported food for the purpose of gaining entry into the United States. The next is increasing the amount of the bond posted by importers for imported foods when necessary to deter premature and illegal entry into the United States. And the last action item is enhancing enforcement against violations

of U.S. laws related to the importation of foods, including the imposition of civil monetary penalties.

We believe the full implementation of these action areas by both FDA and the U.S. Customs Service will provide greatly enhanced border surveillance of imported foods.

Question. What level of funding and FTEs are included in FDA budget request for fiscal year 2001 for the Egg Safety Action Plan, as compared to fiscal year 2000?

Answer. FDA's budget request for fiscal year 2000, included $30 million for the Food Safety Initiative. FDA did not specifically identify the Egg Safety Action Plan within the amount requested for FSI. However, egg safety is a part of the FSI. In fiscal year 2000, we do have egg safety activities included in the Egg Safety Action Plan, which was issued in December 1999. In particular, FDA held two egg safety public meetings one in Columbus, Ohio on March 30 and the second in Sacramento, California on April 6, 2000. Additionally, FDA is in the process of developing the proposed nationwide consistent standards for egg safety. Expenditures for these activities have been minimal.

The fiscal year 2001 FDA budget request includes $5 million and 17 FTE to begin implementation of the Egg Safety Action Plan. The funding will allow FDA to initiate an accelerated research program; hire staff to manage the egg safety program and train and evaluate federal, state, and industry officials in implementation of the standards. Additionally, FDA intends to propose nationwide consistent egg safety standards in fiscal year 2000, finalize these standards in fiscal year 2001, and implement the standards through state contracts in fiscal years 2002 through 2003. Adequate resources to fully implement this plan are crucial to the ability of FDA to meet the goal of reducing, by 50 percent, the rate of *Salmonella Enterditis* illness associated with eggs, by 2005.

Question. What success has PulseNet had in the past year in pinpointing the source of food borne illness outbreaks?

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Epidemiologic investigations linked several clusters of *Salmonella Munchen* to a common seed source used to produce sprouts. Thereafter PulseNet confirmed the epidemiology and helped to link other cases. This was part of the evidence used to foster the new regulations on testing sprouts

Public Health Laboratory Information System—PHILIS, and *Salmonella* Outbreak Detection Algorithm—SODA, detected the 70 cases of *Salmonella Newport* illness in 10 states. PulseNet was used to confirm the link. This information and additional information obtained by CDC implicated imported Mangoes as the source of the infection.

PulseNet supported the establishment of the connection between liver pate and cases of *Listeriosis* in a number of northeastern states while extricating other possible food items.

In ongoing cases, PFGE technology is being used to determine the potential link between recalled product and human illness and death.

Epidemiologists have used PulseNet to confirm links, and tie in other sporadic cases, that have been made with other standard epidemiology approaches. It has been useful in providing supporting evidence in identifying a common source of infection.

PulseNet linked *Salmonella* from ill persons in the USA with those found in imported dog treats made from pig ears. This finding highlighted the role that certain non-food items can play in foodborne illness and provided direction for FDA's surveillance activities.

The linkage established by PulseNet between lettuce and *Escherichia. coli* O157:H7 infections in elderly humans in two U.S. States helped identify the contaminated batches and hence prevent further illnesses.

Question. PulseNet is a collaborative project between CDC, FDA and USDA. What portion of the total costs of PulseNet are borne by FDA? What additional investments are required in PulseNet and what is FDA's financial responsibility to this project? What amount of funding is included in the fiscal year 2001 FDA budget re-

quest for PulseNet? How does this compare with fiscal year 2000? How does this compare with the total fiscal year 2001 cost of PulseNet?

Answer. Scientists from these agencies developed PulseNet technology and application to identify and correlate pathogenic strains using "genetic fingerprints" in food and clinical matrices which are used to identify the common source of foodborne illness outbreaks. Currently, CDC, FDA and USDA, working with 32 states, Los Angeles County and New York City, operate the network. In fiscal year 2000, we are expanding the network to 40 states. For the future, CDC is exploring improved technology to identify "genetic fingerprints".

The PulseNet system and database is financed, managed and maintained by CDC. CDC reports Pulsenet operation costs to be about $7 million. Of this $7 million, 70 percent is financed through federal funds. The balance is supplied by State and Local governments. Since its development in 1998, FDA's costs to support personnel, equipment and training have been approximately $400,000. There is no specific line item in FDA budget for PulseNet. However, we have included in the fiscal year 2001 request an increase of $800,000 and 1 FTE for PulseNet activities, under the Animal Drugs and Feeds portion of the Food Safety Initiative. The activities that the increase supports includes performing pulse field gel electrophoresis on animal isolates. The data on animal isolates is provided to CDC for entry into the PulseNet database to assist in the tracking of resistance in human and animal isolates. We estimate FDA's fiscal year 2001 PulseNet related costs approximately $300,000.

Question. What level of funding will FDA commit for fiscal year 2001 to complete the National Antimicrobial Resistance Monitoring System? What portion of the total cost of this system is being funded by FDA?

Answer. In fiscal year 2001 FDA has requested an increase of $5.4 million to complete the expansion of the National Antimicrobial Resistance Monitoring System—NARMS. FDA has funded approximately 90 percent of the total cost of NARMS.

Question: What funding is included in FDA fiscal year 2001 budget request for the Center for Food Safety and Technology? How does this compare with the funding provided for the Center in each of fiscal years 1998, 1999, and 2000?

Answer. FDA is providing the National Center for Food Safety and Technology with an increase of $1 million in fiscal year 2000 in FSI funding to expand the collaborative research in food safety for a total of $3 million. This includes the previous fiscal year 1998 and fiscal year 1999 FSI base funding of $2 million. In fiscal year 2001 FDA expects to continue to fund NCSFT at $3 million.

Question. What level of funding and full-time equivalent staff years is included in the fiscal year 2001 request for *Codex Alimentarius*? How does this compare with each of fiscal years 1999 and 2000?

Answer. The fiscal year 2001 budget request includes $1.8 million in support of Codex activities. This includes $1.7 million in salaries and support for almost 15 FTE, and $100,000 for travel.

In fiscal year 2000, FDA plans to spend $1.6 million in support of Codex activities. This includes $1.5 million in salaries and support for almost 14 FTE and $100,000 for travel.

The total amount spent by FDA in fiscal year 1999 in support of Codex activities was $1.4 million. This includes $1.3 million in salaries and support for 12 FTE and $100,000 for travel.

Question. For fiscal year 2000, the Congress provided funding of $250,000 for a cooperative research program related to molluscan shellfish? What level of funding is included in the fiscal year 2001 budget request for this research program? Please provide a description of the research being conducted through this program and achievements to date.

Answer. The ISSC has conducted a number of projects, with funds provided by FDA, focusing on *Vibrios*. In 1997, the ISSC funded a two-year project at Louisiana State University to study possible markers for virulent strains of *Vibrio vulnificus*. All of the capsule genes evaluated were eliminated as possible markers. Also in 1997, the ISSC funded a project at Texas A&M University to study the effects of rapid ice chilling on levels of *Vibrio vulnificus* and on oyster mortality. Rapid chilling of sacked shellstock was shown to significantly reduce *vulnificus* levels, with no increase in oyster mortality. In 1998, the ISSC funded a study conducted by the Pacific Coast Institute and the University of Washington to determine if temperature can be used to predict *Vibrio parahaemolyticus* levels in shellfish. A final report on this study is being prepared. Also in 1998, the ISSC funded a collaborative study with the ISSC, FDA, states, and NMFS, to gather data on levels of *Vibrios* in raw shellfish at retail outlets, and to create a regional and seasonal reference collection of *Vibrio vulnificus* strains. The report on the retail study is being finalized and the reference sample collection work is ongoing.

In addition, the ISSC has funded two assessments. The first, conducted in 1997 and 1998, was to determine whether the time-to-refrigeration controls adopted by the ISSC had been able to limit post-harvest growth of *Vibrio vulnificus*. No significant impact on *Vibrio* levels was discernable. The second assessment, funded in 1999, was an analysis by Research Triangle Institute of the economic impact of mandating post-harvest treatment of oysters. A final report is in preparation.

In fiscal year 2000, ISSC is using funds from FDA to conduct training for states in gene probe methodology used for monitoring shellfish growing areas for pathogenic *Vibrio parahaemolyticus*, and for collection by states of baseline data on total and pathogenic *Vibrio parahaemolyticus* levels in shellfish. These data are necessary to assist states in making decisions on growing area closures to prevent illnesses.

In fiscal year 2001, FDA plans to continue funding cooperative research programs related to molluscan shellfish at the fiscal year 2000 level of $250,000.

Question. Please provide the Committee with an update on FDA's education program on the consumption of raw shellfish.

Answer. In fiscal year 2000, FDA provided $200,000 to the interstate Shellfish Sanitation Conference—ISSC, to educate consumers on the risks to certain individuals associated with *Vibrio vulnificus* and the consumption of raw molluscan shellfish. In April 1999, the ISSC published a final report on their *Vibrio vulnificus* education campaign, which was targeted towards high-risk consumers through their health care providers. In partnership with five states, ISSC distributed over 16,000 fact sheets and almost 29,000 patient education kits. The ISSC also surveyed the patients and health care providers who received the information. Both groups reported that the materials had increased their awareness of the risk of *Vibrio vulnificus*, and a majority of the high-risk patients who completed the survey said that they intended to stop eating raw shellfish.

In addition, FDA's Food Safety Initiative is focusing on educating consumers about high-risk foods, including raw shellfish. In 1999 the theme for National Food Safety Education Month was "Cook It Safely," and the FSI Education Staff added instructions on the safe preparation of seafood—including shellfish—to the 1999 National Food Safety Education Month Consumer Education Planning Guide, a 43-page compendium of ideas for food safety education activities, reproducible education materials, and sample media materials prepared by FDA and USDA and distributed to 35,000 health educators at the state and local levels. In October 1999, a representative of the FSI Education Staff participated in an ISSC *Vibrio vulnificus* Education Workshop concerning means of targeting education programs to persons at high risk. As a result, the FSI Education Staff has drafted a patient guide to food safety that stresses the importance of avoidance of raw shellfish by high-risk individuals. This patient guide, which is currently in review, is a part of the ongoing initiative of the agency in collaboration with American Medical Association, Centers for Disease Control and Prevention, and the Department of Agriculture to improve physician education on food safety, and will be distributed through physicians' offices.

Question. In March of 1999, the FDA provided to the Subcommittee a detailed Food Safety Initiatives Activities Plan. Please update that plan to show the current fiscal year 2000 funding and FTE levels and those proposed for fiscal year 2001 by Food Safety activity.

Answer. We are happy to provide a table that reflects total Food Safety Initiative—FSI, funding by major food safety activity, and another that reflects FSI funding by program. We are also providing by June 30, 2000, under separate cover, a detailed breakout that includes specific projects within each activity category. This will include resource data in the millions and associated FTE.

[The information follows:]

TOTAL FOOD SAFETY INITIATIVE FUNDING BY CATEGORY

	Fscal year 2000 current est		Fiscal year 2001 increase		Fiscal year 2001 request	
	In dollars	FTE	In dollars	FTE	In dollars	FTE
Surveillance	$11.0	51	$5.4	4	$16.3	55
Coordination	7.9	76	0.0	0	7.9	76
Inspections	119.1	1,126	17.0	116	136.1	1,242
Education	8.6	67	.....	.....	8.6	67
Research & Risk Assessment	40.6	278	7.6	11	48.2	289

TOTAL FOOD SAFETY INITIATIVE FUNDING BY CATEGORY—Continued

	Fscal year 2000 current est		Fiscal year 2001 increase		Fiscal year 2001 request	
	In dollars	FTE	In dollars	FTE	In dollars	FTE
Total	187.2	1,598	30.0	131	217.2	1,729

Question. In fiscal year 1997, FDA was spending $109.3 million for Food Safety initiatives. In the past year, FDA has received an additional $79 million for its Food Safety initiatives. How has food safety been improved as a result of the additional funding provided?

Answer. On March 17, CDC reported a 20 percent reduction in overall foodborne illnesses associated with pathogens through their active surveillance network—Foodnet. The Centers for Disease Control—CDC, credited the federal, state and industry food safety partnership activities, such as Fight Bac!; HACCP and Good Agriculture Practices as major contributors to this public health improvement. CDC also reiterated the need to continue to make similar strides in prevention, improved food safety systems and outbreak response.

Additionally, the overall picture of trends for food safety knowledge and practices that emerges from research is quite encouraging. Between 1993 and 1998, the public's food safety practices, both the consumption of risky foods and food handling behaviors in home kitchens, show dramatic improvement. For example, for the population as a whole, the incidence of eating pink hamburger is down 33 percent and the incidence of eating raw oysters or clams is down 39 percent. The safety of reported hand-washing and cutting board practices has also improved markedly. The improvement is particularly strong for handling meat or chicken, which improved 74 percent compared to a 27 percent improvement for fish. Knowledge levels about microbial food pathogens increased, along with rising perceptions of the possible risk of getting foodborne illness.

That is not to say that there are no consumer education issues to be addressed. There are obvious gaps in consumer knowledge, attitudes and practices related to food safety. For example, although awareness of salmonella has increased most consumers still do not handle eggs very carefully and they are more likely to consume undercooked eggs or foods containing raw eggs than any other risky food. Most consumes have never heard of *Listeria* or *Campylobacter*, which are at least as prevalent in the food supply as the more well known pathogens, *Salmonella* or *E. Coli.*

The Food Safety Initiative has provided necessary resources for FDA to undertake the enormous challenge of foodborne illness. Even more is expected of this Agency as its responsibility encompasses a broader array of regulated products and potential hazards in foods.

Question. Commissioner Henney, you indicate in your prepared statement that the fiscal year 2001 budget proposed to accelerate the process of generic drug review. How specifically will the process be accelerated? Please give current review times as opposed to those that will be achieved with the additional resources proposed.

Answer. With additional resources FDA expects to accelerate the processing time for generic drug applications by improving its IT infrastructure which will increase the number of electronic submissions and reviews. An increase in the generic drug science base will also improve our processing time. Funding is needed for research to support the development of scientifically rigorous bioequivalence testing methodologies for non-systemically absorbed drug products. The stronger scientific support of these approvals, the more likely it will be that we can successfully meet innovator challenges.

Approval times reflect both time with the Agency reviewing applications as well as time with the sponsor or applicant responding to deficiencies noted by FDA reviewers. The time spent in FDA is measured by "review cycles." A cycle starts when an application is filed by FDA and ends when the Agency issues an "action" letter. Generally, these letters communicate to the sponsor that their application is approved or not. The majority of actions on an original Abbreviated New Drug Application (ANDA) are disapprovals. If not approved, the sponsor or applicant is provided with the reasons why and has an opportunity to submit information needed to address all of these deficiencies. When this information is received, a new cycle begins; often, the next action is another disapproval, due to inadequate information in the submission. For fiscal year 1999, the average ANDA took 2.4 review cycles to reach approval, a decrease from previous years' number of cycles of 2.7 in fiscal

year 1998 and 2.9 in fiscal year 1997. The time to reach approval has been decreasing as well, with the average time in fiscal year 1999 being 17.3 months, down from 18.7 months in 1998 and 19.6 months in 1997.

For fiscal year 1999, the Office of Generic Drugs does not expect to meet the original goal of reviewing 60 percent of the original, fileable applications in the statutory time frame. We expect to have acted upon 40 percent of the original applications in fiscal year 1999. Final performance data for the fiscal year 1999 cohort will not be available until April of 2000. The goal for fiscal year 2000 is 45 percent. The additional funding request for fiscal year 2001 will help us meet 50 percent within statutory timeframes.

For fiscal year 2000, the Committee approved the Administration's request to provide an additional $28 million and 141 FTE staffing for premarket application review. The Committee indicated in its report that it was approving the following increases requested in the budget: $11.4 million for foods (+51 FTEs); $2.4 million for human drugs (+13 FTEs); $4 million for biologics (+16 FTEs); $1.6 million for animal drugs (+14 FTEs); $7 million for devices (+45 FTEs); and $1.6 million for NCTR (+2 FTEs). This was on top of the following base appropriations and staffing levels for premarket review, as follows: $16.310 million and 134 FTEs for foods; $162.813 million and 1,261 FTEs for human drugs; $57.263 million and 410 FTEs for biologics; $11.546 million and 115 FTEs for animal drugs; $48.5 million and 477 FTEs for medical devices.

Question. Are these premarket application review funding and staffing levels being achieved for fiscal year 2000? If not, please indicate what specific funding and staffing levels are being changed and explain why. Also, please provide the fiscal year 2001 comparable funding and staffing levels.

Answer. FDA's total premarket review funding and staffing levels are being achieved for fiscal year 2000. The base resources referenced constitute those funds devoted solely to the review of an application. However, the application review process is entirely dependent on several activities that allow Agency to process and review an application. The areas historically included in the premarket review area include the review of an application, premarket research, premarket outreach and coordination, premarket inspections. These activities reinforce FDA's role of monitoring the industry and providing the consumer with the best assurances possible that the industry is meeting its responsibility. This strategy is designed to ensure that safety is built into the product rather than to check for safety after the product is on the market. Premarket review activities implement this strategy by ensuring that the premarket evaluations of drugs and medical devices are effective and timely, and the safety reviews of food and drug components are conducted to determine if they pose hazards in light of new scientific evidence and techniques. Agency staff actively work with manufacturers to identify critical control points and to develop good manufacturing practices. FDA is providing a table depicting total premarket review activity estimates through fiscal year 2001. The table provides data from fiscal year 1999 through fiscal year 2001 including the fiscal year 2000 mark, the effects of the recission, the PDUFA reallocation and the increases for fiscal year 2001. Additionally, the agency is providing definitions of each of the pieces which make up premarket review.

[The information follows]

PREMARKET REVIEW

[Dollars in thousands]

	Fiscal year 1999 actuals		Fiscal year 2000 Inc.		Fiscal year 2000		Fiscal year 2000 recission		Fiscal year 2000 PDUFA reallocation		Fiscal year 2001 Inc.		Fiscal year 2001 President's budget	
	Amount	FTE	Amouint	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE
FOODS	$25,196	207	$11,400	51	$36,596	258	($840)	.....	$1,653	.....	$1,232	5	$38,641	263
HUMAN DRUGS	212,902	1,768	27,277	23	240,179	1,791	(136)	.....	(4,434)	.....	4,495	3	240,104	1,794
BIOLOGICS	96,187	716	5,869	15	102,056	731	(124)	.....	1,322	.....	8,778	30	112,032	761
ANIMAL DRUGS & FEEDS	18,522	178	500	115	19,022	293	(54)	.....	300	.....	3,936	9	23,204	302
DEVICES	57,358	595	7,00	477	64,358	1,072	(164)	.....	212	.....	7,708	14	72,849	1,086
NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH	14,815	97	1,60	.....	16,415	97	(235)	.....	.....	.....	444	2	16,624	99

PREMARKET REVIEW ACTIVITIES

Headings	Definition, examples
Premarket Review	All resources involved in the premarket review process, i.e. application review, notices, petitions, sample collections, sample analysis and method validations, premarket regulation writing and policy decision making. Product approval activities, e.g., ANDAs, colors, food additives.
Premarket Applied Research	Laboratory research to support premarket approval and activities. Includes Methods development for testing and non-testing purposes, and research to develop solutions for specific regulatory problems. Should include regulatory research, but exclude premarket methods development which should be included under premarket review. Excludes routine product testing, quality control, mapping, collection of general purpose statistics, experimental production, and training of scientific and technical personnel. Includes domestic and foreign standards development and recognition and international harmonization-related research activities.
Premarket Outreach/Coordination: Domestic.	Includes all consumer information, public affairs, legislative affairs, policy, meetings, conferences, media interviews, small business education and liaison activities. Premarket-related outreach activities includes manufacturers assistance and government, medical, and consumer liaison efforts.
Premarket Outreach/Coordination: Foreign.	All foreign non-inspection trips such as ICH, MRA and conferences. International Harmonization activities. Premarket-related outreach activities includes manufacturers assistance and government, medical, and consumer liaison efforts. This category includes all foreign travel that does not result in a written inspection report.
Premarket Inspections: Domestic	Physical inspection of regulated establishments, blood banks, manufacturers, etc. Investigations by field, non OCI personnel, trace backs, trace forwards. Includes domestic travel for inspection purposes. Includes sample collections.
Premarket Inspections: Foreign	Physical inspections of foreign establishments may include public health and trade issues. Includes foreign travel for inspection purposes. Should include all foreign trips for which an inspection report is written. Trips for GAP/GMP equivalence are contained in outreach.

Question. Included in the $11.4 million increases provided by the Congress for premarket application review for the foods program for fiscal year 1999 is an additional $5,400,000 for the direct additive process. Is this funding level being achieved? If not, why?

Answer. Yes, the additional $5.4 million for the direct food additive petition review process has been targeted to that program in the Center for Food Safety and Applied Nutrition. Since passage of the fiscal year 2000 appropriations bill, the Center has begun the process of bringing on additional scientists as petition reviewers. To help improve productivity during the time it takes to hire and thoroughly train reviewers, we are also using some of the new resources to engage contractors to assist with some petition review tasks. Our performance in timeliness of petition review has been slowly improving in recent years; with the new resources, we expect to make significant further improvements in performance.

Question. For fiscal year 2000, funding of $6 million was provided to FDA to fully implement the food contact substances program. Is this funding being provided? If not, why? How much is included in the fiscal year 2001 request for the food contact substances program, funding and FTE as compared to fiscal year 2000?

Answer. Yes, the funding necessary to implement the food contact substance premarket notification program has been allocated to that program. Indeed, since the program became effective upon passage of the fiscal year 2000 appropriations bill, more than four dozen pending petitions for food contact substances have been converted to notifications, and more than a half dozen new notifications have been received. The first of these notifications became effective in early March, 120 days

after receipt. FDA expects to continue to fund this program at the same level of $6 million in fiscal year 2001 as in fiscal year 2000.

Question. For fiscal year 2000, the Committee indicated that at least $0.2 million and 2 new FTE positions were to be made available from the increase provided for animal drug premarket application review for the Center for Veterinary Medicine to review aquaculture drug submissions on a timely basis. What funding and staffing increase has been allocated to the Center for fiscal year 2000 for this purpose and what reductions will it yield in the amount of time required for the Center to review aquaculture drug submissions?

Answer. In recent years, the Center for Veterinary Medicine—CVM, has had a heavy backlog of Aquaculture submissions waiting for review. Of the two positions specifically targeted for Aquaculture reviews in fiscal year 2000, one has been filled and the other will be filled shortly. The full effect of the new hires will not be felt until fiscal year 2001 when the reviewers are fully trained. This fiscal year CVM has made substantial progress in reducing the backlog of Aquaculture submissions, with only fourteen out of the sixty-two Aquaculture applications overdue at the current time. We intend to meet our goals in Aquaculture in fiscal year 2001, which are based on an Aquaculture Drug Team composed of four members, and submissions which fall within currently projected levels in subsequent years.

Despite the challenges, definite progress is being made toward Aquaculture drug approvals. Coalitions from the public and private sectors are providing leveraging and are producing the needed investigational data for individual drugs. CVM is a willing participant in these partnerships and continues to look for new ways to support the continued growth of an Aquaculture industry that produces safe and healthy domestic and imported food products.

Question. Provide the 2001 staffing (FTE) and funding levels for generic drug review, as compared with those in each of fiscal years 1998, 1999, and 2000.

Answer. I would be happy to provide information that reflects fully supported FTE for the Generic Drugs Program, including resources for both the Center for Drug Evaluation and Research and the Office of Regulatory Affairs. A fully supported FTE includes salaries, benefits, and other support costs such as training, office space, travel, equipment and supplies.

[The information follows:]

GENERIC DRUG APPROVAL PROCESS

[Dollars in thousands]

Fiscal year	FTE	Amount
1995	396	$42,643
1996	327	33,634
1997	351	34,183
1998	345	34,898
1999	362	36,049
2000 [1]	372	37,873

[1] Estimate. Fiscal year 2000 data is not yet available that will allow the Agency to project year end data, but the Agency expects to expend an additional $1.824 million for the Office of Generic Drugs—the $1.9 million appropriation minus a $76,000 reduction taken as a result of the fiscal year 2000 Budget Recission.

Question. Commissioner Henney, you indicate in your prepared statement that "FDA will use new funding to develop a focused effort in the rapidly evolving field of food biotechnology". What is planned and what level of "new" funding is requested for fiscal year 2001, as compared with fiscal year 2000, for this new effort?

Answer. For fiscal year 2001, the Center for Food Safety and Applied Nutrition—CFSAN, is requesting an additional $1 million to enhance our research efforts and our scientific expertise in the area of food biotechnology, with a particular focus on areas that will directly support our regulatory programs. We are seeking both to increase our in-house research and testing capabilities in this area, as well as to leverage our resources with other institutions with relevant expertise, such as the Joint Institute for Food Safety and Applied Nutrition—JIFSAN. The major focus of our efforts will be on developing and improving techniques for assessing the safety of bioengineered foods and feeds, for example, methods for predicting allergenicity of proteins, and new alternatives to animal models for determining safety. There is also a pressing need for a better knowledge of factors that influence the perception of risks associated with genetically engineered foods and feeds, and thus we intend to work with other institutions with expertise in this area to develop methods for

the effective communication of risks associated with these products. In fiscal year 2000, CFSAN expects to spend approximately $700,000 on in the area of food biotechnology.

FDA's Center for Veterinary Medicine—CVM, in fiscal year 2000 plans to spend approximately $120,000 in the area of food biotechnology. The activities include evaluating safety of biotech foods used in animal feeds and some outreach activities associated with biotech foods used in animal feeds. We are finding that the number of biotech related submissions is increasing.

In fiscal year 2001, the Center for Veterinary Medicine is requesting an increase of $300,000 to be used for evaluating safety of biotech foods used in animal feeds.

FDA's National Center for Toxicological Research has no funding in fiscal year 2000 for biotechnology research. In collaboration with CFSAN and CVM, in fiscal year 2001, NCTR is requesting $500,000 for research related to food derived from genetically modified organisms.

CLINICAL PHARMACOLOGY PROGRAM

Question. For each of fiscal years 1998, 1999, and 2000 please indicate the total funding level, by grantee, provided for the Clinical Pharmacology Program.

Answer. I would be happy to provide the requested funding level by grantee of the Clinical Pharmacology Program for fiscal years 1998, 1999 and 2000.

[The information follows:]

CLINICAL PHARMACOLOGY GRANTS

[In thousands of dollars]

Grantee	Fiscal year 1998 actuals	Fiscal year 1999 actuals	Fiscal year 2000 estimate	Totals
Mayo Foundation	60	.....	.....	60
University of Illinois	225	369	.....	594
Meharry Medical College	.....	131	.....	131
Indiana University	.....	.....	460	460
Totals	285	500	460	.....

Question. How much is included in the fiscal year 2001 budget request for the Clinical Pharmacology Program?

Answer. FDA plans to expend $500,000 in fiscal year 2001 for clinical pharmacology grants awarded competitively.

Question. Please provide a description of the Clinical Pharmacology Program.

Answer. The Clinical Pharmacology Program provides financial assistance to investigators who conduct research as part of their clinical pharmacology training program. This program is funded through cooperative agreements. I will be happy to provide a more specific description of the Clinical Pharmacology Program for the record.

[The information follows:]

Specific goals important to the public health include: Advancing scientific knowledge of mechanisms of *in vitro/in vivo* metabolism/drug interactions; characterization of individual exposure-response to drugs; and, the effect of age, gender, and race on drug disposition and exposure response relationships.

Projects that fulfill any one or a combination of the following specific objectives are considered for funding:

—Mechanistic understanding of drug-drug, drug-food, and drug-non-prescription product interactions;

—Research to develop and evaluate biomarkers, and noninvasive imaging as a way to assess safety and efficacy;

—Computer modeling and clinical trial simulations: evaluation of clinical study designs to confirm drug safety and efficacy; evaluation of techniques in gender, age, race, and liver/kidney function-specific differences in drug response and drug interactions;

—Development of electronic databases to capture key metabolism/drug interaction data and provide a linkage to an expert system to assist the New Drug Application (NDA) review; and

—Research to define the clinical pharmacology characteristics of complex drug substances to assure proper use, define the biopharmaceutic characteristics of

the active ingredients, and develop ways to establish equivalency of dosage forms to establish standards.

WASTE-MANAGEMENT AND RESEARCH CONSORTIUM

Question. For fiscal year 2000, $100,000 was provided for the Waste-Management and Research Consortium, as proposed by the House. What level of funding is included in the fiscal year 2001 budget request for this consortium.

Answer. FDA expects to provide approximately $100,000 for the Waste-Management and Research Consortium in fiscal year 2001.

Question. What is the purpose of the Waste-Management and Research Consortium? What are its benefits to FDA and who are the participants in this program?

Answer. The purpose of this program is to provide talented college students with a chance to work on real world environmental or health related problems. FDA presented a problem—"Find a way to detect contaminated fresh produce quickly"—that the consortium posted on its website. Five colleges responded to the challenge and are competing to solve the problem. In April 2000, 10–12 judges drawn from a pool of experts from FDA, the California State Department of Health, academia, and an expert from Waste-Management in Manure Research will evaluate the solutions presented. If a viable solution is found, FDA will begin implementing the solution to inspect imported fresh fruit for contaminants.

SEAFOOD EQUIVALENCY AGREEMENTS

Last year, FDA indicated that it is working to improve the safety and sanitation of imported seafood by establishing equivalency agreements to ensure that exporting countries have seafood inspection systems equivalent to those of the U.S. Further, FDA indicated it was in the process of evaluating submissions for equivalency agreements from numerous countries and the European Union and had plans to visit six countries, including Australia, Canada, Chile, Iceland, New Zealand, and the European Union, before the end of the year.

Question. What is the status of FDA's efforts with regard to seafood equivalency agreements?

Answer. Thirty-four countries have made at least initial requests for equivalence determinations for seafood products. The determination process involves at least six significant steps. In the first step, FDA receives an initial inquiry from a country and, in response, provides a package of materials designed to help the country prepare a side-by-side comparison of regulatory systems. Many countries realize at this point that they need to upgrade their systems and they essentially allow their request for an equivalence determination to become dormant. FDA regards the determination process for 26 of the 34 countries that made initial inquiries to be in a dormant stage. The second step involves a full "paper" comparison of all relevant aspects of a country's food safety system. This is a rigorous and time-consuming process involving major exchanges of material and lengthy analysis. The third step includes one or more site visits to verify the findings of the paper review.

If FDA makes a preliminary determination of equivalence based on the paper review and on-site visits, the Agency will then progress to the fourth step, publishing preliminary determination for comment in the Federal Register. In the fifth step, a final determination is made after review of any comments received. The development of an equivalence agreement, if any, could then occur as the sixth and final step.

The countries that have advanced the furthest in the process are Canada, New Zealand, Australia, Norway, and Japan. All have had at least first site visits and extensive, although not fully complete, paper reviews. A second site visit is scheduled for Canada later this year to review recent changes in the Canadian regulatory system. A preliminary determination may be possible for Canada this year, as well as preliminary determinations for some of the others, depending on outcomes of their reviews.

Question. Did FDA complete the six country visits in 1999? If so, what has been the results of those visits? If not, why?

Answer. In 1999, the Agency planned to visit Canada twice, Chile, Japan, Iceland, and Thailand. FDA visited Canada once, for an audit of Canadian regulatory laboratories, but delayed an inspection audit until this year at the request of the Canadians. The site visit to Japan was made, and may be sufficient to enable FDA to make a preliminary determination about Japan without need for further information or visits. The results are still being reviewed. The other site visits were not conducted due to a number of outstanding questions related to the paper review. FDA is waiting to receive answers to these questions before performing the site visits.

Question. Has FDA established criteria for determining whether another country's food safety system is equivalent to the U.S. system? If not, why? Are these criteria specific to seafood?

Answer. In June 1997, FDA published draft equivalence criteria for all foods regulated by FDA. The Agency obtained comment on the draft criteria from consumer advocacy organizations, industry trade associations, and foreign countries. FDA is in the process of developing final equivalence criteria that take into account the comments received. Completion of the equivalency criteria is a priority for CFSAN in fiscal year 2000.

Question. Where will the FDA target overseas compliance visits this year?

Answer. In fiscal year 1999, FDA inspected seafood processing plants for compliance with U.S. safety regulations in Ecuador, Taiwan, Vietnam, and the Philippines. A trip to Indonesia was canceled due to political unrest in that country. For fiscal year 2000, the Agency has planned compliance inspections in Costa Rica—which has already been completed, Thailand, China, Indonesia, Mexico, Panama, India, and South Africa. Non-seafood overseas compliance visits will be targeted toward manufacturers of low-acid canned foods, one of FDA's designated "high risk" areas.

Question. What is the current level of resources for this effort? Are additional resources needed?

Answer. FDA plans to spend approximately $4 million on all overseas compliance visits in fiscal year 2000. Our fiscal year 2000 plan for overseas compliance visits was drafted using available resource levels. Additional resources would allow FDA to increase the number of inspections.

TRANSFER OF VOLUNTARY SEAFOOD INSPECTION PROGRAM

Question. In a letter to me, the National Fisheries Institute has indicated its opposition to transferring the Department of Commerce Voluntary Seafood Inspection Program to the FDA. It feels it is inappropriate to combine the Department of Commerce voluntary marketing and quality assurance program with FDA's mandatory seafood HACCP program. It indicates that the National Academy of Sciences and the Department of Health and Human Services, in response to a 1992 General Accounting Office report, have warned against combining regulatory food safety programs with industry-funded marketing and promotional programs like Commerce's voluntary inspection service. Do you agree that combining these programs might undermine the objectivity and credibility of FDA's seafood HACCP program? If not, why?

Answer. FDA believes that safeguards could be put in place to eliminate a potential conflict of interest that could undermine the objectivity and credibility of the current regulatory seafood HACCP program. Transferring the program as a Performance Based Organization—PBO, would help. A PBO is a quasi-public organization that is located in a federal agency but operated like a business in that it is to be financially self sustaining. While FDA would oversee the policy direction of the PBO, no agency funds would be used to finance the organization. While the legislation would authorize PBO inspectors to perform regulatory inspections, FDA would adopt precautions to ensure the objectivity and credibility of the inspection. For instance, FDA could adopt a policy of utilizing PBO inspectors to perform regulatory inspections only for seafood firms that are not also paying customers of the PBO. In the end, FDA can always utilize its regulatory inspection force as a check against the PBO inspection force to ensure that the public health is protected.

Question. What benefits does the FDA believe would be obtained by transferring the National Marine Fisheries Service voluntary seafood inspection program to the FDA?

Answer. Transfer of the NMFS/SIP program to FDA will place all Federal seafood inspection authorities within one Federal agency, enabling increased efficiency and consistency of standards and implementation of FDA seafood requirements. It would establish FDA as the sole seafood agency with one HACCP standard, thereby promoting efficiency, effectiveness, and consistency of seafood regulation. This centralization will help both domestically and internationally. FDA would be able to train the voluntary inspectors in the regulatory HACCP standard along with the regulatory inspectors. Consequently, FDA may be able to contract with the voluntary inspectors to perform certain regulatory inspections or, in certain instances, to count a voluntary inspection as a regulatory inspection.

Question. I understand the proposal would allow for voluntary inspectors to be "cross-deputized" as mandatory HACCP inspectors. Is this correct? Does the FDA need additional HACCP inspectors? If so, why doesn't the Administration's budget request simply reflect a need to hire additional HACCP inspectors?

Answer. The legislative proposal does allow FDA to utilize the PBO inspectors to perform regulatory inspections under the Federal Food, Drug and Cosmetic Act. Such cross utilization could help to meet the agency=s goal of annual HACCP inspections for seafood establishments.

ORPHAN DRUGS

Question. FDA policy already rewards an "improved" orphan drug by allowing it on the market immediately alongside the pioneer orphan drug, thus cutting short the pioneer's exclusivity. Is the grant of an additional reward on top of that, i.e., seven years of exclusivity for the improved drug, warranted? If so, why? What does it add to the incentive to develop improved versions of orphan drugs?

Answer. Under the Orphan Drug Act, if a drug is designated for an orphan indication and is approved for that indication, it will receive seven years of exclusivity. During this seven-year period, the agency will not approve or license the same drug from another sponsor. However, the first sponsor's exclusivity is not a barrier to approval of a product that is not the same drug. If a subsequent sponsor demonstrates that its drug is for the same indication, and is not the same drug as the drug with exclusivity, either because it is chemically not the same, as defined in the orphan drug regulations or is clinically superior the term you use is "improved", the second product will be approved. If the second drug was designated for the orphan indication, it will also receive orphan exclusivity. Hence, the second drug is entitled to the full seven years of orphan exclusivity because it is not the same drug as the product that already received exclusivity. The statute does not limit the drug's eligible for exclusivity on the basis of indication, chemistry, or clinical behavior.

The current approach, in which improved forms of human growth hormone for human growth hormone deficiency and interferon-beta for multiple sclerosis have been granted exclusivity, provides substantial incentive for research and investment.

Question. In the case of an "improved" orphan, why does FDA insist on protecting the chemical entity itself for seven years instead of limiting protection to the improvement, e.g., a convenient long-acting formulation, or oral version that replaced an injection? FDA seems to be making orphan drug exclusivity even broader than patent protection. Is that necessary?

Answer. The Orphan Drug Act grants seven years of exclusivity to certain approved drugs for orphan indications. The analysis of whether approval of a new drug is blocked by orphan exclusivity turns on whether the two drugs are the same. Generally, an applicant wishing to establish that its product is not the same as one with orphan exclusivity must demonstrate that its drug is either chemically different, or clinically superior to the product with exclusivity. In that case, the first product's exclusivity is not a bar to the approval of the second product. If the subsequent product received an orphan designation, it will be entitled to its own seven year period of orphan exclusivity upon approval because it is not the same drug. That exclusivity will protect the second drug against competition from any drug that is chemically and clinically the same. The statute does not limit the scope of orphan exclusivity for some drugs only to certain characteristics of the drug.

It is not clear how this protection is broader than patent protection. Patents run for a period of 20 years from date of application and, with respect to those applicable to drug products, can vary in coverage from very broad, such as those patents that cover a drug substance, to narrow, such as patents that cover a specific dosing regimen for a single indication or a single formulation.

Please note that, in the rare case when there are at least three products that are chemically the same for the same orphan indication, different factors may be at issue. If the orphan exclusivity for the first of the products has expired, the new drug, if it is regulated under section 505 of the act, can also obtain approval despite the second product's exclusivity if it can demonstrate that it meets the criteria in 505(j) of the act as a duplicate to the product whose exclusivity has expired. The new drug would be approved because it is not the same drug as the drug that still has orphan exclusivity, but it would not receive its own exclusivity because the drug—albeit from a different sponsor—has already be granted exclusivity, which has expired.

Question. What is the rationale for allowing only drugs that qualify for short cut approvals to enter into competition with an older version of an orphan drug? Why prevent biologic drugs from competing, as long as they do not attempt to copy the improvement that resulted in approval of the subsequent product?

Answer. Any analysis of whether a drug can be approved in the face of existing orphan drug exclusivity turns upon whether the drug is the same chemically and clinically as the drug with exclusivity. When there are only two drugs at issue, the

sponsor of the second drug must demonstrate that its product is chemically not the same as, or clinically superior to the product with exclusivity in order to obtain approval, and its own exclusivity. When there are two drugs that are chemically the same, but each has been granted orphan exclusivity because of a finding of clinical superiority for the more recently approved product, the issues for approval of a third product are somewhat different. Once the first product's exclusivity has expired, the inquiry is still whether a proposed drug is the same as the drug that still has orphan exclusivity. The new drug can show that it is clinically superior to the drug that still has exclusivity or, in the alternative, it can demonstrate that it is not the same as the drug that still has exclusivity by showing it is the same as the drug whose exclusivity has expired.

The "short cut" approval process you refer to is the abbreviated new drug application program enacted by Congress in the Drug Price Competition and Patent Term Restoration Act of 1984 to provide a streamlined means for approving generic drugs that can be expected to be as safe and effective as the innovator product. FDA has determined that if the sponsor of a new product can establish that its product meets the approval criteria under section 505(j) of the Federal Food, Drug, and Cosmetic Act for a duplicate to the product whose exclusivity has expired, it will be approved because it is not the same as the drug that still has orphan exclusivity. There are scientific and technical barriers to demonstrating that two biological products from different manufacturers can be expected to have the same safety and effectiveness measures. There currently is no process for approving generic versions of biological products regulated under section 351 of the Public Health Service Act. The agency is reviewing its approach to orphan issues as they apply to biological products.

Question. In enacting the Food and Drug Administration Modernization Act in 1997, Congress specifically included a section mandating greater harmonization between drug and biologic regulation (noting that the provision was not intended as a mandate for "generic" biologics). How can FDA's orphan drug competition policy be reconciled with this mandate?

Answer. Under FDAMA section 123(f), the agency continues to work to minimize differences in the review and approval of products required to have biologics licenses and products required to have approved new drug applications. The issues raised in certain orphan exclusivity situations relate to establishing whether two orphan products from different sponsors can be expected to have the same safety and effectiveness. The generic drug approval process at section 505(j) of the act is an appropriate means for making this determination for drugs approved under section 505 of the act. However, the composition and characteristics of biologic products regulated under 351 of the Public Health Service Act pose different scientific and technical challenges. The agency currently does not have a means for making a determination that two biological products from different sponsors can be expected to have the same safety and effectiveness.

ASSESSING THE QUALITY OF DIETARY SUPPLEMENTS

Question. Has a study been done to assess the overall quality of dietary supplements that are being sold in the United States?

Answer. No, FDA has not conducted any systematic evaluation of the overall quality of dietary supplements in the marketplace

Question. What kinds of scientific studies should be performed on dietary supplement products that are on the shelf in order to assess their quality?

Answer. FDA believes that scientific studies, to assess quality of dietary supplements that are on the shelf, should verify that dietary supplement products offered for sale contain the ingredients that are stated on the label at the strength and purity claimed. Other quality factors appropriate for study include those that assure the dissolution, bioavailability, and shelf-life or stability of dietary supplement products.

A "market basket" evaluation should be performed of one or more botanical dietary supplements that are used extensively by U.S. consumers. This evaluation would provide the information needed to conduct effective exposure evaluations for future risk assessments, to assess the distribution of formulations that are available commercially, and to identify the areas were FDA should be focusing its activities in botanicals in the future.

DIETARY SUPPLEMENTS

Question. Are you concerned about microbiological contamination of dietary supplements?

Answer. Although we are not aware of specific microbiological risks that are unique to dietary supplement ingredients or products, like conventional foods, many

dietary supplement ingredients are natural products and we would expect that some natural products would be at risk for contamination with microorganisms that may affect the quality of the product or that may present disease risks.

Question. Are pesticides, herbicides and fungicides a potential problem with dietary supplements?

Answer. Yes, like any food ingredient, dietary supplements may become exposed to, and be contaminated with, various pesticides, herbicides, and fungicides used during their growth, harvest, production, or in the manufacturing facility. Additionally, cultivated and wild-crafted herbs or botanicals may unintentionally come in contact with pesticides, herbicides, and fungicides, via adjacent treated fields.

Question. Is contamination with lead or other heavy metals from the soil a potential health problem?

Answer. Yes, as with all plant-derived foods, plant-derived dietary supplements may accumulate heavy metals that are present in the environment. It is also possible for manufacturing equipment to unintentionally contaminate food and dietary supplements with heavy metals during processing. Whether a given heavy metal in a dietary supplement presents a health risk to consumers depends on many factors, including the amount present.

Question. Can or should some of these studies be conducted by universities that have expertise and experience in that research area?

Answer. Yes, partnering with universities and other academic institutions enables FDA to leverage both its financial and scientific resources to the benefit of U.S. consumers. In the areas of methods development and validation relative to issues of identity, bioavailability, dissolution and disintegration, potency, shelf-life stability, and quantification of contaminates, studies can be conducted, not only by FDA, but also by universities, research institutions, and other government agencies. To facilitate this process, FDA is talking with United States Pharmacopoeia—USP, academic institutions, and other interested parties to develop guidelines for the needed research, and a process to facilitate communication and coordination among research groups and users of these data.

Question. Are you aware of the research on the quality of dietary supplements that is being done in the National Center for Natural Products Research at the University of Mississippi?

Answer. During the past year, CFSAN has had increased interaction with the National Center for Natural Products Research—or NCNPR, at the University of Mississippi, including a site visit by several of our top scientists. This increased interaction is due in part to FDA's recognition of the NCNPR as center for excellence in the study of botanicals used as dietary supplements. We have identified dietary supplement research as a critical area for the future and are actively pursuing ways to work closely with the University of Mississippi to enhance the Agency's science-base. In the past, we have experienced great benefit from a government/academic/industry consortium at the National Center for Food Safety and Technology—or NCFST, at the Illinois Institute of Technology. FDA considers participation in such collaborative endeavors to be a vitally important resource in carrying out our mission to ensure that U.S. consumers have confidence in the safety of the drugs, foods, and dietary supplements that they purchase.

Question. What scientific information is needed to help FDA determine if the dietary supplements on the market are safe?

Answer. The Dietary Supplement Strategy—a comprehensive Ten Year Plan, outlines the scientific information that the agency believes is needed to help FDA determine if the dietary supplements on the market are safe. For safety purposes, FDA considers dietary supplements as foods. We believe that scientific studies of the same quality and scientific rigor as those required of novel food ingredients are appropriate to dietary supplements. Data is needed to form a basis to permit a science-based risk assessment of chronic and acute risks to general, high-risk, and vulnerable populations.

A broad range of multidisciplinary research efforts is needed to evaluate the safety of marketed products, including dietary supplements. These efforts include the types of research needed to ensure the quality of marketed products; methods for improving the use of adverse event reports; basic toxicological profiles and dose response curves for ingredients and finished products; potential for adverse interactions among ingredients and identification of vulnerable populations; other clinical studies and evaluations that reflect actual use conditions; and consumer use patterns and interpretation of label information.

Question. Does FDA fiscal year 2001 request include any funds for to improve the quality of dietary supplements? If not, what funding would be needed to initiate this research effort?

Answer. Within the Foods Premarket initiative, our fiscal year 2001 budget request includes an increase of $200,000 for FDA to develop sound scientific data and expertise to support standards and guidance in evaluating the safety of dietary supplements. Our goal is to respond to 90 percent of notifications for dietary supplements containing new ingredients within 75 days.

Additionally, in fiscal year 2001, as part of the Foods Postmarket initiatives, FDA is requesting an increase of $2.5 million to enhance the adverse event reporting system, or AERS, for dietary supplements. With this increased funding, FDA would develop a system component to collect data on drug-dietary supplement interactions to provide a faster, more efficient way to evaluate adverse event reports, thus shortening the time needed for any responsible actions. The potential benefits for this enhancement are lives saved and improved public safety.

We estimate that we would need approximately $1 million to $1.5 million for FDA to approach a collaborative research project with a leading academic institution. This would allow FDA to initiate an analytical survey of currently marketed dietary supplement products to determine the level of health risk to the consumers of dietary supplements.

Question. Has FDA conducted, or is it conducting, the studies described in the report that are necessary to evaluate the effectiveness of this technology?

Answer. FDA has conducted an extensive review of the available information regarding the effectiveness of the technology. Based on this extensive review we have come to understand the infancy of the technology and how little is known about its potential for reducing illegal sales. Our investigation included a search of published and unpublished peer-reviewed scientific literature, searches of computerized data bases, and extensive discussions with experts in tobacco and alcohol control. We have interviewed all of the identified manufacturers of the devices, and requested any studies they had done prior to or after marketing their devices.

Unfortunately, only one controlled study of the efficacy of the devices has been initiated and the results of that study will not be available until late summer of this year. Even when the study results are available, the applicability to sales of tobacco to minors will be limited. The study has as its end-points reduction in deaths from alcohol-related car crashes, a surrogate measure for alcohol use by minors.

A definitive study of the utility of the devices to reduce sales of tobacco to youth would need to test not only the reliability of the machines, but how they are actually used in the retail setting. They can be easily circumvented by the clerk. On the other hand, the machines clearly can assist clerks in determining age eligibility once an ID card has been requested and inspected by the clerk. It is also possible that the mere presence of the machine within site of an under-age customer might deter some youths from even attempting to purchase tobacco. A well-controlled study of these effects is certainly warranted before many merchants go to the considerable expense of installing the devices.

REPORT ON AUTOMATED IDENTIFICATION SYSTEMS

Dr. Henney, in its report on the Agriculture Appropriations, the Committee directed FDA to evaluate the feasibility of equipping tobacco retailers with technology to verify a tobacco purchaser's age through the use of an automated verification system capable of "reading" the magnetic strip or bar code on a driver's license in which the name and age of the licensee is encoded. Among other things, the report is intended to address the effects of reducing illegal tobacco sales to minors and the effect on compliance through the use of automated identification systems. The report accompanying the conference agreement on the bill indicates that FDA is to submit this report within 180 days of the date of the bill's enactment into law—that is, by late April of this year.

Question. Does FDA plan to consult with states, such as New York, that have enacted legislation promoting the use of this technology, or with other states that are considering such legislation?

Answer. FDA has monitored New York's experience with the legislation. The law in New York went into effect on September 1, 1999, and was intended primarily to protect merchants from minors attempting to buy liquor with falsified identification cards. The Agency has learned that to date no merchants have attempted to use the application of the machines as an affirmative defense. If the US Supreme Court affirm's FDA's jurisdiction to regulate tobacco products, FDA plans to continue to monitor the situation in New York, as well as consult with states such as Ohio, Florida, and Massachusetts that are considering the technology.

Question. Does FDA agree, as a general matter, that the federal government should encourage the states to promote the use of technology that can ensure that

the identification presented by tobacco purchasers has not been falsified, so as to help prevent underage purchases of tobacco?

Answer. FDA has encouraged merchants to use the wide array of tools and business practices available to them to reduce illegal sales and has mentioned to interested retailers that scanners are one thing they may want to consider. Unfortunately, our research has shown that these devices possess a number of limitations. These limitations include cost; ease with which they can be bypassed; privacy issues; and lack of any credible, scientific evidence that the machines actually are effective in reducing illegal sales. As a result, FDA believes that it is important to not overstate the value that these products may provide in reducing illegal sales to minors.

FDA COUNTER-BIOTERRORISM ACTIVITIES

Question. FDA performance plan indicates that in responding to chemical and biological threats of bioterrorism, FDA's roles include development of new vaccines and drugs, safeguards for the food supply, and research for diagnosis and treatment of disease outbreaks. Would you please give us an update on FDA's efforts in each of these areas, the level of resources currently (i.e., fiscal year 2000) being devoted to each, and how the additional funding requested for fiscal year 2001 will strengthen each of these efforts.

Answer. FDA participates on an interagency group formed by the Department's Office of Emergency Preparedness—OEP, with the Department of Defense, Veterans Administration, the Centers for Disease Control and Prevention—CDC, and the National Institutes of Health—NIH to plan for responses in the event of a bioterrorist attack. FDA's counter bioterrorism initiative focuses on the priorities for creating and maintaining a stockpile of pharmaceuticals and other materials, as well as furthering research on detection, diagnosis, antibiotics, therapeutics and vaccines. Under Emergency Support Function #8, FDA is the lead DHHS agency for ensuring the safety of regulated foods, drugs, biologics, and medical devices. This includes preventing and detecting the importation of contaminated FDA regulated products. Therefore, FDA has the responsibility for responding to any incident involving a FDA regulated product.

In fiscal year 2000, the Center for Biologics Evaluation and Research, CBER, received $7.5 million one-time funding from the Department's Bioterrorism Vaccine Program Fund to begin the process of developing the necessary expertise and infrastructure to address regulatory activities related to the countering bioterrorism initiative. The one-time funding is being used to expedite the development and licensure process for improved vaccines for anthrax and smallpox, the associated immune globulin (VIG) products used to treat and prevent serious vaccinia infections brought on by the smallpox vaccine, and to continue on-going efforts to work with the interagency group on a variety of bioterrorism issues. The fiscal year 2001 request of $6.5 million for CBER is for the following proposed activities: developing necessary expertise regarding the agents identified in the President's Initiative; expanding efforts to test and produce DNA vaccines against the lethal factor and edema factor of anthrax and further develop an Ebola DNA vaccine; exploring the use of DNA vaccines for smallpox and the use of RNA vaccines against some of the encephalitis-causing alphaviruses; initiating or expanding programs on pathogenesis and mechanisms of immunity for a variety of pathogens; developing microarray technology to rapidly detect the presence of nucleic acids, oligonucleotides, and RNA fragments; improving monoclonal antibody therapies, new approaches in the use of biotherapeutics, animal and human derived immune globulins in the treatment of viral and bacterial diseases and in the area of emerging infectious diseases.

The Center for Devices and Radiological Health has continued to conduct bioterrorism-related activities in fiscal year 2000. We estimate that the medical device program will expend approximately $800,000 out of its base resources for bioterrorism activities in fiscal year 2000. The Devices program will collaborate with the Center for Disease Control—CDC, and the military to address domestic preparedness and responsiveness to chemical and biological threat agents, including review of reagents currently available to detect toxic organisms and development of procedures that State and local public health laboratories and the military will employ to diagnose suspected exposures to these chemical and biological agents. FDA will also review plans and protocol for a new diagnostic product sponsored by the Armed Forces Institute of Pathology. In addition, FDA will investigate the validity of products that claim to detect exposure to biothreat agents. This is a new intended use for many *in vitro* diagnostics (IVDs) that raises unique scientific and regulatory questions. FDA needs to evaluate the effectiveness of these products before they are commercially marketed with these claims. Finally, FDA will establish an internal

working group to develop a regulatory strategy, to support CDC's chemical-bioterrorism preparedness activities. This strategy is likely to require FDA to issue new guidances clarifying agency review of IVDs and may also require new rulemaking.

For the past several years, scientists in CDRH, have been researching the development of DNA tools for diagnostic devices. This technology has the potential to be very useful for the early identification of biothreat agents, diagnosis of emerging infectious diseases, possibly in the form of miniaturized diagnostic devices. Part of the $800,000 requested for the device program bioterrorism initiative in fiscal year 2001 will be used to revive this research and take advantage of the scientific expertise CDRH has built in this area.

The Center for Drug Evaluation and Research, CDER, is devoting $400,000 in fiscal year 2000 toward activities contributing to the development of a research agenda and the proposed rule to amend the new drug and biological product regulations to identify the kind of evidence needed to demonstrate efficacy of drug and biological products used to prevent or treat the toxicity of chemical, biological, or radiological substances. Activities also include working with academia to draft fact sheets that can be used by physicians and first responders so they can recognize the symptoms of bioterrorist agents and respond adequately to an attack. The fiscal year 2001 request of $1.2 million for CDER is for the following proposed activities: premarket review of drug products for the treatment and prevention of exposure to bioterrorism agents; review of the preclinical and clinical data supporting the recommendations for treatment of bioterrorism agents; evaluation of the need and availability of alternative agents for the treatment of exposure to bioterrorism agents; and collaboration with other agencies in the development of a research program to develop and test therapeutic agents.

The Center for Veterinary Medicine, CVM, is devoting $100,000 in fiscal year 2000 to activities including the participation in meetings with representatives of government and non-government organizations to consider the risk to animal agriculture, including the safety of feedstuffs and food from food-producing animals and the development of effective lines of communication among anti-bioterrorism units of federal and State governments. The fiscal year 2001 request of $800,00 for CVM is for the following proposed activities: exploring ways to prevent microorganism and toxic chemicals including pesticides from entering animal feeds and food-producing animals; training senior State personnel as first responders to an attack; developing effective lines of communications among anti-bioterrorism units; and facilitating timely reporting events, diagnoses, and identifying research needs.

The Center for Food Safety and Nutrition, CFSAN, is devoting $300,000 in fiscal year 2000 toward a contract to develop the Food Safety Strategic Plan for Chemical/Biological Terrorism; coordinate the development of information on Chemical/Biological Terrorism from other Federal Agencies, particularly the Department of Defense, DOD, and the Department of Agriculture, USDA; develop research and Infrastructure needs for FDA and associated food safety partners, including State and local governments; facilitate leveraging of resources and technology transfer from DOD and other government organizations to meet these needs; and develop and implement the needs for contracts and grants for food safety chemical/biological terrorism programs. The fiscal year 2001 request will help expand the agency's ability to safeguard the food supply from potentially harmful and lethal biological agents. The fiscal year 2001 request of $1.2 million for CFSAN is for the following proposed activities: conducting research to develop rapid methods of detection of biological agents, such as anthrax; working with other governmental agencies and private sector organizations to developing cooperative exchange information on surveillance activities and develop crisis management procedures.

The proposed $1 million request for fiscal year 2001 activities for the National Center for Toxicological Research include expanding the mass spectrometry-based approaches to identify biomarkers of toxicity associated with biological warfare agents; and developing novel techniques to identify new bacteriological and chemical contaminants in the food supply.

I will be happy to provide a table reflecting funding for the bioterrorism initiative.

[The information follows:]

BIOTERRORISM FUNDING

[In thousands of dollars]

Program	Fiscal year 2000 estimate	Fiscal year 2001 requested increase
Foods	0.030	1.200
Human Drugs	0.400	1.200
Biologics [1]	7.500	6.500
Animal Drugs & Feed	0.100	0.800
Devices & Radiological Health	0.800	0.800
NCTR	0.000	1.000
Total	8.830	11.500

[1] Includes one-time funding from the DHHS Public Health and Social Services Emergency Fund in fiscal year 2000.

Question. For fiscal year 2000, the Administration requested that funding for FDA's counter-bioterrorism activities be made available from the Department of Health and Human Services Public Health and Social Services Emergency Fund. Why are funds for these activities now being requested in FDA's budget? To what extent are FDA's activities in this area dependent on those of other federal agencies, and FDA's ability to use the funds it has requested dependent on funding being received by other agencies?

Answer. The Administration requested $13.4 million in its fiscal year 2000 budget request to support FDA's counter bioterrorism activities. This request was made through the Public Health and Social Services Emergency Fund to the Appropriations Subcommittee on Labor, HHS, Education and Related Agencies as part of a consolidated request for the Department of Health and Human Services. FDA's fiscal year 2000 counter bioterrorism request was not funded because FDA's appropriation falls under jurisdiction of the Appropriations Subcommittee on Agriculture. FDA's programs do not fall within the jurisdiction of this Subcommittee. In contrast, FDA's fiscal year 2001 request for activities related to the countering bioterrorism initiative is being made to the Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies, which has jurisdiction over appropriations for FDA programs. FDA's efforts in countering bioterrorism are critical to success of the bioterrorism activities government-wide.

In this, the third year of the Departmental anti-bioterrorism initiative, DHHS is continuing to build on its ongoing initiatives and also launch a number of new efforts that will further strengthen and enhance its capacity to anticipate and respond to bioterrorism. For fiscal year 2001, DHHS proposed an investment of $265 million for its anti-bioterrorism initiative. To date, FDA has been contributing to this initiative on a limited basis without receiving base appropriations earmarked in this area.

FDA received $7.5 million one-time funding from the Department's Public Health and Social Services Emergency Fund for fiscal year 2000 to begin the process of developing the necessary expertise and infrastructure to address regulatory activities related to the countering bioterrorism initiative. This one-time funding cannot be used by the Agency to develop staff experts or address the long list of agents identified as bioterrorism threats.

FDA participates on an interagency group formed by the Department's Office of Emergency Preparedness—OEP, with the Department of Defense, Veterans Administration, the Centers for Disease Control and Prevention—CDC, and the National Institutes of Health—NIH to plan for responses in the event of a bioterrorist attack. All of the agencies are involved in the medical research and planning in the event of an attack.

The Department of Health and Human Services' role is to meet the Nation's public health and medical needs associated with terrorist events. Preparing for the threat of bioterrorism requires government funding to train the health-care workers, improve laboratory testing, develop and produce vaccines and drugs, and expand hospitals' capacity to deal with a large influx of sick people. FDA's countering bioterrorism initiative focuses on the priorities for creating and maintaining a stockpile of pharmaceuticals and other materials, and furthering research on detection, diagnosis, antibiotics, therapeutics and vaccines.

FDA has the responsibility of determining whether pharmaceutical products produce the benefits they are supposed to without causing side effects that would

outweigh those benefits. This includes both laboratory and non-laboratory investigation that addresses questions either of immediate applicability to present-day regulatory problems, questions that can be expected to arise in the near-term, and fundamental studies in biomedical areas that can reasonably be expected to have long-term effects on FDA regulatory responsibilities. Unlike other DHHS agencies that are participants in the Department-wide anti-bioterrorism initiative, FDA plays a critical but less visible role with respect to its programs. Whether the issue is the development and use of rapid diagnostics to quickly identify a suspected biological agent or the capability to make available and administer large quantities of a vaccine or drug to counter the effects of a bioweapon, FDA is the linchpin that makes it possible for DOD, CDC, OEP, and others to carry out such activities.

Other than research, FDA has the responsibility to review and make approval decisions for drugs, therapeutics, vaccines, anti-toxins to be administered to humans and every diagnostic tool that is to be used clinically. In the event of bioterrorist attack, the public health goal is to have available pharmaceuticals, the rapid diagnostics and the vaccines that have already completed FDA review process for safety and efficacy. Since this regulatory process is lengthy, complex and fraught at times with the unforeseen, it is essential, in the interest of national security and public health, that FDA engages in the process as early as possible with sponsors and organizations that are developing the therapeutics, vaccines and rapid diagnostics. This means that FDA will assume a pro-active role and work with these organizations from the very outset, starting with outlining the individual steps that must be taken to obtain FDA approval, through pre-clinical toxicity testing, the development of protocols for conducting the clinical trials, to the review and analysis of the trial results, review of the proposed manufacturing procedures, inspection of the manufacturing process to assure compliance with Good Manufacturing Practices and post-marketing surveillance of adverse events.

Question. Commissioner Henney, you indicate in your prepared statement that specialized equipment and facilities are necessary and needed in FDA to understand these agents and prevent, diagnose and treat outbreaks. How much of the $11.5 million requested is for specialized equipment and facilities?

Answer. The Agency estimates that approximately $3 million of the requested $11.5 million request for the Countering Bioterrorism Initiative is for specialized equipment and facilities.

Question. With respect to counter-bioterrorism, what is the total amount of funding required for FDA to complete its vaccine development and build an appropriate stockpile?

Answer. FDA's role is to develop tools to determine the safety and effectiveess of vaccines that cannot be tested against live viruses. Vaccine development is a joint effort between DOD, CDC, FDA, and the private sector. The President's Countering Bioterrorism Initiative has identified numerous agents as bioterrorism threats, including, anthrax, smallpox, plague, botulinum, tularemia, brucellosis, Venezuelan equine encephalomyelitis, ebola, and Q-fever, as well as others. FDA has begun the process of developing the necessary expertise and infrastructure to address regulatory activities for the President's initiative. The fiscal year 2000 $7.5 million one-time funding is being used to expedite the development and licensure process for improved vaccines for anthrax and smallpox, and the associated immune globulin products (VIG) used to treat and prevent serious vaccinia infections brought on by the smallpox vaccine. These funds would be needed to develop, train and adequately equip staff experts that can deal with the range of agents that have been identified as part of the President's initiative. FDA's countering bioterrorism initiative includes other priorities as well for which funding is requested including safeguarding the food supply, development of pharmaceuticals and furthering research on agents with respect to detection, diagnosis, and treatment.

RENT AND RELATED ACTIVITIES

Question. Provide a detailed breakdown of the Commercial Rent and Related Services activities funded in each of fiscal years 1999 and 2000, as compared with the fiscal year 2001 request.

Answer. I am happy to provide the information detailing the specific expenses included in the Other Rent and Related Activities for fiscal year 1999 and fiscal year 2000 as compared to fiscal year 2001.

[The information follows:]

OTHER RENT AND RELATED ACTIVITIES, FISCAL YEAR 1999–FISCAL YEAR 2001

[In thousands of dollars]

Subaccount	Fiscal year 1999 actual	Fiscal year 2000 estimate	Fscal year 2001 estimate
Commercial Leases:			
Dallas, TX	545	352	.....
Los Angeles, CA	1,561	1,606	1,648
Bethesda, MD (NLRC)	2,265	2,211	2,252
Lenexa, KS	107	108	110
San Clemente, CA	250	250	250
Jersey City, NJ	386	388	395
Total, Commercial Leases	5,114	4,915	4,655
FDA Owned:			
MOD I/BRF	3,637	3,720	3,830
San Juan/WEAC	510	525	540
Total, FDA Owned	4,147	4,245	4,370
GSA Rent-Related	10,757	10,745	10,730
GSA Buildings Delegated to FDA:			
Atlanta	680	700	725
FB–8	3,000	3,120	3,250
MOD II	1,920	2,000	2,075
Twinbrook Complex	236	130	50
Total, Building Delegation	5,836	5,950	6,100
Total, Other R&R	25,854	25,855	25,855

Other Rent and Rent-Related Activities.—FDA costs for Other Rent and Rent-Related Activities are included in three subaccounts: Commercial Rent & Related Services, GSA Rent-Related Services and GSA Building Delegation Services.

Commercial Rent & Related Services are expenses that FDA pays directly to non-Federal sources under the delegation of direct lease and service authority. Services include rental of space and all building operation services, i.e., utilities, janitorial, guard and grounds maintenance, and operation and maintenance of heating, ventilation and air conditioning (HVAC) systems. FDA also pays similar expenses for a small number of buildings owned by the agency.

GSA Rent-Related Services are expenses that FDA pays to GSA that are over and above the standard level that GSA covers in its rent costs. Services include security systems, guard services and HVAC systems.

Building Delegation expenses are expenses that FDA pays to either GSA or non-Federal sources to operate and maintain buildings delegated to FDA by GSA for management of day-to-day operations. Services include utilities, janitorial, guard and grounds maintenance and operation and maintenance of HVAC systems.

Question. The fiscal year 2001 budget requests $13.5 million in additional funding to improve statutory inspection coverage for human drugs, biologics, animal drugs and medical devices. Please provide the level of inspection effort in terms of frequency of inspection, level of funding and FTEs, in each of these areas proposed to be achieved in fiscal year 2001, as compared with each of fiscal years 1999 and 2000.

Answer. The Federal Food Drug and Cosmetic Act and FDAMA require FDA to conduct inspections at specified intervals. To meet the statutory requirement, FDA must inspect at least 50 percent of the statutory human drugs, biologics, animal drugs and feed, and medical device establishments annually. No food establishments are subject to the 2-year statutory inspection requirement. In fiscal year 1999, FDA inspected 26 percent of the domestic registered drug manufacturers, compounders, or processors; 64 percent of statutory biologics firms; 25 percent of domestic registered animal drug and feed establishments; and 30 percent of domestic registered

class II and III medical device manufacturers, compounders or processors. In fiscal year 2000, we project that the agency will conduct biennial inspections in 22 percent of the statutory human drug establishments, 50 percent of the statutory biologics establishments, 27 percent of the statutory animal drugs and feed establishments, and 24 percent of the statutory medical device establishments. In fiscal year 2001, without a funding increase and given our need to absorb current services, we project FDA will be able to conduct biennial inspections in 18 percent of the statutory human drug establishments, 50 percent of the statutory biologics establishments, 25 percent of the statutory animal drugs and feed establishments, and 21 percent of the statutory medical device establishments.

The current funding level for the field for domestic statutory inspections is $44.31 million and the staffing level is 525 FTE. FDA is seeking an increase for field inspectional activities of $13.5 million and 89 FTE. With the funds requested in fiscal year 2001, we expect to make modest improvements in statutory inspection coverage. The agency can increase the percentage of statutory inspections to 28 percent for the Human Drugs program, 28 percent for Medical Devices and 46 percent of Animal Drugs and Feeds. We expect to meet and possibly exceed the statutory inspection requirement in the Biologics program. In addition, $1.7 million dollars of the increase will support sample collection and sample laboratory testing in the Foods program for chemical contaminants and pesticides and dietary supplements.

PERCENT OF FACILITIES INSPECTED [1]

	Human drugs	Biologics	Animal drugs and feeds	Medical devices
Fiscal year 1999	26	64	25	30
Fiscal year 2000	22	50	27	24
Fiscal year 2001 (proposed targets without enhancement)	18	50	25	21
Fiscal year 2001 (proposed targets with enhancement)	28	+50	46	28

[1] Includes only those with sstatutory inspection requirements.

I am happy to provide a table that shows the funding level and staffing levels for the field statutory inspectional activities by program area for fiscal years 1999, 2000 and 2001. Since the fiscal year 2001 budget request includes a modest increase for inspectional activities in the Foods program, the table also displays base and fiscal year 2001 resources for the field inspectional activities associated with chemical contaminants and pesticides and dietary supplements for reference.

[The information follows:]

FDA FIELD INSPECTION RESOURCES, FISCAL YEARS 1999–2001

[Dollars in thousands]

Program	Fiscal year 1999		Fiscal year 2000		Fiscal year 2001	
	Funding level	Staffing level (FTE)	Funding level	Staffing level (FTE)	Funding level	Staffing level (FTE)
Human Drugs	$16,890	208	$16,374	194	$20,161	213
Biologics	11,368	140	11,141	132	13,141	136
Animal Drugs & Feeds	3,735	46	4,304	51	6,304	54
Medical Devices	11,693	144	12,491	148	16,491	164
Statutory Inspections Subtotal	43,686	538	44,310	525	56,097	567
Foods [1 2]	15,753	194	16,374	194	18,096	209

FDA FIELD INSPECTION RESOURCES, FISCAL YEARS 1999–2001—Continued

[Dollars in thousands]

Program	Fiscal year 1999		Fiscal year 2000		Fiscal year 2001	
	Funding level	Staffing level (FTE)	Funding level	Staffing level (FTE)	Funding level	Staffing level (FTE)
Total FDA	59,439	732	60,684	719	74,193	776

[1] The Foods program has no biennial inspection requirement. The Foods resources are included for reference. The inspectional activities for the Foods program funded by the fiscal year 2001 increase are for sample collection and laboratory testing for chemical contaminants and dietary supplements. In addition, $17 million is being requested in fiscal year 2001 for inspection of high risk food establishments. These funds are included under our Food Safety Initiative request.

[2] Base estimate represents the total field resources (for both domestic and imports) for the Pesticide and Chemical Contaminants program and resources for Dietary Supplements from the Food Composition Standards and Labeling Project.

Question. Of the $13.5 million proposed, what amount of funding is to enhance laboratory testing for pesticides, chemical contaminants and dietary supplements?

Answer. Of the $13.5 million increase in funding proposed for inspectional activities, $1.7 million are designated to enhance laboratory testing for pesticides and chemical contaminants and for dietary supplements. The increase requested includes resources needed for sample collection and laboratory testing.

BUILDINGS AND FACILITIES

Question. The fiscal year 2001 budget requests $3 million for the next phase of the plan for the Arkansas Regional Laboratory. What is the "next phase" of this project and what work will be accomplished with the $3 million requested?

Answer. The $3.0 million included in the fiscal year 2001 budget request continues work on Phase III of the Arkansas Regional Laboratory project. Phase III provides for the renovation of the existing Building 50 in its entirety and completes the common ORA/NCTR administrative and support area. Specifically, the $3.0 million in the budget request will be utilized to fund the majority of the mechanical and plumbing systems infrastructure and related electrical system items necessary for the operation of the installed mechanical systems.

Question. Please give us a status report on funding provided to date for the Arkansas Regional Laboratory, including the work funded and the status of that work.

Answer. I would be happy to provide for the record the status of the Arkansas Regional Laboratory ARL.

[The information follows:]

Arkansas Regional Laboratory

The ARL facility project was initiated in fiscal year 1995 through a $2.5 million appropriation for architectural and engineering design. The firm Kling-Lindquist (KL), Philadelphia, PA, was selected. KL, in consultation with FDA, developed an overall campus design comprising both new and renovated space:

—(1) joint NCTR and ORA animal quarantine facility—renovation of Building 62;
—(2) ORA's Arkansas Regional Laboratory—new facility;
—(3) Building 50 renovation—3 floors of office space; and,
—(4) common Office of Regulatory Affairs (ORA)/National Center for Toxicological Research (NCTR) administration and support area.

The fiscal year 1996 appropriation included $3.8 million for an animal quarantine facility and preparation of joint NCTR/ORA laboratory space.

Laboratory Building, Phases I & II, status

The estimated construction cost of the laboratory portion of the project totals $37.95 million.

The fiscal year 1997 appropriation included $13.0 million for Phase I construction of the ARL. Phase I began construction and provided the ARL building, foundation, substructure, superstructure, exterior enclosure, and roofing. Major building systems, such as fire protection, HVAC, electrical and some site work, is included.

The construction of the ARL project was awarded on September 26, 1997, to Charles N. White Construction Company (White) of Clarksdale, Mississippi. White was given notice to proceed on Phase I of the project on October 1, 1997.

A ground breaking ceremony was held at NCTR on November 18, 1997.

The fiscal year 1998 appropriation included $14.55 million for Phase II construction. Phase II continues the ARL project by completing the building systems and providing some office and laboratory fit-out in the ORA laboratory building.

On December 24, 1997, White was given notice to proceed on a portion of the Phase II construction.

FDA received reprogramming authority for up to $10.4 million of Buildings and Facilities funds for Phase II of the ARL project to complete the office and laboratory fit-out for the laboratory building.

On February 27, 1998, White was given notice to proceed on the remaining portion of Phase II to complete the office and laboratory fit-out for the laboratory building.

A building dedication ceremony for Phases I & II, the laboratory portion, was held on February 17, 2000.

Building 50 Renovation and Common Area, Phase III, status

Phase III provides the renovation of the existing Building 50 in its entirety and completes the common ORA/NCTR administrative and support area.

The fiscal year 1999 appropriation included $3.0 million to begin construction of a portion of Phase III. This first portion included the exterior demolition, exterior structural work, exterior masonry work, and some roofing repairs.

On January 26, 1999, White was given notice to proceed on the first portion of Phase III.

The fiscal year 2000 appropriation included another $3.0 million to continue the construction of a portion of Phase III. This portion of work includes exterior glass and glazing, roofing, an elevator, and some of the site work and utilities.

On February 2, 2000, White was given notice to proceed on the next portion of Phase III.

The total resources required to complete Phase III of the Arkansas Regional Laboratory project are currently $9.5 million. With the $3.0 million requested in the fiscal year 2001 budget, the balance required is $6.5 million in today's dollars. Because the work remaining to complete Phase III is being divided into smaller increments, completed over a longer duration, and the construction market continues to be very active with increased competition for skilled labor, the costs of the construction continues to escalate. Therefore, a total of approximately $7.2 million in additional funding will be needed to complete Phase III. We will evaluate the decision to request the remaining amount as we determine our total requirements to meet our mission critical responsibilities.

Question. What level of funding is required beyond the $3 million requested for fiscal year 2001 to complete the plan for the Arkansas Regional Laboratory?

Answer. The total resources required to complete Phase III of the Arkansas Regional Laboratory project are currently $9.5 million. With the $3.0 million requested in this budget, the balance required is $6.5 million in today's dollars. Because the work remaining to complete Phase III is being divided into smaller increments, completed over a longer duration, and the construction market continues to be very active with increased competition for skilled labor, the costs of the construction continues to escalate. Therefore, a total of approximately $7.2 million in additional funding will be needed in fiscal year 2002 to complete Phase III. Prior to submitting our fiscal year 2002 budget submission to DHHS, we will re-evaluate the total cost requirements for this project and make the necessary adjustments to meet our mission critical responsibilities.

Question. The budget requests $20 million to replace the Los Angeles laboratory facility. What is the total cost of construction of this project? Is there a lower-cost construction phase of this project?

Answer. The budget request of $20 million is for the first phase of a two phase project that totals $43.0 million. It is conceivable that the construction documents could be modified to define a "site-foundation" only project that would entail a first phase cost of $10.5 million. However, this would delay the funding of a large portion of the construction work for another year, resulting in the prolongation of construction. As the construction market continuing to remain very active and with increased competition for skilled labor, the cost of construction may escalate.

Question. If funding is not provided to construct the Los Angeles laboratory replacement facility, where will FDA perform the work now performed by this laboratory?

Answer. Status quo is not an option, if funding is not provided the LA lab will close. The lease for the current laboratory facility at Pico Boulevard has been extended twice, and will expire at the end of March 2000. A short-term extension is being negotiated, which will allow adequate time for either new facility construction, or an orderly closing of the Los Angeles laboratory and reassignment of staff and workload. Closure will force the State of California, Department of Health Services to find a new facility for their laboratory operation that is co-located in the existing FDA lab. The closure of a large field laboratory, particularly a large lab such as Los

Angeles, on relatively short notice, will cause significant disruption due to the personnel impacts. Workload may be transferred to other existing labs, but the requisite staff with the skills and experience would not be in place for years. The other two laboratories in the Pacific Region, located in Alameda, CA and Seattle, WA, are essentially at capacity for people and space. It would be difficult for those labs to take on the additional workload and staff, and would add to the time frames for sample analysis. While space exists in the Arkansas Regional Lab, we would anticipate a potentially lengthier delay in recruiting and training new analytical staff to handle the increased workload since we would expect only a small percentage of displaced analysts from Los Angeles to transfer to the Arkansas facility. Other labs in the Southwest Region, at Kansas City and Denver are also at capacity. Furthermore, it would require additional time for shipping and sequencing of additional samples from the LA Lab into other lab operations. Longer delays would occur if the added workload puts the receiving labs into a backlog situation. If FDA had to ship more samples to other labs we would incur significant additional expenses in addition to the time delays. Since a large number of samples are perishable, they need expedited and environmentally controlled shipments. For shipments of a relatively short distance, we are often able to use the freight shipping services of bus companies, etc. For longer distances, we would likely need to go to airfreight, which is more expensive. We have no recent studies that would specifically quantify projected cost increases for sample shipments. Of equal or greater importance would be the resulting additional delays in obtaining analytical results.

MEDICAL DEVICE REVIEW

Question. As you know, this Committee has taken a significant interest in ensuring that medical device review times are improved and last year we earmarked an additional $7 million to that end. In the device portion of the budget justification, it indicates that $7.7 million will be devoted to device reviews. Can you please provide a breakdown of how that money will be spent?

Answer. FDA is requesting an appropriated enhancement of $7.7 million and 14 FTE that will be spent in the medical device review areas of genetic testing, reuse applications, and premarket science. On genetic testing, $2.6 million, including 5 FTE, will build capacity and develop strategies to respond to scientific breakthroughs in this area and review genetic testing applications. For reuse applications, $2.8 million, including 5 FTE, will increase review activities and develop standards for premarket review of devices that may pose significant risk if reused. In premarket science, $2.3 million, including 4 FTE will improve our scientific information base and evaluation methods to facilitate patient access to breakthrough technologies; intensify research and scientific collaborations that will enhance reviewer and user understanding of new technologies; and work with stakeholders to develop comprehensive test methods and performance requirements for critical devices.

Question. I also note that the justification references a number of times, the Center's performance goals. The agency indicates its performance goals to be reviewing and completing 90 percent of PMA first actions and 95 percent of 510(k) first actions within statutory review times, 180 and 90 days respectively. Can you please tell me the resources which are needed, both in terms of dollars and staffing (FTEs), to accomplish these goals?

Answer. In its fiscal year 2001 performance plans for the Medical Device program, FDA outlined a series of performance improvements that expand on fiscal year 2000 accomplishments. In fiscal year 2000, Congress appropriated an increase of $7 million to enhance medical device reviews. Expanding on these efforts, the fiscal year 2001 budget requests a total of $79.2 million and more than 640 FTE dedicated to improving and expediting premarket review work for medical devices. Without additional funding in fiscal year 2001, FDA will be severely limited in its ability to meet the heightened performance targets which are labor, as well as time intensive. These requested funds will allow FDA to improve fiscal year 2001 performance workload for the device program over fiscal year 2000 activity levels. For example, FDA would increase the percentage of PMA first actions completed within 180 days, and HDE first actions within 75 days, from a performance target of 85 percent in fiscal year 2000 to 90 percent in fiscal year 2001. Also, we will increase the percentage of PMA supplement final actions within 180 days from a performance target of 85 percent in fiscal year 2000 to 90 percent in fiscal year 2001. In addition, we will increase the percentage of 510(k) final actions completed within 90 days from a performance target of 65 percent in fiscal year 2000 to 75 percent in fiscal year 2001. The performance plan also indicates that in fiscal year 1999 FDA completed over 99 percent of 510(k) first actions within 90 days. FDA plans to build on this accom-

plishment with the more difficult task of increasing the percentage of 510(k) final actions completed within 90 days.

Question. A first action on device applications within statutory review times is laudable but even more important is final action. The agency is only planning a final action on 90 percent of PMA supplements within statutory review times and 75 percent of 510(k)s within statutory review times. The performance goals don't even reference objectives for PMA's, the most innovative products. Can you please provide the Committee with a breakdown of the resources that are needed, (both dollars and FTE) to get the job done in each of these areas?

Answer. Calculating the cost required to meet all of FDA's medical device review statutory obligations is a very difficult task given the rapid growth in the volume and complexity of emerging medical devices. In fiscal year 1999, FDA estimated that $26.7 million would be required to review all statutory obligations as stated in FDAMA for medical devices. Since that time, in fiscal year 2000, the Medical Device program received a $7 million increase, and the fiscal year 2001 President's Budget requests an additional $5.4 million in appropriated funds, as well as a $5.8 million user fee increase. If these spending requests are approved, the medical device program still needs $8.5 million to fully meet all the medical device review statutory requirements in FDAMA. Furthermore, FDA has subsequently identified additional costs to the $8.5 million that include: $3 million for PMAs and PMA supplements, $3 million for 510(k)s, and $2.5 million for meetings with sponsors required by FDAMA throughout the medical device review process, bringing the total revised cost to $17.0 million. This cost estimate may require future adjustments to reflect any changes in workload projections.

FDA is committed to increasing medical device review performance and appreciates the support of the Congress in continuing to make progress. FDA sets performance goals for both first actions and final actions in the fiscal year 2001 Performance Plan. As I said earlier, the fiscal year 2001 performance plan includes device review performance goals, at the resource level requested in the President's budget, of 90 percent of PMA original first actions within 180 days, and HDE first actions within 75 days; 90 percent of PMA supplement final actions within 180 days; and 75percent of 510(k) final actions within 90 days.

The fiscal year 2001 performance plan also commits to improved timeliness in meetings with sponsors, as required by FDAMA, throughout the medical device review process. FDA is also committed to high quality, interactive as well as timely device reviews. By statute and regulation, we are required to take action—final action if possible or interim action if necessary—on 510(k)s within 90 days; approve or disapprove IDEs within 30 days; and take action again, final action if possible or interim action if necessary—on PMAs and PMA supplements within 180 days and HDEs within 75 days.

Question. Commissioner Henney you have made enhancing the Agency's science base a priority in your administration. This is a laudable goal and one that many of us would agree with given the increasing complexity of products the agency must review. Can you provide us with some sense of how that money will be used?

The budget justification, for instances, speaks to "improving the scientific information base" and "intensifying research and scientific collaboration in breakthrough technologies," "increas[ing] scientific interactions with industry during review," and "seeking outside expertise to ensure that its regulatory decisions are based on the latest scientific knowledge," etc. What do you mean? Are we talking about enhancing the training of existing reviewers? Hiring "bioengineers" or others that are schooled in the latest technological developments to review products? Increasing the agency's bench science? Also, please explain what is meant by "collaborative".

Answer. I am planning to improve the scientific information base via several avenues, a few of which you mentioned. We will work closely with the outside scientific community to focus our energies on breakthrough technologies and how best to regulate them. Consider the area of new medical devices. During the past two years, more than 800 new high technology products have entered the market or are under development. FDA will consult with the scientific community in establishing appropriate standards for these new products. We will also collaborate with internationally recognized research Centers to help focus their efforts in emerging areas such as non-invasive surgical techniques and computerized technologies. In other instances we are strengthening our science base by building models that will predict risk individuals will face in clinical trials for new products. These models are constructed in partnership with scientists from other government agencies and industry. Our science base is also strengthened by maintaining close consultation with product sponsors in the early stages of product development. These early dialogues are invaluable to both FDA and industry, not only because they expedite the specific products under development by sponsors, but also because they expand the under-

standing of scientific breakthroughs that can be incorporated into guidance provided to other product sponsors.

Our existing scientific reviewers need to continually update their knowledge of scientific advances in order to intelligently regulate new products. We need to strengthen the continuing active training programs that are already in place within the Agency. The 'Staff College' concept has worked well at FDA, but should be augmented by external expertise. A critical requirement for strengthening FDA science is the recruitment of scientists with state-of-the-art skill sets. We must be able to access the appropriate professionals to address the breakthrough areas. For example, as a continually larger number of products are spawned by the biotechnology revolution, we will have to recruit more scientists in such disciplines as molecular biology.

In answer to your question on the meaning of "collaborative," we are defining that term as the creation of relationships and/or formal agreements with others outside FDA that will enhance FDA's ability to meet its public health mission. We intend to enter into collaborations where the end results are greater for all concerned than could have been realized if all parties were working independently. We have demonstrated that these collaborative efforts in the science arena can work very well. One illustration is the Product Quality Research Institute. This Institute was created in 1999. It is a partnership between FDA and several drug industry associations, designed to find joint solutions to key issues associated with drug product quality. The partnership works because it marshals the experience and energies of many private sector, academic and government specialists and focuses it on important drug quality issues. All parties gain in this relationship. The patients receive higher quality products, and both FDA and industry benefit by solving the tough problems, and thus reducing both costs and regulatory burden.

Question. I understand that where more complex devices are eligible for 3rd party review, the industry is taking advantage of the 3rd party program. For instance, I understand the imaging sector of the device industry is using the program in much greater numbers, than other sectors. I also am aware that FDA has not yet met FDAMA's statutory triggers for the pilot program to begin. Can you advise me of the steps being taken to make this program work?

Answer. In fiscal year 1999, we received 32 510(k)s with a third party review, the most in any fiscal year since the program began. But this is still a very small proportion, only 3 percent, of the approximately 1,200 submissions received that were eligible for third party review—including nearly 800 510(k)s for Class II moderate risk devices. The list of 154 devices currently eligible for third-party review includes a variety of diagnostic imaging devices, such as diagnostic ultrasound systems, magnetic resonance imagers, nuclear medicine tomography systems, and numerous types of x-ray systems and related products. The list of eligible devices is available on FDA's website at http://www.fda.gov/cdrh/dsma/3258.html. In fiscal year 1999, diagnostic ultrasound devices accounted for 15 of the 32, or 47 percent, of the 510(k)s received by FDA with a third-party review, but only two third-party 510(k)s were received for all other types of diagnostic imaging devices. Thus, while one sector of the diagnostic imaging industry made significant use of the third party approach, most sectors did not. Even in the diagnostic ultrasound sector, approximately three-fourths of all 510(k)s processed by FDA in fiscal year 1999 did not have a third-party review.

While you are correct that the third party program has not met the two FDAMA triggers per section 523(c) of the Federal Food, Drug, and Cosmetic Act, FFD&C Act it is important to note that the statutory triggers do not impact the starting date of the third party program. Instead, they are triggers for beginning the time period that would result in sunset of the Accredited Persons provisions. FDA has already begun FDAMA's third party program. On November 21, 1998, the agency began accepting reviews of premarket notifications—510(k)s—from qualified third party organizations under the Accredited Persons provisions. Before that date, the agency took numerous steps that were necessary for successful implementation of the program, including publishing the criteria for accreditation of third parties, as required by the FFD&C Act; issuing draft and final procedural guidance for the program; issuing a list of devices eligible for Accredited Person review; developing product-specific guidance and recognizing national or international consensus standards to assist third parties in conducting consistent and thorough 510(k) reviews; performing accreditation of prospective third parties; and conducting training of Accredited Persons.

One of the statutory triggers—section 523(c)(2)—that would begin the time period leading to sunset of the Accredited Persons provisions occurs when the Agency notifies Congress that it has processed a third-party review for at least 35 percent of the potentially eligible devices. Due to low industry use of the third-party approach,

together with the large number of potentially eligible devices, it appears unlikely that this trigger will be met. The other trigger—section 523(c)(1)—occurs when the agency notifies Congress that at least two third parties are accredited to review at least 60 percent of 510(k) submissions. Currently, 154 devices are eligible for third-party review—including many significant devices such as diagnostic ultrasound systems, magnetic resonance imagers, endoscopes, and cardiac monitors—and at least 2 of the 13 Accredited Personsare available to review each of the devices. In fiscal year 1999, the Agency received more than 1,200 510(k) submissions for the 154 devices, representing nearly 50 percent of all 510(k)s that are potentially eligible for third-party review based on the criteria in section 523(a)(3) of the FFD&C Act.

FDA is working on a significant expansion of the third-party program. The agency intends to pilot test an expansion of the program that will allow all devices eligible under the terms of the statutory provision to be candidates for third party review. CDRH is planning to issue a draft guidance document in April that will explain the agency's expanded program and provide an opportunity for comment from all interested parties. We are hopeful that expansion of the eligible device list will stimulate greater industry interest in the third party approach, and many trade associations have informed us that they will encourage their members to take advantage of these third party opportunities. In addition, we are optimistic that the additive user fee proposal included in the Administration's fiscal year 2001 budget proposal, if implemented, will jump-start the third party program. The revenue from these fees would be used to provide information about the availability of third-party reviews and to subsidize the cost of these reviews.

I understand that there may be a serious backlog as well as long review times for medical devices which get reviewed by the Center for Biologics Evaluation and Review.

Question. What is the backlog for devices reviewed by the biologics center?

Answer. Thank you for the opportunity to respond and provide information on the improvements made in device review performance by the Center for Biologics Evaluation and Research, CBER, since the enactment of the Food and Drug Administration Modernization Act of 1997. There are currently 4 overdue PMAs or 510(k)s at CBER. Because we define overdue reviews as reviews that did not meet the statutory deadline for first review action, once FDA misses a statutory deadline for a submission, the submission will remain on the overdue list until it is either approved, cleared, withdrawn or denied. Subsequent review cycles will not have an effect on an application's overdue status until the product is approved, cleared, withdrawn, or denied. Thus far, during fiscal year 2000 there have been no additional overdue submissions. Significant improvements in review of all types of devices has occurred during the past 2 years. These improvements have come about as a result of a concerted effort by CBER known as the Device Action Plan. One example of the improvement is the review of 510(k)s at CBER. During the past two years on-time review of all device submissions has improved dramatically. For example, in fiscal year 1998, only 22 percent of 510(k)s were reviewed on time, that is within 90 days, for the first response either approving or denying substantial equivalence. On-time review improved to 64 percent in fiscal year 1999, and to 100 percent on time thus far in fiscal year 2000.

CBER reviews devices that are used to ensure the safety of the blood supply, to prepare certain blood components, and tests that are used in the diagnosis of Human Immunodeficiency Virus (HIV). These devices involve complex issues and are critical to the public health. Devices reviewed by CBER include tests used to screen the blood supply for HIV, Hepatitis B virus, and Hepatitis C virus; diagnostic tests for HIV; blood-bank software; devices used to collect blood components; and other devices used to ensure blood safety. Approximately 12 million units of donated blood and 12 million units of donated plasma are collected each year. FDA considers the review of devices used to ensure blood safety one of its most important public health responsibilities.

As mentioned above, CBER initiated the Device Action Plan in 1999. Because most of the devices reviewed by CBER are reviewed within the Office of Blood Research and Review, OBRR has reengineered the review process to improve the effectiveness and timeliness of reviews including the following: (1) implementation of the Regulatory Project Management concept to set the target dates for the review of an applications; (2) integration of the scientific and regulatory reviews within a division; (3) delegation of the resolution of the scientific issues down the management chain; (4) issuance of the Office Standard of Operation Policy (OSOP) to achieve the consistency and timeliness of the review; and, (5) implementation of the monitoring process to ensure the achievement of the Office Streamline Review Process.

Question. What are the average review times for 510(k) and PMA devices reviewed by the biologics center?

Answer. As noted above, review of all devices has greatly improved over the past 2 years. For fiscal year 1999, the average 510(k)s review times were 77 days per review cycle. This figure does not include time that the manufacturer may have taken to respond to deficiencies identified by FDA. If the submission was found to be not substantially equivalent, and the manufacturer needs to submit additional information for product approval then a second or even a third review cycle may be necessary. In fiscal year 1998, the average PMA review time was 132 days per review cycle. Again, this does not include time a manufacturer may have needed to respond to FDA identified deficiencies. The average review time for PMAs for fiscal year 1999 are not yet available because submissions are still undergoing additional cycles of review before approval, denial or withdrawal.

Question. What resources are needed to get the job done?

Answer. The backlog of overdue medical device applications in CBER has been dramatically reduced. This accomplishment was achieved as the result of redirection of other mission-related, non-user-fee activities. In order to maintain the same level of response to device applications, as well as address other areas, the Office of Blood Research and Review, OBRR, requires additional resources. Specifically these needs are to meet predicted review workload; to address emerging infectious blood-borne diseases; and to deal with new technologies such as nucleic acid testing for infectious diseases, novel blood collection devices, and single-unit blood and plasma inactivation devices. Recent analyses of CBER workload predicts that there will be a continued upward trend in all types of device submissions to CBER, in particular to OBRR. The analyses were based on the trend in submissions over the past few years and on the degree of employee effort needed to review each type of submission. We have made significant progress on eliminating backlogged submissions and decreasing the review time on each application type. However, this progress will be difficult to maintain and has been accomplished at the cost of other components of our mission. Additional resources are needed to continue to provide the same speed and quality review in the blood program. The Office of Blood Research and Review estimates that 20 FTE and $2.5 million are needed to sustain the reduction of the blood medical device backlog, and perform their other regulatory responsibilities. This estimate does not include resources needed to permit scientific professional development and research.

There are also additional needs related to special initiatives which include: expansion of reporting systems for transfusion-related errors, accidents and adverse reactions requiring approximately $1 million including at least two FTE; completion of rulemaking, guidance, including monographs, and supply improvements under the Blood Action Plan at a cost of about $1 million per year for 3–5 years; and research to permit science-based revision of the donor questionnaire costing about $3 million.

HEALTHY PEOPLE 2010

I have a few questions about the Department of Health and Human Services' target for reducing underage smokeless tobacco use and the method for measuring whether the target is met.

For purposes of Healthy People 2000, the Department established a 1988 baseline of 6.6 percent for past-month use of smokeless tobacco by 12–17 year-old males and set a goal of reducing smokeless tobacco use among 12–17 year-old males to 4 percent by 2000. The Department used the National Household Survey on Drug Abuse to measure progress toward this goal. According to the National Household Survey, the 4 percent goal was not only reached but surpassed in 1993 and 1994.

In 1996, the Department indicated that it had changed its survey methodology, and that one effect of the change was to estimate 12–17 year-old male smokeless tobacco use at 5.1 percent in 1995—a much higher number than the 3.5 percent reported for 1994. Even with the new methodology and the higher 1995 estimate the department's 4 percent goal was reached and surpassed in 1996, 1997, and 1998. A past-month use rate of 2.1 percent was reported for 1998 for 12–17 year-old males.

Healthy People 2010 establishes a new goal of reducing smokeless tobacco use among all 9th through 12th graders to 1 percent by 2010, but it will use yet another methodology—the Youth Risk Behavior Survey—to measure progress toward this goal.

In the draft Healthy People 2010 Objectives issued for public comment however, the Department stated that "continuity" and "comparability" were important and that, whenever possible, Healthy People 2010 should use the performance measures already used in Healthy People 2000.

Question. Could you explain why the department has again revised its methodology for measuring underage smokeless tobacco use, for the second time in six years?

Answer. Continuity and comparability in the source of information from one year to the next are important factors in monitoring trends in tobacco use in the population. The Department supports three surveys to determine how adolescents use tobacco products—the National Household Survey on Drug Abuse, NHSDA; Monitoring the Future, MTF; and the Youth Risk Behavior Survey, YRBS. Each of these surveys takes a somewhat different approach. Monitoring the Future surveys youth in schools, the YRBS also focuses on school youth; and the NHSDA interviews a large sample of persons over 12 years of age. Because these surveys are somewhat different in how the samples are drawn, how interviews are conducted, and the general structure of the questionnaires, they produce somewhat different results with respect to absolute levels of use. The different approaches contribute to resolving the problem of what the level of true use may be. What is important is that the three surveys historically describe essentially similar trends.

Careful consideration was given to all available data sources for monitoring Healthy People 2000 and 2010 objectives. The tobacco working group, comprised of scientists and health professionals, suggested using YRBS because state data is available for both baseline and trend analysis, making it possible for states to accurately measure progress on the objectives.

Question. How can the department accurately gauge the actual trend of smokeless tobacco use over time when it changes its measurement tools every few years?

Answer. The Department does not change the tools it uses for measurement every few years. The YRBS, the NSDA, and the MTF have been used for more than a decade to measure changes in substance use and abuse. Each survey provides estimates of prevalence and trends over time. Each of the surveys can be used to provide a general picture of the trends in youth use of smokeless tobacco. Trend data are available in the current Healthy People 2010 data source, the Youth Risk Behavior Survey, which has collected information about smokeless tobacco use since 1993.

Question. Will the Department again change its measurement tools if the Healthy People 2010 target is achieved ahead of schedule? Is there some concern that we'll stop making vigorous efforts to reduce underage smokeless tobacco use if estimated use levels are too low?

Answer. The Department has maintained the NHSDA for almost 30 years, the MTF for 25 years, and the YRBS for almost a decade. There is no intention to modify these surveys because of a specific change in the trend. Indeed, in order to describe trends the surveys need to be modified as little as possible. In addition, the department has no intention to change the Healthy People data source during the decade. As long as any youth are using tobacco, a cancer-causing substance, the department will maintain vigorous prevention, cessation, and research efforts in this area.

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The first strategic goal focuses on premarket activities and the second on postmarket activities. Both the fiscal year 2001 budget request and performance plan are organized by these strategic goals. The fiscal year 2001 budget requests the resources necessary for FDA's core activities of premarket review and postmarket surveillance by program. The performance plan also organizes the agency's performance goals by these two strategic goals and links the performance goals to the agency's programs as presented in the budget request.

Question. Could you describe the process used to link your performance goals to your budget activities?

What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The process used to link performance goals to budget activities involved program managers, planners and budget representatives from each major program area, their field counterparts, and analysts in the Office of Planning and the Office of Financial Management in the Office of the Commissioner. It involved several steps, the most significant of which was the use of strategy teams composed of representatives of all agency programs and led by senior agency managers. These teams brought agency decision-makers together to look carefully at the difference between current Agency performance and specific performance targets established by statute, such as FDAMA. In this way we could focus on resources needed to close the gap between actual and intended performance and on the strategies needed such as leveraging and improving our science base to meet performance targets. Performance goals were developed to reflect the level of performance expected based on the budget request.

We did not encounter many difficulties in linking performance goals to budget activities in terms of developing goals related to the budget activities. The difficulties encountered were in precisely linking specific resources to specific performance goals and in the presentation of the budget and related performance goals in the performance plan. We learned we would need more precise performance data and cost accounting data to establish specific linkages between resources and specific goals. This data, would be costly and difficult to collect especially if we had to collect performance related data from the public, industry, and the health care community. The presentation and integration of the budget and the performance plan are a continuing challenge and a continuing learning process. We will continue to look for meaningful ways to relate agency outcomes with resource allocation decisions.

Question. Does the agency's Performance Plan link performance measures to its budget?

Does each account have performance measures?

Answer. Yes, the agency's performance plan links performance measures (goals) to its budget by its overall premarket and postmarket strategic goals and by program. The agency's budget has one major appropriation account which covers its programs. Each program within the account has corresponding performance goals in the performance plan.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Do you plan to propose any changes to your account structure for fiscal year 2001?

Will you propose any changes to the program activities described under that account structure?

Answer. The agency's performance planning structure is the same as the account and activity structure in its budget justification. The budget and the performance plan are both organized by the agency's two overall strategic goals for premarket and postmarket activities and by programs. We currently plan no changes to the agency's account structure nor to the program activities described under that account structure in fiscal year 2001.

Question. How were performance measures chosen?

How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Performance measures were selected by the agency leadership based on their direct support of the agency's long range, strategic goals, and also because they supported the strategies outlined during the planning phase of the fiscal year 2001 budget. Goals contained in the Performance Plan were determined to be the most critical indicators for successful achievement of strategic goals and strategies. The specific performance target levels for fiscal year 2001 were also influenced by several factors, including: the urgency of the health or safety risk addressed by the goal, the proposed level of funding, environmental factors such as size and complexity of workload, and actual performance results for fiscal year 1999.

The agency balanced the cost versus the need for performance data based on the degree of health and safety risks involved and on the availability of existing data. The greater the potential risks, the greater is the need for performance data to tell us how we are addressing that risk. Where mature data systems are already in place, costs are well justified by the quality of performance data we receive. PDUFA is a good example of this type of program. In some new areas in which the agency is re-inventing its review processes to expedite the marketing of safe products, such as the premarket notification program for food additives, we are obliged to re-engineer our data systems, and collect data to support our regulatory activities. Improvements to the existing data collection systems that support our regulatory efforts require an initial front-end investment that will yield benefits relatively soon within one or two years. The benefits resulting from these investments in terms of the public health impact and ultimate savings to the industry will exceed the cost of the improvements. For some areas, such as medical errors, a large front-end investment is required. But we believe that investment in data collection is well worth the cost, even though benefits will only be fully realized after five or more years. This is because a comprehensive medical error surveillance, assessment and correction system is a primary means for improving health and safety outcome.

Yes, FDA's fiscal year 2001 Performance Plan includes thirteen 1999 performance goals and measures for which data were not available for inclusion in the fiscal year 1999 Performance Report. These goals account for 20 percent of the 65 performance goal commitments for fiscal year 1999.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. I would be happy to provide that for the record.

[The information follows:]

FISCAL YEAR 200 ANNUAL PERFORMANCE PLAN KEY GOALS

Program	Fiscal year 2000 performance goal	Output/outcome	Strategic goal
Foods	Complete First Action on 40 percent of food and color additive petitions within 360 days of receipt.	Output	Provide consumers quicker access to new food ingredients and dietary supplements, while assuring safety and effectiveness.
Foods	Achieve adoption of Food Code by at least 18 states.	Outcome	Reduce the health risks associated with food and cosmetic products by preventing human exposure to hazards, monitoring product quality and correcting problems that are identified.
Foods	Inspect at least 90 percent of high risk domestic food establishments.	Output	Reduce the health risks associated with food and cosmetic products by preventing human exposure to hazards, monitoring product quality and correcting problems that are identified.
Foods	Conduct 60,600 import exams of high risk food products.	Output	Reduce the health risks associated with food and cosmetic products by preventing human exposure to hazards, monitoring product quality and correcting problems that are identified.
Drugs	Review and act on 90 percent of priority NDAs within 6 months.	Output	Reduce human suffering and enhance public health by providing quicker access to important, lifesaving drugs, and assuring availability of safe and effective drugs.
Drugs	Review and act on 45 percent fileable original generic drug application within 6 months after submission date.	Output	Reduce human suffering and enhance public health by providing quicker access to important, lifesaving drugs, and assuring availability of safe and effective drugs.
Drugs	Inspect 22 percent of registered human manufacturers, repackers, relabelers and medical gas repackers.	Output	Prevent unnecessary injury and death to American public caused by adverse drug reactions, injuries, medication errors and product problems.
Biologics	Review and act on 90 percent of priority original NDA/PLA/BLA submissions within 6 months of receipt.	Output	Ensure the expeditious availability of safe and effective human drugs, including biologics, for prevention, diagnosis, and treatment of disease.
Biologics	Meet the biennial inspection statutory requirement by inspecting 50 percent of registered blood banks, source plasma operations and biologics manufacturing establishments.	Output	Reduce the risk of biologics products on the market through assuring product quality and correcting problems associated with their production and use.
Animal Drugs	Increase the level of presubmission conferences with industry sponsors to 75 percent.	Output	Increase the availability and diversity of safe and effective animal drugs and feeds.
Animal Drugs	Review and act on 65 percent of NADAs/Abbreviated New Animal Drug Applications (ANADAs) within 180 days of receipt.	Output	Increase the availability and diversity of safe and effective animal drugs and feeds.
Animal Drugs	Improve biennial inspection coverage by inspecting 27 percent of registered animal drug and feed establishments.	Output	Reduce risks associated with marketed animal products.

FISCAL YEAR 200 ANNUAL PERFORMANCE PLAN KEY GOALS—Continued

Program	Fiscal year 2000 performance goal	Output/outcome	Strategic goal
Medical Devices	Increase the on-time percentage of Premarket Approval Application (PMA) first actions (within 180 days) and Humanitarian Device Exemption (HDE) first actions (within 75 days) completed to 85 percent.	Output	Provide quicker access to important, life-saving and health-enhancing medical devices, while assuring their safety and effectiveness.
Medical Devices	Review and complete 65 percent of 510(k) (Premarket Notification) final actions within 90 days.	Output	Provide quicker access to important, life-saving and health-enhancing medical devices, while assuring their safety and effectiveness.
Medical Devices	Inspect 24 percent of Class II and Class III domestic medical device manufacturers.	Output	Reduce the risk of medical devices and radiation-emitting products on the market by assuring product quality and correcting problems associated with their production and use.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. FDA's Office of Planning, OPL, uses a long-established liaison system to work with each Center's staff that is responsible for its Center's portion of the Performance Plan. Each OPL liaison has received extensive training in the types of GPRA goals. OPL liaisons consulted closely with the Centers' staffs during the development of the goals. Once in draft form, OPL liaisons reviewed and provided comments on the Performance goals back to the Centers' staffs. In many cases, OPL liaisons offered suggestions so the goals would provide outcome measures. The OPL liaisons meet weekly together to exchange comments and suggestions to encourage Centers to develop outcome goals. Finally, the OPL Director provided another review level to point out possible improvements in goals.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. In addition to the liaison program mentioned in my previous answer, the Office of Planning OPL has provided extensive GPRA training to many parts of FDA. Between 1996 and 1997 a three-person OPL team trained over 500 FDA personnel throughout the country on GPRA requirements in three-day workshops. An integral part of this training were lectures and exercises to identify, distinguish and write outcome goals. OPL has followed up this initial training with workshops tailored to Centers' specific needs. For instance, these workshops often involve participants rewriting draft goals to become outcome oriented.

While we believe that many managers understand the difference between output and outcome goals, by necessity we include output goals because many of our efforts provide information to an industry or the public. Even with this information in hand, there may be many external intervening factors that can affect the outcomes that we cannot control. Because change can be difficult, there can be economic, political, and cultural obstacles to altering people's behavior. For instance, providing the public information may require new spending patterns and challenging ingrained behavior.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Some examples of external customer satisfaction measures are usefulness of information provided by FDA on food labels, usefulness of Consumer Alerts about food safety problems, and consumer awareness of FDA's mission. These measures were used as part of a government-wide Customer Satisfaction Survey sponsored by the President's Management Council. The particular group of FDA customers targeted by this survey were the principal grocery shoppers and food preparers in U.S. households. The agency has also committed to the National Performance Review goal which focuses on the availability, quality and usefulness of prescription drug information provided to individuals who receive new medicines.

The agency applies a variety of performance measures to gauge service to internal customers, including measures of quality and timeliness of performance. Each of the agency's administrative support functions, including human resource management, procurement, facilities, information resource management and budgeting, are incorporating such measures into their continuous improvement efforts. Each week, exec-

utive officers from each of the agency's organizational components meet to address concerns in these areas of internal customer service. This meeting serves as an excellent forum for listening to feedback from customers and engaging in problem solving. In addition, the agency conducts periodic employee surveys to determine their degree of satisfaction at FDA. Their satisfaction is measured by such indicators as: job satisfaction, overall quality of the work being done, recognition for doing a good job and degree of flexibility in doing the work.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. The agency's measurable fiscal year 2000 goals were important, but not the only, inputs used in developing the fiscal year 2001 budget. We raised a series of questions during our planning and budgeting process. First, what was our long range goal? Second, what was our performance in fiscal year 1999? Third, how much closer did our fiscal year 2000 performance goal bring us toward closing the gap between actual and ideal? The gap between our fiscal year 2000 performance goals and our long range goals told us how much further we had to go to reach our ideal. The selection of an fiscal year 2001 performance goal represented a conscious decision concerning how much of the remaining gap we intended to close. The fiscal year 2001 budget increases are an estimate of the resources that would be required to achieve the fiscal year 2002 performance goals, as well as implement other key strategies.

The area of drug inspections provides a good example of this process at work: We knew that one long range goal in the area of drug inspections was to meet our statutory biennial inspection requirement, which meant inspecting at least 50 percent of the drug establishments annually. Our fiscal year 1999 actual performance was 22 percent. We had established the same 22 percent goal for fiscal year 2000, and knew that ideally we would have to inspect an additional 28 percent of the firms annually to meet the statutory requirement. We made a conscious decision to set the fiscal year 2001 performance goal at 28 percent rather than the statutory goal of 50 percent. The more modest inspection goal in fiscal year 2001 was selected because FDA had to also address higher priority health and safety risks such as imports, needed to strengthen its science capability to address 21st Century technology, and also wanted to invest in bringing the states up to speed so that they could be more effective partners with FDA in the future. The fiscal year 2001 budget request for drugs in the post market arena reflects a balance in funding the above strategies.

If a proposed budget number is changed by your Committee we would be able to estimate the likely impact of that change on our level of program performance for those areas where we have measurable performance goals. We would also be able to estimate the likely impact on less quantitative proposals, such as the strengthening of an adverse event reporting system; but the estimate would be made in qualitative terms.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. We do have the capability to measure program performance in those instances where performance goals are stated in quantitative terms. We have the technological capability of reporting program performance throughout the year on a regular basis. All levels of management have access to that information, and our progress on key performance goals are becoming increasingly available both on FDA's intranet and on the internet as well. The agency is improving in its ability to access performance-related data throughout the various information systems. More of FDA's performance information is being shared through the web as time goes on. We are generally aiming for greater accessibility by all who have a need for this type of information.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in the budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Have you faced such difficulty?

Answer. We have not been able to precisely link dollars to specific performance goals and results. However, our present budget account structure has not prevented us doing so. Rather, we do not have the necessary performance data or cost accounting systems to establish precise linkages between specific performance goals and results and resources. We have estimated resources for broad categories of goals based on our strategic goals and programs. For example, we estimate aggregate dollars for human drug premarket activities. We have also been able to estimate approximate changes to performance goal targets based on changes to related budget requests and final appropriations. However, it is not easy to estimate dollar amounts or FTE needed to meet specific statutory requirements or performance targets or to report on performance. Many factors affect performance. Using a risk based strategy the agency will emphasize higher priority risks over lower priority risks. Also, as we pursue more leveraging opportunities, we will have additional start up costs, set up time, and training requirements for our partners. Improving the agency's science capacity upon which decisions are based will also require resources and time. We need to expand our electronic submission and review capabilities, update our laboratories, and continuously train our staff in the scientific advancements that are creating the new products subject to FDA regulation. Allocating these investments which are intended to improve overall performance to specific performance results is very challenging.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. We do not believe that the linkages would be clearer if the budget account structure were modified. As described above, the difficulties in establishing linkages are not caused by the budget account structure.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. We do not propose modifying our budget account structure.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We do not propose modifying our budget account structure.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions.

Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. FDA has a good understanding of the resource requirements needed to achieve most of its performance goals. Inspectional coverage of food establishments, review time for new drug applications, and assessment of mammography facility quality are a few examples of areas in which good performance data are available or will be available soon. With that information, we can demonstrate how resources impact program performance. We have been able through analysis to discern the difference between available resources and the necessary resources to achieve the highest performance possible. This analysis also helped illustrate FDA's continuing need to set risk-based priorities.

As we continue to gain experience in implementing GPRA, we improve our ability to evaluate the impact of changes in funding level on our programs and our ability to achieve the performance commitments outlined in the Annual Performance Plan. In some instances, changes in funding level may require an increase or decrease in program efforts and target level of performance. It may require development of new performance goals.

Over the past few years, FDA has practiced several strategies for operating with reduced resources in spite of an increasing workload. These strategies have included reducing program efforts, refocusing program efforts to target the highest priority health risks, and re-examining the role we play in protecting public health relative to other government agencies, third parties, and industry. Some of those strategic changes have caused us to change our activity measures. In some instances, for example, the number of inspections conducted is not as appropriate a measure as the percentage of products approved by third-party sources. However, changes in approach will not change the agency's desire to improve health outcomes.

The performance goals in the annual performance plan link directly to the budget. Each individual performance goal supports a somewhat broader program strategic goal, which in turn supports a major FDA program. In the performance plan, budgeted amounts, both dollars and FTE, are aggregated at the program strategic goal level. So, for each major program area, the total budget request represents the total of the program strategic goal amounts.

FDA implemented managerial cost accounting as a pilot program during fiscal year 1997, in order to meet the Chief Financial Officers Act requirement for a "statement of net costs". The pilot initiated efforts to design, document, and implement the process of measuring full cost of FDA programs. A series of Excel worksheets were created identifying the resources consumed. In fiscal year 1999, total costs were allocated to 7 programs. Using the Excel format, the resources (or cost elements) were subsequently assigned directly, or allocated indirectly to the FDA components that consumed them. Additionally, the worksheets were linked in a manner where the data for each cost element was summarized and uploaded into published report formats. We also have experience in cost accounting as required by the Prescription Drug User Fee Act.

Integration of the budget and the annual performance plan is a continuous learning process. We continue to look for meaningful ways to relate Agency outcomes with resource allocation decisions. With no single answer on the horizon, we continue to emphasize agency results as a key driver for fiscal decisions.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting.

The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Will you be able to show us the per-unit cost of each activity and result?

To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. FDA is evaluating the need to enhance our existing system in order to support cost accounting requirements of the new accounting standards recommended by the Federal Accounting Standards Advisory Board, and issued by OMB for the other major programs and sub-programs in FDA. These enhancements will improve FDA's ability to adequately gauge the performance measurement activity.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. Several significant reform measures have been implemented, many of them mandated by FDAMA. The agency's performance plan contains specific goals, strategies and reports on accomplishments which reflect the agency's commitment to successfully implementing these reforms. Some of the key reforms highlighted in the performance plan include: a new notification process for dietary supplements containing new ingredients; a pre-market notification process for food contact substances; an initiative requesting additional pediatric information on clinical trials for new drugs; redesigning the Animal Drug Approval process to make it more efficient for FDA and industry; and reinventing many of the medical device premarket review processes to use resources more effectively and efficiently. Through regulatory reform efforts such as these, the agency has been able to improve the transparency of its processes, and facilitate participation by outside stakeholders. These reforms also enable the agency to focus on specific risk priorities, as in the case of dietary supplements and obtaining additional information on the impact of new drugs on children in the clinical trial setting. The performance plan provides an operational document which is used to help manage the implementation of these important new steps for FDA.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

If so, what steps have you identified to prepare, anticipate and plan for such influences?

What impact might external factors have on your resource estimates?

Answer. Yes, FDA's fiscal year 2000 Performance Plan identifies external factors that could influence goal achievement in the goal-by-goal presentation of perform-

ance of each FDA Program. Within the goal by goal presentation, external factors are discussed in the narrative description of each performance goal, the sections called "Context of Goal" and "Performance". External influences include changes in our workload and changes in the environment in which FDA operates, the increasing complexity and sophistication of the industries we regulate, and the ever-increasing development of new products that evolve from emerging technologies are also among external factors that may present obstacles to the achievement of our goals.

In developing our program strategies, we have taken several steps to prepare, anticipate and plan for external influences. First, we make every effort to keep abreast of changes in our external environment through ongoing analysis of emerging issues, industry trends and existing and proposed policy and legislation. Occasionally, a particular public health issue may warrant special studies. Such studies allow us to gain insight on the various facets of the problem and to identify the most effective intervention strategies. Second, consultations with our stakeholders, contacts with trade associations and collaboration with partners provide valuable information and forums for exploring strategic alternatives and for identifying synergies and competing interests. This has become increasingly important now that FDA shares the responsibility for achieving national public health objectives, such as those of Health People 2010 and the Food Safety Initiative, with many government and non-governmental organizations. Third, the monitoring of FDA program performance and effectiveness provides valuable information about how the agency's efforts impact public health. Fourth, the agency engages in strategic and operational planning both at the program level and the agency level. In developing agency strategic approaches, program planners and budget officers focus on strategies that leverage FDA resources to achieve the maximum public health impact despite external influences that potentially impede our progress.

FDA functions in a rapidly changing environment. Many factors that influence the achievement of our public health objectives are partially controlled by other organizations or are outside our direct influence and control. In addition, we acknowledge that despite our best efforts to anticipate and identify effective remedies to counteract the adverse effects of certain negative factors, unforeseen problems may arise. As a consequence, we may find that an unforseen change in our environment adversely affects our ability to attain some of FDA's performance targets and that the additional resources to address some external factors.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

If so, does the Performance Plan identify the overlap or duplication?

Answer. Potential overlaps were identified during the agency's deliberations about fiscal year 2001 strategies, but as a result of those strategic discussions the overlaps were eliminated prior to the development of the performance plan. The performance plan reflects a clear division of responsibilities among the agency programs. Each program does address similar functional responsibilities—e.g., science-based premarket review, and post-market surveillance, compliance and outreach. But the implementation of these responsibilities is tailored to the unique challenges addressed by each center.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Yes, agencies should and FDA does address management challenges, as well as potential duplication as part of their strategic and performance planning process. This is accomplished through the formation of 'corporate' strategic teams that are composed of individuals representing all organizational components. Each team is assigned to a major strategic area that the Agency is pursuing. The teams identify management challenges for the future in their respective areas, and formulate strategies for addressing these strategies. As part of the strategy development process, teams coordinate with each other and identify potential overlaps. The performance plan is a reflection of the division of responsibility agreed to by the teams and also clearly allocates a division of responsibility among FDA's centers.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Will this use increase in the future and if so in what ways?

Answer. GPRA principles are adhered to by FDA's leadership as they make strategic decisions about the agency's future directions, operational decisions about the specific performance goals that they are willing to commit to, and budget decisions which will adequately fund these commitments. As the agency gains further experience in implementing GPRA, we will improve our ability to evaluate the impact of changes in funding levels on our programs and our ability to achieve the performance commitments outlined in the Annual Performance Plan. FDA leaders will also

be in a better position during the coming year to use information on actual performance to help make mid-course adjustments to plans. The ability to monitor performance, analyze variance and make decisions on adjustments will be further strengthened as the agency's information systems and web-based capabilities provide managers with greater access to performance information. Also, increasingly, GPRA-type of performance goals are being incorporated into the individual performance plans of senior executives. This enables their individual efforts to be directly linked to the agency's program commitments.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The maturity of our performance measures varies from program to program. In PDUFA-funded areas, for example, performance measures have remained relatively stable during the past several years. New measures have been added to implement PDUFA II, but the original measures are essentially the same. Because of this stability, the information and cost systems that support this endeavor have also matured and are able to provide reliable data. In the area of inspections, information systems do provide intelligence on actual performance, as well as costs associated with achieving target performance levels. In areas where significant reinvention has occurred, neither data bases nor base lines have yet been established which will allow the agency to report on historical progress. Thus, there would be no reference points from which goals could be established with a high level of confidence. FDAMA presented the agency with several regulatory reforms that required the creation of new review processes. Performance measures in these areas are not sufficiently mature to be used in a performance management setting.

In several other areas, the agency is investing new efforts in leveraging its own limited assets with partners such as states, the health professionals, other agencies and the regulated industry. These leveraging initiatives should ultimately yield greater returns on investment to FDA in terms of stronger science-based regulatory decisions, faster review times and increased inspection coverage. Although review times and inspection coverage are the same kinds of performance measures that the agency currently uses, the estimates of funding required to achieve performance gains will be much less certain. This is because initial investments in leveraging will not yield immediate gains in performance. Time will be required to determine the cost profiles associated with a new way of doing business.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No, we are not requesting a relation of transfer or reprogramming controls in return for specific accountability commitments.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. I believe that you are referring to the HHS Strategic Plan—not an FDA-specific strategic plan. The HHS Plan is in the process of being redrafted at this time. We suggested some modifications to FDA's contributions to the HHS Plan. Specifically, we placed additional emphasis on the fact that FDA would focus its future efforts on strengthening the science base of the agency. This is viewed as absolutely essential in order to keep pace with science and technology advancements so that FDA can pass judgements on the products and processes of these new advancements. We also suggested that FDA's future reliance on leveraging as a primary way of doing business be given greater emphasis in the HHS Strategic Plan.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

I have some concerns about the possible effect on small businesses of FDA's final rule on the Prescription Drug Marketing Act, which was published on December 3, 1999. The FDA's small business analysis of the rule noted that 94 percent of pharmaceutical distribution firms, or about 4,000 companies, are small businesses. I have several questions about the rule and its small business impact:

Question. It is my understanding that nearly all of these 4,000 small businesses would have to provide their customers with a very detailed sales history for each product they wished to resell. If they cannot obtain the required information from

whomever they buy the products from, is it correct that they would not be able to legally resell the prescription drug products?

Answer. If the wholesalers who do not buy directly from the manufacturer cannot obtain the detailed prior sales history required by the final rule and they sell the product anyway, they would be violating the requirements of the rule.

Question. Does the final rule require manufacturers or authorized distributors to provide this detailed information to firms who purchase from them?

Answer. The final rule is consistent with the statute and the legislative history. Manufacturers or authorized distributors are not required to provide the sales history but unauthorized distributors are required to provide the sales history. The statute requires wholesale distributors who are not the manufacturer or an authorized distributor to provide a statement identifying each prior sale, purchase, or trade of such drug. There is no indication in the Prescription Drug Marketing Act, PDMA that Congress intended that the statement or pedigree include only those sales, purchases or trades since the drug was last handled by an authorized distributor. Moreover, the legislative history of PDMA indicates that the pedigree must include all previous sales of the product. Thus, an unauthorized distributor would be required to provide a full drug origin statement in accordance with PDMA and the final rule whether or not it has purchased a prescription drug from an authorized distributor of record. Although FDA has encouraged authorized distributors to provide a pedigree to unauthorized distributors, they are not required under PDMA to do so. Note, FDA has extended the effective date of this part of FDA's final rule and we are willing to consider the additional comments and information presently being provided to assist in developing a solution to this potential problem.

Question. Is it possible that this rule will drive some of these small resellers out of business? If so, how many resellers do you think are at-risk? If many of these small distributors were to go out-of-business, what would be the impact on prescription drug prices? Would we risk disruption in the supply of prescription drugs?

Answer. FDA agrees there could be a negative impact if thousands of drug resellers were forced out of business. However, because the PDMA has been in effect since 1988, FDA does not believe that this will occur and does not believe that there will be a disruption in the supply of prescription drugs to retailers and consumers. Assurances to consumers that they are not receiving subpotent, adulterated, counterfeit or misbranded drugs will be strengthened by the procedural and recordkeeping requirements of the final rule. In any event, FDA is willing to work with Congress and others to resolve the concerns raised and allay any fears of supply disruption.

QUESTION SUBMITTED BY SENATOR SLADE GORTON

Question. As you know, Congress debated The Food and Drug Administration Modernization Act (FDAMA) for 3 years, from 1994 to 1997, with the purpose of streamlining the FDA and its product approval process for drugs, medical devices, etc. One of the key provisions in the Act involves FDA having a quasi-private-public partnership, using independent 3rd party scientific review organizations to make product approval recommendations to the FDA. Companies would pay 3rd parties to review their products, and the FDA would accredit these 3rd parties, as well as sign off on their final recommendations. I understand that the 3rd party system isn't working very well, because the list of products currently eligible for the program is very limited, to low-end products. Last year, this subcommittee allocated the largest increase for CDRH ever. In light of these new dollars, what is the FDA doing to expand the 3rd party program this year?

Answer. Currently, 154 devices are eligible for third-party review—including many significant devices such as diagnostic ultrasound systems, magnetic resonance imagers, endoscopes, and cardiac monitors—and at least 2 of the 13 Accredited Persons are available to review each of the devices. In fiscal year 1999, the agency received more than 1,200 510(k) submissions for the 154 devices, representing nearly 50 percent of all 510(k)s that are potentially eligible for third-party review based on the criteria in section 523(a)(3) of the Federal Food, Drug and Cosmetic Act. An important milestone of the third-party review program occurs when the agency notifies Congress that at least two third-parties are accredited to review at least 60 percent of 510(k) submissions. FDA expects to meet the 60 percent milestone with the next expansion of the eligible device list, which we plan to announce soon. In addition, the Administration's fiscal year 2001 budget proposal includes a proposal for additive device user fees to help jump-start the third-party program. The revenue from these fees would be used to provide information about the availability of third-party reviews and to subsidize the cost of these reviews.

QUESTIONS SUBMITTED BY SENATOR MITCH MCCONNELL

With respect to the FDA's regulations issued December 3, 1999 implementing the Prescription Drug Marketing Act, I am concerned that wholesale distributors will not be able to comply with the requirement that they provide a statement identifying prior sales back to the manufacturer. This is because many of the distributors buy from full line authorized distributors who are not required by PDMA to provide such information. This aspect of the final rule is inconsistent with the contemporaneous interpretation that the industry has operated under for the past twelve years.

Question. In its final rule, why did FDA change from its 1988 guidance to its present rule requiring a statement identifying prior sales that go back to the manufacturer?

Answer. FDA investigations have found that secondary wholesalers who are diverting prescription drugs will ship the drugs through an authorized distributor in order to erase, or wash, the record of all sales of the drugs prior to the authorized distributor. Since the Prescription Drug Marketing Act, PDMA, does not impose the drug pedigree—statement of origin-requirement on authorized distributors, the pedigree is—washed—with the drugs' passage through the authorized distributor, with the result that all sales of the drugs prior to the authorized distributor are erased. The secondary wholesaler can then claim that they purchased the drugs from an authorized distributor without divulging the true source or sources of the drugs. Traceability of the drugs through the wholesale distribution system is also, therefore, erased.

Question. What evidence does FDA have that authorized distributors who are not required by PDMA to provide prior sales histories of the drugs they sell will do so voluntarily?

Answer. Although FDA has encouraged authorized distributors to provide a pedigree to unauthorized distributors, they are not required under PDMA to do so. In any event, we have extended the effective date of that part of the final rule and are willing to consider the additional comments and information presently being provided to assist in developing a solution to this potential problem.

Question. Has FDA determined the cost to authorized distributors of implementing the same system of providing prior sales information that is now required of distributors who are not authorized?

Answer. As noted in the preamble to the final rule, most of the requirements in the proposed rule were already implemented by the industry in response to the enactment of the PDMA, FDA's guidance, and industry trade association recommendations. Therefore, the agency, in section IV, of the final rule determined that there would be one-time costs of $318,000 for developing forms, and total annual costs of approximately $82 million. Of these costs, approximately $39 million has already been incurred by industry since Congress enacted PDMA in 1988.

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

Question. Please provide information describing in detail the activities conducted by FDA using funds included as part of the Food Safety Initiative in fiscal year 2000 and proposed for fiscal year 2001.

Answer. I will be happy to provide this information for the record.

[The information follows.]

FOOD SAFETY INITIATIVE

For fiscal year 2000, FDA received a $30 million increase for the President's Food Safety Initiative and thanks the Committee for their continued support. The additional resources are being targeted to further developing a nationally integrated, seamless, and science-based food safety, enhancing public health surveillance and increasing the speed and efficiency of responses to outbreaks of foodborne illness, and placing greater emphasis on the control of foodborne hazards in the pre-harvest phase of the farm-to-table continuum. Specifically the funds will be used to:

—Begin development of an electronic communication and data sharing system for use in Federal-state monitoring and traceback activities;

—Expand and increase the overall capacity of the National Antimicrobial Resistance and Monitoring System (NARMS) and the number of States covered to assure a higher probability of detecting emerging resistant pathogens capable of animal to human transmission and to minimize the occurrence of foodborne outbreaks including those from outside the United States;

—Increase inspection coverage and frequency of coverage of domestic firms, with top priority given to firms processing "high-risk";

—Increase the number of inspections of foreign processors and conduct evaluations of foreign food production systems;
—Provide training to State and local food safety officials and industry in the effective use of preventive control systems, such as HACCP and to perform inspections of HACCP systems;
—Develop methods for predicting the risk associated with foodborne pathogens and partnerships with government, industry, and academic scientists to conduct studies that demonstrate comparability of disease across species;
—Continue a program of research in quantitative risk assessment that is targeted to address the limitations in risk assessment methodologies;
—Continue to build the activities of the interagency Risk Assessment Consortium and to continue development, through the Joint Institute of Food Safety and Applied Nutrition, of the Risk Assessment Clearinghouse; and
—Continue to develop and provide multi-lingual education programs for food service workers and to implement a national education and training program to ensure greater safety in retail food preparation practices, including the use of HACCP principles in retail establishments.

The fiscal year 2001 request builds upon three years of intense work and cooperation among FDA, CDC, and USDA, as well as State and Local Health agencies. FDA's request would, among other things, ensure annual inspections of high-risk food establishments and enhance the supporting laboratory analyses; work with states to implement audit programs to ensure consistent application of regulations and develop consistent nationwide food safety standards; implement the Hazard Analysis Critical Control Point system for fruit and vegetable juices; develop and evaluate on-farm intervention strategies and/or technologies to improve testing methodologies for Salmonella Enteriditis (the Egg Safety Action Plan); and complete the National Antimicrobial Resistance Monitoring System by adding national and international data collection sites.

Question. To what extent has FDA's role in the Food Safety Initiative reduced the health threat of imported foods?

Answer. On March 17, CDC reported a 20 percent reduction in overall foodborne illnesses associated with pathogens through their active surveillance network—Foodnet. The Centers for Disease Control—CDC, credited the federal, state and industry food safety partnership activities, such as Fight Bac!; HACCP and Good Agriculture Practices as major contributors to this public health improvement. CDC also reiterated the need to continue to make similar strides in prevention, improved food safety systems and outbreak response.

Additionally, the overall picture of trends for food safety knowledge and practices that emerges from research is quite encouraging. Between 1993 and 1998, the public's food safety practices, both the consumption of risky foods and food handling behaviors in home kitchens, show dramatic improvement. For example, for the population as a whole, the incidence of eating pink hamburger is down 33 percent and the incidence of eating raw oysters or clams is down 39 percent. The safety of reported hand-washing and cutting board practices has also improved markedly. The improvement is particularly strong for handling meat or chicken, which improved 74 percent compared to a 27 percent improvement for fish. Knowledge levels about microbial food pathogens increased, along with rising perceptions of the possible risk of getting foodborne illness.

That is not to say that there are no consumer education issues to be addressed. There are obvious gaps in consumer knowledge, attitudes and practices related to food safety. For example, although awareness of salmonella appears to be on the rise, most consumers still do not handle eggs very carefully and they are more likely to consume undercooked eggs or foods containing raw eggs than any other risky food. Most consumes have never heard of *Listeria* or *Campylobacter*, which are at least as prevalent in the food supply as the more well known pathogens, *Salmonella* or *E. Coli.*

The Food Safety Initiative has provided necessary resources for FDA to undertake the enormous challenge of foodborne illness. Even more is expected of this Agency as its responsibility encompasses a broader array of regulated products and potential hazards in foods.

Question. Can FDA quantify the amount of unsafe food items that enter this country uninspected?

Answer. No, however, we are able to quantify the total number of FDA regulated food products that are offered for entry into the United States. From January 1-December 31, 1999, 3.4 million food or food related products were offered for entry. Of these products, two percent were refused entry due to their failure to meet FDA's regulations or because they were determined to be unsafe for human use.

BOTTLED WATER STUDY

The Safe Drinking Water Act Amendments of 1996 required a report related to bottled drinking water. Since that time, FDA has been charged with preparing a study on this subject for which the Senate Report for the Fiscal Year 2000 Appropriations Act directs completion by March 2000. The 1996 Amendments required a final report no later than February 1999. I now understand FDA has moved the completion date until later in the year.

Question. Please explain why FDA is causing a further delay for a report that has been pending for nearly four years?

Answer. In January 2000, FDA's Center for Food Safety and Applied Nutrition—CFSAN, published its workplan, titled "2000 CFSAN Program Priorities," to inform its stakeholders about CFSAN's priorities for the fiscal year. The workplan includes A and B list goals. Items on the A-list are projects that will be completed this fiscal year. Items on the B-list are projects on which CFSAN intends to make progress this year, but will likely not complete.

Among our A-list goals, pursuant to Senate Report 106–80, CFSAN will publish a "Bottled Water Feasibility Study," examining the feasibility of appropriate methods of informing consumers about the contents of bottled water as mandated by the Safe Drinking Water Act Amendment of 1996. The draft "Bottled Water Feasibility Study" was published on February 22, 2000. We expect this study to be finalized by August 2000.

Question. Will FDA be able to complete this report by a date more in line with the congressional directive?

Answer. The draft bottled water feasibility study was published on February 22, 2000. The comment period for the draft study will close on April 24, 2000. The final feasibility study is on CFSAN's list of priorities for this fiscal year, and we have requested an extension of the due date until August 2000 to complete this report. We believe we can meet an August 2000 completion date, given the amount of time needed for the evaluation of comments and development of the final report.

SEAFOOD INSPECTION FROM COMMERCE

Question. The President's budget proposes to transfer the voluntary seafood inspection program from the Department of Commerce to the FDA. Some have expressed concern that this action may undermine the public confidence provided by Seafood HAACP. Please respond to that concern.

Answer. Rather than undermine public confidence, such a transfer could strengthen it. Transferring the National Marine Fisheries Service—NMFS, voluntary program to FDA would establish FDA as the sole seafood agency with one HACCP standard. FDA would be able to train the voluntary inspectors in the regulatory HACCP standard along with the regulatory inspectors. Consequently, FDA may be able to contract with the voluntary inspectors to perform certain regulatory HACCP inspections or, in certain instances, to count a voluntary inspection as a regulatory inspection. The result is that the transfer would provide a skilled cadre of inspectors to implement FDA's regulatory HACCP program. Industry will benefit by eliminating redundant inspections at the federal level. Consumers will benefit by improved food safety resulting from inspections based on a single HACCP standard established by FDA.

FDA believes that safeguards could be put in place to eliminate a potential conflict of interest that could undermine public confidence in the current seafood HACCP program. While the legislation would authorize PBO inspectors to perform regulatory HACCP inspections, FDA would adopt precautions to ensure the objectivity and credibility of the inspection. For instance, FDA could adopt a policy of utilizing PBO inspectors to perform regulatory inspections only for seafood firms that are not also paying customers of the PBO. In the end, FDA can always utilize its regulatory inspection force as a check against the PBO inspection force to ensure that the public health is protected.

FOOD CONTACT SUBSTANCE

The Fiscal Year 2000 Appropriation Act provided an increase for premarket application reviews of food contact substances.

Question. How much of FDA's fiscal year 2000 budget was directed for this purpose?

Answer. For fiscal year 2000, funding of $6 million was provided to FDA to fully implement the food contact substance notification program established by FDA Modernization Act.

Question. Does FDA require any additional resources to fully meet the needs of this premarket review process?

Answer. Our current estimate is that $6 million would adequately fund this program in fiscal year 2001. FDA notes that this program has only recently begun to operate. As we gain experience with the notification program, and obtain better information about the number and complexity of notifications we can expect to receive, we may need to refine our cost estimates for future years.

GINSENG

The Senate Report to accompany the Fiscal Year 2000 Appropriations Act includes language that calls FDA's attention to potential problems of adulterated ginseng imports.

Question. What specific actions has FDA taken in response to this language?

Answer. FDA received information suggesting that a significant amount of imported ginseng may be treated with pesticides that are not approved for use in ginseng in the United States. In response to this information, FDA decided to determine the scope of the problem in September 1998. Accordingly, FDA collected samples of imports between October 1998 and May 1999. A total of 56 samples were collected and analyzed for organochlorine and organophosphate pesticide residues. Of the 56 ginseng samples analyzed, 33, or 58.9 percent were found to be violative for pesticide residues and appropriate regulatory action was taken.

I would like to provide a chart for the record that shows the countries in which the violative samples originated.

[The information follows:]

IMPORTED GINSENG

Country	Number of samples collected	Number of regulatory actions taken
China/Hong Kong	38	18
Korea	13	10
Canada	5	5

A total of 28 different manufacturers or shippers were involved in shipping violative ginseng samples from the countries listed above and were named on an Import Alert.

An Import Alert identifies and disseminates import information about problem commodities and/or shippers and provides guidance to FDA personnel on import coverage.

EGG SAFETY

Last year, the FDA proposed a warning label for eggs. I have heard from egg producers who feel it is overly alarmist and would prefer a different label; they do not oppose the concept of labeling, only the specific label the agency proposed.

Question. Can you give us some insight into your thinking on this label, and whether you are considering any changes to what you proposed last year?

Answer. From the results of previous focus group research on label statements used to alert consumers to potential hazards in foods—namely, iron supplements and fresh or unprocessed fruit and vegetable juice warning statements, FDA determined that certain types of information was required to adequately inform consumers about the potential risks associated with the food. In particular, our focus group research indicated that for consumers to understand and modify their behavior with regard to a particular food there needed to be an information statement explaining why there was a risk associated with the food. This information statement was especially important if the information was considered new information. In crafting the proposed safe handling instructions for eggs, FDA considered that consumers needed to be given information on why the product presented a risk. Accordingly, FDA proposed to include a sentence in the statement that informed the consumer that the eggs may contain harmful bacteria known to cause serious illness in children, the elderly, and persons with weakened immune systems. FDA included these groups because they are generally at higher risk of serious illness from food borne pathogens than the rest of the population.

FDA received several comments objecting to the introductory sentence in the proposed safe handling instructions. We also received comments offering alternative

wording for the safe handling instructions, as well as those asserting that the presence of *Salmonella* in eggs was not new information.

CONSUMER INFORMATION

Question. To what extent does the "Take Time to Care Initiative" duplicate the "MedGuide" program?

Answer. The programs were created to complement each other, not duplicate each other. As part of its mission, FDA makes approval decisions for new products based on a balancing the risks and benefits of a given product. Yet, that is just one small part of the process—all along the way, from the manufacturer who makes a drug, to the prescriber who writes a prescription, the pharmacist who fills the prescription, to the patients and consumers who make decisions about product use for themselves and their families, we all have a role to play in minimizing product risks.

Because women are the primary users of medicines and typically administer medicines to their families—they are ultimately the risk managers for their families—The Take Time to Care Initiative focuses on them. Women need to take charge of their own health and learn about proper use of medicines for themselves and in their role as family caregivers. Through this program, we have emphasized that there are very easy ways to do this, including: reading labels, keeping track of their medications, avoiding sharing or skipping of medications, keeping track of the basic side effects, and, simply—but importantly—asking questions. These very easy steps can ultimately have a very large impact on reduction in adverse events from medical products.

In this effort, FDA's Office of Women's Health partnered with more than 70 organizations in the "Take Time to Care" campaign, which distributed the *My Medicines* brochure to help women safely use medications. The brochure is available at the FDA website: www.fda.gov/womens/tttc or by calling toll free 1–888–8–PUEBLO.

In addition, FDA's Medication Guide program would provide additional information to patients and consumers regarding the prescription drugs that they receive for themselves and their families. Medication Guides contain specific information about each drug—information about dosage, warnings, contraindications, and other critical information to help individuals take their medications accurately and effectively. This program provides the specific information about each drug, ensuring that it is conveyed to the patient or consumer in a manner that is clear and intelligible. In contrast, the Take Time to Care Initiative is focused more broadly, underscoring the importance of reading and following such information.

INTERNET DRUG SALES

Question. Please provide information regarding identified problems related to current internet drug sales practices and the specific manner in which your proposal would solve these problems?

Answer. The Internet has provided a new marketplace for sales of unapproved new drugs including counterfeit drugs, prescription drugs sold without a prescription, drugs imported or re-imported illegally, and products marketed with fraudulent claims. Patients who buy prescription drugs from websites that engage in such illegal activities are at risk for adverse effects from inappropriately prescribed medications, dangerous drug interactions, and contaminated drugs. As you know, long before the Internet was created, Congress and the State legislatures enacted a comprehensive system of premarket approval, prescription drug designations, practioner evaluation and pharmacy dispensing to protect patients from injuries resulting from unsafe or counterfeit drugs and from the illicit practice of medicine and pharmacy This system has worked well over the years.

Because the current laws were not enacted with the Internet in mind, however, they do not provide regulatory and law enforcement agencies with fully effective tools to protect consumers from operators of online pharmacies that engage in illegal activities. For example, both consumers and law enforcement officials may have difficulty identifying the name, location, and State licensure of physicians, pharmacists, and online pharmacy operators. Even if the parties can be identified, because the Internet is largely unconstrained by State and national boundaries, States—traditionally the primary regulators of the practice of pharmacy and the practice of medicine are undercut in their efforts to regulate online pharmacies. Finally, both State and Federal agencies are limited in the causes of action that may be brought against illegal online sellers of prescription drugs.

The Administration's proposal is designed to provide sufficient safeguards to protect the public health effectively without hindering the enormous potential benefit of the Internet. In addition, the proposal is designed to enhance the effectiveness of the Federal-State partnership in the regulation of prescription drugs and recog-

nize the importance of the States' traditional role in regulating the practice of medicine and pharmacy. Accordingly, the proposal would support and strengthen the States' authority too enforce applicable law within their borders, while providing enhanced Federal authority to monitor the multistate and interstate aspects of Internet prescription drug sales. By filling gaps in Federal and State authority, the bill seeks to curb illegal sales of prescription drugs and to ensure that consumers are receiving safe and effective drugs prescribed by health care professionals, and dispensed by pharmacies that properly licensed. The proposal will allow legitimate online pharmacies to be much more easily distinguished from illegal online pharmacies, which will enhance consumer safety and confidence, and level the playing field for legitimate online pharmacies by reducing their illegal competition.

Question. To what extent do you believe further regulation of internet drug sales will impair or reduce the availability of drugs through this medium?

Answer. New legislation regarding Internet drug sales will not reduce the availability of legally prescribed and dispensed medications through this medium, however, it will reduce the availability of illegal medications distributed through this medium. By increasing consumer confidence in the Internet as a medium for prescription drug sales, new regulations will advance the interests of legitimate online pharmacies.

Question. If you think further regulation of internet drug sales will have no effect on the availability of prescription drugs, please explain.

Answer. The legislation only targets illegal sellers of prescription drugs and would have little effect on those entities who are properly licensed by states and abiding by state and federal law.

ORPHAN DRUGS/EVERGREENING

Under current law, companies which bring certain orphan drug products to the market are granted a 7 year exclusivity period in which they are allowed to help recoup their development costs for that product. However, under a so-called "Evergreen" provision, any company which develops a further improvement of that product is granted a further 7 year exclusivity period for the entire product, not just for the "improved" component. This combination of factors can potentially lead to a product's exclusivity period running indefinitely and, thereby, cutting off competition and related cost savings to the consumer.

Question. Please explain why the exclusivity of a product improvement attaches to the entire product?

Answer. Under the Orphan Drug Act, if a drug is designated for an orphan indication and is approved for that indication, it will receive seven years of exclusivity. During this seven-year period, the agency will not approve or license the same drug from another sponsor. However, the first sponsor's exclusivity it not a barrier to approval of a product that is not the same drug. If a subsequent sponsor demonstrates that its drug for the same indication is not the same drug, either because it is chemically not the same, as defined in the orphan drug regulation, or clinically superior, the second product will be approved. If the second drug was designated for the orphan indication, it will also receive orphan exclusivity. The statute does not limit the drugs eligible for orphan exclusivity, or the scope of that exclusivity, on the basis of indication, chemistry, or clinical behavior.

Question. To what extent would consumers benefit from cost savings if the exclusivity attached only to the improvement?

Answer. It is well established generally that the entry onto the market of the first generic version of a drug begins what may ultimately be a sharp decline in the price. This is described in *How Increased Competition from Generic Drugs Has Affected Prices and Returns in the Pharmaceutical Industry,* July 1998, Congressional Budget Office. However, generic drugs are duplicates of innovator products and thus may be promoted by the sponsors only in the same manner as the innovator product. In contrast, an orphan drug exclusivity program that permitted the agency to approve any new orphan drug that did not copy a particular protected improvement could result in the introduction of new "innovator" products that would attempt to distinguish themselves from the other marketed products, and not result in any cost savings to consumers. It is useful to note that the availability of multiple "innovator" human growth hormone and erythropoetin products on the market for orphan indications has not resulted in a meaningful decrease in the cost of these drugs to consumers. In addition, because the expressed goal of the Orphan Drug Act is to encourage investment in drugs for rare diseases and conditions, it is important to keep in mind the need for adequate financial incentives for continuing development and improvement of these treatments. Although the availability of generic drugs is a continuing priority for the agency, any discussion of generic drugs for orphan dis-

eases would be fruitless if innovator companies do not first develop needed orphan products.

Question. Please compare this feature of orphan drug products to other drug or device products which enjoy periods of marketing exclusivity.

Answer. Every exclusivity under the Federal Food, Drug, and Cosmetic Act, FFD&C Act, that gives drugs some form of market protection has different characteristics. For example, there are substantial differences in what aspect of a drug is protected by each form of exclusivity. "New chemical entity" exclusivity under section 505(c)(3)(D)(ii) and 505(j)(5)(D)(ii) of the Act protects the active moiety of the drug from competition from other products containing the same moiety, regardless of whether the subsequent drug is for the same indication, has the same formulation, the same dosage form. In contrast, orphan drug exclusivity protects only the particular drug for the designated orphan indication; a subsequent applicant can obtain approval of the same drug for a different indication, even in the face of orphan exclusivity. In addition to differences in what aspect of a drug is protected, forms of exclusivity differ in what competition is prohibited. "New chemical entity" exclusivity and "clinical studies" exclusivity under section 505(c)(3)(D)(ii)–(iv) and 505(j)(5)(D)(ii)–(iv) of the Act grant protection to innovative drugs against competition from certain generic drugs and other drugs for which the sponsor did not do the supporting studies. However, these two forms of exclusivity do not protect against competition from a drug whose sponsor has conducted all the studies necessary to gain approval of its product, even though this product may be directly competitive to the product with exclusivity. Orphan drug exclusivity, on the other hand, protects the drug with the exclusivity from competition from the same drug for the same indication produced by another sponsor, regardless of whether the other sponsor may have conducted all the studies necessary to obtain approval of the drug. The pediatric exclusivity provisions passed as Section 111 of the FDA Modernization Act of 1997 include an express limitation upon the number of times a drug can benefit from the six month exclusivity period, but that exclusivity can attach to multiple other exclusivity and patent protections covering many drug products. There is no exclusivity protection in the Federal Food, Drug, and Cosmetic Act for devices.

GENERIC DRUGS

Over the next five years, brand drugs with approximately $21.6 million in annual sales will come off patent, providing opportunities for substantial health care cost savings through the alternate use of generic drugs. However, it is reported that the median approval time for generic drugs in fiscal year 1999 was 17.3 months.

Question. What levels of savings in the costs of prescription drugs would be realized if approval times were shortened from the 17.3 month time frame to the statutory requirement of six months?

Answer. There would be some cost savings, but generic applications for most large selling drugs are submitted to FDA well before the date of patent expiration for the innovator drugs. As a result, in recent years FDA review time has not significantly delayed the availability of most generic products.

Question. How much of FDA's fiscal year 2000 budget will be directed to the Office of Generic Drugs?

Answer. Approximately $13.6 million of fiscal year 2000 budget proposed for the Center for Drug Evaluation and Research will be allocated to the Office of Generic Drugs. These dollar and FTE figures do not include overhead expenses such as legal, facilities and telecommunications, personnel, budget development and execution, executive communications, labor/management, EEO, and general management oversight.

Question. How much of the fiscal year 2001 budget is proposed specifically for the Office of Generic Drugs?

Answer. It is estimated that approximately $13.8 million of the proposed budget for the Center for Drug Evaluation and Research will be allocated to the Office of Generic Drugs in fiscal year 2001.

ANTIMICROBIAL PRODUCTS

I note that the National Antimicrobial Resistance Monitoring System (NARMS) expanded its activities from funds derived from the Food Safety Initiative during fiscal year 1999.

Question. Please provide information regarding specific activities of NARMS.

Answer. The National Antimicrobial Resistance Monitoring System—NARMS, monitors the emergence and spread of resistance in enteric bacteria and helps to ensure the continued safety and effectiveness of veterinary antimicrobials. Under

NARMS thousands of bacterial isolates are tested for resistance to antimicrobials. NARMS will provide an early warning to identifying resistance trends among bacteria. All data from NARMS are made public for review by scientists or the public. With the additional funds requested for NARMS in fiscal year 2001 we will expand the geographical scope and capacity of NARMS by increasing the number and sources of isolates of *Campylobacter, Salmonella, and E. coli* from both human and animal sources. Additional veterinary sentinel sites are also planned. Increasing the number and sources of these foodborne pathogens will increase the likelihood of detection of emerging resistance. Detecting the resistance early allows the implementation of strategies to contain or mitigate the resistance before it reaches public health concerns. These resources will also aid in the Center for Veterinary Medicine's ability to establish and implement monitoring thresholds for resistance development in food animals to guide post-marketing regulatory activity.

In addition, new pathogens will be monitored by NARMS from both animal and human isolates. Anticipated pathogens to be monitored include *Enterococcus* and *Shigella* species. Also, we plan to enhance and expand FDA support of current international efforts to develop a global resistance database. The incidence of multi-country foodborne outbreaks are increasing and the severity of foodborne disease originating in foreign countries is increased by resistant foodborne pathogens.

Question. What specific health risks have been identified resulting from the use of antimicrobial drugs in animals produced for human consumption?

Answer. The specific human health risks identified with using antimicrobial drugs in food animals is loss of efficacy of the drugs in treating human disease. The FDA recently contracted with a quantitative risk assessment expert to develop a model relating the prevalence of fluoroquinolone resistant *Campylobacter* infections in humans associated with the consumption of chicken to the prevalence of fluoroquinolone resistant *Campylobacter* in chickens. The risk assessment showed that fluoroquinolone use in chickens accounted for almost all of the fluoroquinolone-resistant *Campylobacter* in those persons who had not traveled outside the United States or had taken a fluoroquinolone drug prior to submission of a culture. This risk assessment estimated that out of 122,078 people seeking care for a campylobacter enteric infection from chickens, 58,450 persons would be treated with antibiotic and of those, 4,682 would be resistant to fluoroquinolone therapy.

Other human health risks due to antimicrobial use in food-animals are the potential development of resistant organisms in the gut of persons consuming an antimicrobial residue and an allergic reaction to the residue. Unlike the fluoroquinolones, for which the major hazard associated with their use in animals is the selection of resistant foodborne pathogens, the major hazard associated with the use of virginiamycin in food animals is the selection of resistant enterococci. The presence of virginiamycin resistant enterococci is of concern because a related antimicrobial, Synercid, was recently approved for use in human medicine. Synercid will be used in humans to treat enteroccal infections for which there are no other antimicrobial therapies available. To assess the risk associated with the continued use of virginiamycin in animal agriculture, a quantitative risk assessment framework is needed. This risk assessment framework will quantify the probability, uncertainty and variability associated with several factors. The agency will also be considering whether additional risk assessments should be conducted on other antimicrobial and foodborne pathogen combinations.

SINGLE USE MEDICAL DEVICES

Concerns have been expressed about the safety of reprocessed single use medical devices.

Question. Please provide your analysis on the safety of these devices including findings of any investigations you may have pursued relating to injuries caused by such devices.

Answer. In the past three years, FDA has received approximately 245 adverse event reports from manufacturers that involved the reuse of devices labeled for single use including 7 deaths; 72 injuries; 147 malfunctions, and 19 other. During that same time period, FDA received approximately 300,000 device adverse event reports, summary reports, and supplements. The 245 reports spanned approximately 70 different types of devices. An analysis of the events did not reveal any patterns of failures with the reuse of single-use devices—SUDs—that were different from patterns noted with the initial use of SUDs.

It is important to note that the Medical Device Reports—MDRs—are unlikely to represent an accurate assessment of failure rates for any medical device, regardless of whether they are single-use or non-disposable products, because of incomplete reports and under-reporting. The SUDs, however, pose a greater challenge because

there may be increased under-reporting of these events when end-users recognize that the failed device involved a reused device labeled for single use. In addition, infections that may have resulted from an improperly reprocessed SUD may be difficult to trace to a reused device.

Question. Please compare the current regulatory requirements related to marketing of reprocessed single use medical devices with similar requirements for "new" devices.

Answer. To date, FDA has enforced existing premarket submission requirements against original manufacturers, but not third party reprocessors or hospitals that reprocess single use devices. FDA has enforced other requirements of the Act, such as good manufacturing practice and adverse event reporting requirements, against third party reprocessors. FDA has not enforced Federal Food, Drug, and Cosmetic Act requirements against hospitals that reprocess single use devices. We FDA recently issued draft guidance entitled *Enforcement Priorities for Single-Use Devices Reprocessed by Third Parties and Hospitals*, proposing to enforce the premarket submission requirements and all of the other requirements of the act against third party reprocessors and hospitals.

Question. What, if any, additional regulatory requirements regarding reprocessed single use medical devices would you recommend?

Answer. Under the proposed strategy outlined in FDA's enforcement guidance, the agency would enforce the same regulatory requirements that are applicable to a new device to reprocessed devices labeled for single use, regardless of whether the reprocessor was a third-party or a hospital. Additional regulatory requirements would not be required; however, FDA's proposed strategy would phase in enforcement of existing requirements over a period of 18 months.

Question. What effect would additional regulation of reprocessed single use medical devices have on health care costs?

Answer. As I said earlier, FDA is not proposing to promulgate new regulatory requirements regarding reprocessed single use medical devices. The agency's strategy is to phase in uniform enforcement of all current requirements for third-party reprocessors and hospitals, including premarket requirements. At this time, FDA cannot determine the economic effect of its proposed enforcement policy on the cost of health care. However, any evaluation would need to consider the expected reduction in the number and severity of adverse events as well as any costs associated with FDA's phased in enforcement strategy.

DETROIT LABORATORY

Language was provided in the fiscal year 2000 Appropriations Act regarding the Detroit, Michigan, lab and field office.

Question. Please provide an update on activities at these locations.

Answer. I am happy to describe our efforts to relocate both the Detroit District Office and Detroit Laboratory. As you may recall, the current facility which houses both our laboratory and district office is scheduled to be acquired and demolished by the City of Detroit as part of a major downtown renovation project. We are proceeding in accordance with congressional guidance, which in short prohibited any geographical reassignment of the lab staff or reorganization of the district. We are actively engaged in dialogue with several Michigan State authorities and federal agencies in the area in an effort to develop mutually beneficial arrangements to house the remaining Detroit laboratory staff. Of particular interest to FDA at the moment, is the strong possibility of entering into a partnership arrangement with Wayne State University to co-locate our laboratory operations. Wayne State is a part of the university system of Michigan, and currently has state of the art facilities and equipment that would enhance our current level of operation, and the potential exchange of expertise between university scientists and FDA scientists would serve both parties well. We are continuing to explore other possibilities with other components within the State system, as well as with the Veterans Administration. We are committed to identifying and securing suitable accommodations in the immediate area to continue our inspectional operations and to maintain viable laboratory support.

LOS ANGELES LABORATORY

The budget request includes $20 million for construction of the Los Angeles Lab. I understand that if improvements are not made at that location, FDA will be forced to transfer personnel to other FDA field locations.

Question. What would be the costs of such transfers and how soon would they occur?

Answer. The current lease for this facility has been extended twice and will expire at the end of March 2000. A short term extension has been negotiated which will allow for continued occupancy during construction of a new facility, or an orderly closing of the existing lab within three years.

Our experience with other field labs that have closed has been that most laboratory staff have not willingly accepted directed reassignments to gaining laboratories. Those staff not wanting to relocate to a targeted laboratory may apply for laboratory analyst jobs at other, more personally desirable locations; apply for other jobs within the district to which they are currently assigned; resign Federal service and accept positions in the private sector; retire if they met eligibility requirements; or, be separated, with severance pay, if they cannot retire and refuse a directed reassignment to a laboratory in another part of the country.

As is FDA policy for all closing field laboratories, all impacted laboratory staff in Los Angeles would be given a directed reassignment to an equal position at another FDA field laboratory, with full rights to relocation benefits for reimbursable expenses. The average cost for an employee move is $35,000. Total staffing at the Los Angeles Laboratory at Pico Boulevard is 76. If the facility were to be closed with an estimated effective date of the end of fiscal year 2002, the agency could expect approximately 20 employee transfers to other sites, resulting in moving costs of approximately $700,000 over the next three fiscal years.

If the Los Angeles Laboratory were to close, the greater cost to FDA would be the loss of productivity and expertise that would certainly occur over the next several years. We would expect a significant number of experienced analysts to retire or accept other positions in the Los Angeles area, either in the district or within the private sector. Inexperienced replacement staff would need to be hired and trained in other locations, causing delays in product analysis. Los Angeles is one of the agency's largest field laboratories, analyzing 25 percent of FDA import sample workload nationally. Workload in this area is increasing, and faster turnaround times for import sample analysis is a stated priority of both Congress and the import community.

Question. Can an amount be provided in fiscal year 2001 less than $20 million that would allow construction at the lab to proceed?

Answer. The budget request of $20 million is for the first phase of a two phase project that totals $43.0 million. It is conceivable that the construction documents could be modified to define a "site-foundation" only project that would entail a first phase cost of $10.5 million. However, since this would delay the funding of a large portion of the construction work for another year, partial funding would result in the construction being completed over a longer duration. With the construction marketing continuing to be very active and with increased competition for skilled labor, the cost of construction may escalate.

ARKANSAS REGIONAL LABORATORY

Question. Please provide an update on construction activities of the Arkansas Regional Lab.

Answer. I would be happy to provide that information for the record.

[The information follows:]

Status of the Arkansas Regional Lab

The ARL facility project was initiated in fiscal year 1995 through a $2.5 million appropriation for architectural and engineering design. The firm Kling-Lindquist (KL), Philadelphia, PA, was selected. KL, in consultation with FDA, developed an overall campus design comprising both new and renovated space: (1) joint NCTR and ORA animal quarantine facility—renovation of Building 62; (2) ORA's Arkansas Regional Laboratory—new facility (Phases I & II); (3) Building 50 renovation—3 floors of office space (Phase III); and, (4) common ORA/NCTR administration and support area (Phase III).

The fiscal year 1996 appropriation included $3.8 million for an animal quarantine facility and preparation of joint NCTR/ORA laboratory space. This project has been completed. The fiscal year 1997 appropriation included $13.0 million for Phase I construction of the ARL. Phase I began construction and provided the ARL building, foundation, substructure, superstructure, exterior enclosure, and roofing. Major building systems, such as fire protection, HVAC, electrical and some site work, is included.

—The construction of the ARL project was awarded on September 26, 1997, to Charles N. White Construction Company (White) of Clarksdale, Mississippi. White was given notice to proceed on Phase I of the project on October 1, 1997.

The fiscal year 1998 appropriation included $14.55 million for Phase II construction. Phase II continued the ARL project by completing the building systems and providing some office and laboratory fit-out in the ORA laboratory building.

—On December 24, 1997, White was given notice to proceed on a portion of the Phase II construction.

FDA received reprogramming authority for up to $10.4 million for Phase II of the ARL project to complete the office and laboratory fit-out for the laboratory building.

—On February 27, 1998, White was given notice to proceed on the remaining portion of Phase II to complete the office and laboratory fit-out for the laboratory building.

A building dedication ceremony for Phases I & II, the laboratory portion, was held on February 17, 2000.

Building 50 Renovation and Common Area, Phase III, status:

—The fiscal year 1999 appropriation included $3.0 million to begin construction of a portion of Phase III. This first portion included the exterior demolition, exterior structural work, exterior masonry work, and some roofing repairs.

—On January 26, 1999, White was given notice to proceed on the first portion of Phase II. This work has been completed.

—The fiscal year 2000 appropriation included another $3.0 million to continue the construction of a portion of Phase III. This portion of work includes exterior glass and glazing, roofing, an elevator, and some of the site work and utilities.

—On February 2, 2000, White was given notice to proceed on the this portion of Phase III.

—In fiscal year 2001, FDA requested $3.0 million to continue work on Phase III. Therefore, approximately $7.2 million in additional funding will be needed to complete Phase III. The $3.0 million in the fiscal year 2001 budget request will be utilized to fund an additional portion of the Phase III construction. This portion will include work such as the majority of the HVAC and plumbing infrastructure and related electrical system items necessary for the operation of the installed HVAC systems.

Question. Please provide information regarding FDA field structure consolidation as it relates to completion of the Arkansas Regional Lab and please identify savings to be achieved by this action.

Answer. I would be happy to provide that information for the record.

[The information follows:]

The original field lab consolidation plan called for six field laboratories to be ultimately consolidated into the Arkansas Regional Laboratory. They are as follows, including dates of closure:

Chicago	1997
Minneapolis	2000
Detroit	2000
Dallas	2000
Denver	2010
Kansas City	2014

As leases have or will expire for these facilities, the agency will negotiate new leases for office space only, as opposed to full replacement space to include new laboratories. FDA will thus realize considerable savings on an annual basis in the form of "avoided rent" for replacement of expensive, state-of-the-art lab space in the above locations.

The current estimated differences in annual rent for office only versus office and lab space for each of these locations is presented below, and does not include Denver or Kansas City due to the lengthy time before planned closing of those facilities. Savings to FDA will increase again starting in 2010 with the additional closures of Denver, and then Kansas City in 2014.

[In thousands of dollars]

Facility	Annual cost for lab consolidation	Annual cost for lab replacement	Est savings with consolidation at ARL
CHICAGO (Lab only)		574	574
MINNEAPOLIS	664	2,500	1,836
DETROIT	783	1,900	1,117
DALLAS	132	1,700	1,568
ARKANSAS REG LAB [1]	3,650		−3,650

[In thousands of dollars]

Facility	Annual cost for lab consolidation	Annual cost for lab replacement	Est savings with consolidation at ARL
TOTAL	5,229	6,674	1,445

[1] The annual cost for ARL was calculated based on a 20 year amortization of constructions costs plus $1 million per year in operating costs.

USER FEES

Question. Section 735 of Public Law 106–78, the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2000, requires the budget proposal for fiscal year 2001 to include information identifying savings in the event proposed user fees are not authorized prior to the convening of a committee on conference for the fiscal year 2001 appropriations act. The fiscal year 2001 budget request assumes revenues from the enactment of unauthorized FDA user fees.

Accordingly, which FDA activities proposed for fiscal year 2001 do you recommend for reduction in the event these user fees are not authorized this year?

Answer. In the fiscal year 2001 budget, FDA has requested user fees in the amount of $8.4 million for Direct Food Additive Petition review, and $5.8 million for the premarket review in the Medical Device program. These two proposed user fees are additive in nature, allowing for increased performance on the part of FDA, once enacted. Were these user fees not to be approved, the activities highlighted as being accomplished with the user fee funds would not be accomplished. For example, FDA would not be able to provide enhanced training to support scientific expertise of reviewers that need to keep pace with increasingly complex products; nor would there be time for the agency to be ready to engage in pre-filing consultations with petitioners. Medical device manufacturers would continue to face a significant financial disincentive to use the third party review option created by the Food and Drug Administration Modernization Act, or FDAMA.

FDA also requested $5.3 million in new user fees for the food export certification program. Collection of user fees for export certificates for human drugs, animal drugs and devices is authorized by the Federal Food, Drug, and Cosmetic Act. This does not cover collection of user fees for export certificates for foods. FDA must divert significant resources from food safety work to address what in essence is an economic trade matter for these certificates. Were this user fee not authorized this year, FDA would continue to expend resources for the food export certificates, with no means to recoup the costs incurred as a result of inspections, laboratory analyses and administrative costs associated with issuance of food export certificates.

Question. Can you give us some insight into your thinking on this label, and whether you are considering any changes to what you proposed last year?

Answer. From the results of previous focus group research on label statements used to alert consumers to potential hazards in foods—namely, iron supplements and fresh and unprocessed fruit and vegetable juice warning statements, FDA determined that certain types of information was required to adequately inform consumers about the potential risks associated with the food. In particular, our focus group research indicated that for consumers to understand and modify their behavior with regard to a particular food there needed to be an information statement explaining why there was a risk associated with the food. This information statement was especially important if the information was considered new information. In crafting the proposed safe handling instructions for eggs, FDA considered that consumers needed to be given information on why the product presented a risk. Accordingly, FDA proposed to include a sentence in the statement that informed the consumer that the eggs may contain harmful bacteria known to cause serious illness in children, the elderly, and persons with weakened immune systems. FDA included these groups because they are generally at higher risk of serious illness from food borne pathogens than the rest of the population.

FDA received several comments objecting to the introductory sentence in the proposed safe handling instructions. We also received comments offering alternative wording for the safe handling instructions, as well as those asserting that the presence of *Salmonella* in eggs was not new information. We have fully considered all of the comments. We have been persuaded by those comments to reconsider the wording of the informational component of the safe handling instruction and will likely revise the safe handling instructions in a way that addresses both the con-

cerns raised by industry and the need to adequately inform consumers about the risk associated with eggs.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

Question. Commissioner Henney, I was disturbed to read a recent report that DES had been found in a shipment of meat to Europe. Incidences such as this certainly don't help resolve our trade difficulties with the EU. Can you tell me what role FDA has in resolving incidences such as the DES incident, and what you have been doing to help address issues related to residues in meat?

Answer. In July 1999, Switzerland reported to the United States that it had found trace levels of diethylstilbestrol—DES—in two samples of U.S. beef. On July 13, the Swiss government published a press release that announced its DES findings in U.S. beef. The press release stated that the amounts detected were at low levels and did not pose an acute health threat.

FDA takes misuse of compounds of public health significance like DES, very seriously. The agency's Center for Veterinary Medicine—CVM—which has the responsibility to investigate the misuse of drugs in food animals, has carried out an intensive investigation during the past eight months. FDA inspectors have conducted on-farm investigations of animal producers and feedlots delivering animals to the establishment in question. They have investigated bulk drug re-packers, compounding pharmacies, and other points at which illegal diversions of drugs might be uncovered. FDA has thus far found absolutely no evidence of the diversion of DES for use in food animals.

In the meantime, we have learned that the Swiss government sent the two positive samples to a European Union—EU—reference laboratory for re-confirmation. The October 14, 1999 report from the EU reference laboratory states that the conclusion of the analyses does not confirm the presence of DES in the samples submitted for analysis. FDA scientists conclude that some type of laboratory contamination may have led to false positive samples.

In response to your question regarding FDA's role in resolving incidences such as the DES case, the FDA establishes tolerances for residues of animal drugs in edible tissues. Food-producing animals, even though not in their final, edible form, have been held to be food under a variety of statutes. Thus, live animals raised for food are "food" under the Federal Food, Drug, and Cosmetic Act.

CVM has implemented a compliance program to address consumer exposure to drug residues in the edible tissues of food animals. The Center assigns more Field resources to this program than to any other that it oversees. The immediate goal of this program is to prevent future residue violations through on-farm educational efforts, and/or enforcement activity as warranted. To this end FDA has developed cooperative agreements with 32 states to conduct educational follow-ups of first-time violators. State participation is an integral element of the U.S. residue reduction effort. The compliance program instructs the FDA District Offices to conduct onsite investigations whenever the Food Safety and Inspection Service—FSIS—reports finding a residue of a drug prohibited from food-animal use such as DES. FDA investigations are also required for all high-level residues which may pose a toxicological concern, as well residues from drugs not approved for food animal use. FDA also conducts investigations of any residue from drugs prohibited from extra-label use under the Animal Medicinal Drug Use Clarification Act of 1995. Additionally, FDA Districts are instructed to follow up on all repeat violators. A repeat violator is defined as an individual who sells a slaughter animal whose carcass is found to contain a violative concentration of a drug, pesticide, or environmental contaminant within a 12-month period after receiving the FSIS Violation Notification Letter. Complete instructions for these investigations are included in Compliance Program 7371.006. Last year FDA conducted approximately 485 investigations of illegal residues and the States an additional 1,000 on-farm visits in response to FSIS-reported tissue residue violations.

Question. FDA announced early in 1999 its intention to give "priority" to reviews of food additive petitions with food safety benefits. Several food irradiation petitions are pending at FDA, including one that would allow the use of irradiation on hot dogs or luncheon meats, and could be used to reduce the incidence of *Listeria*. The Conference Report accompanying the Fiscal Year 2000 Agriculture Appropriations bill directed FDA to propose and finalize a rule on this petition by August 2000. Do you intend to meet this deadline? How quickly does FDA intend to act on other pending irradiation petitions? How can we be assured they won't meet the same fate as red meat irradiation that FDA and USDA more than five years to complete?

When will we see faster reviews resulting from the more than $5 million in additional funds the Congress provided FDA in fiscal year 2000?

Answer. First, FDA does not intend to propose a rule because under the food additive petition process, a proposal is not required. Rather, the filing notice, which was published in the Federal Register on January 5, 2000, meets the legal requirement of giving notice that a rule under consideration.

In the priorities established for food safety in fiscal year 2000, FDA has established a goal of completing the safety evaluation for 80 to 90 percent of expedited review petitions within one year of filing. FDA filed the petition that includes hot dogs and luncheon meats on October 27, 1999. This is the actual filing that preceded the notice in the Federal Register. Although we cannot comment on issuing a rule until we complete the safety evaluation and verify whether data in the petition will support a final rule, we are committed to completing that evaluation within a year of filing. FDA expects to complete evaluations of all other pending irradiation petitions within the same time frame.

With regard to the petition for red meat irradiation that FDA approved in December 1997, FDA received this petition at a time when there was a backlog of several petitions and before a priority was being placed on petitions intended to significantly reduce pathogens. Additionally, USDA regulations for meat irradiation now incorporate FDA regulations for the use of radiation which means that USDA will not be required to issue its own regulation to allow irradiation of meat after FDA issues such a regulation.

The time to complete reviews on food and color additives has been improving in recent years. FDA is committed to making further significant improvements as we hire and train additional scientists for review. We have already begun the process of bringing more reviewers on board and improving the training for current staff. In the interim as this process is ongoing, FDA is also using some of the newly appropriated resources to arrange for review help through the use of contractors. The most immediate results will be seen in the petitions that qualify for expedited review due to pathogen reduction described.

Question. FDA visits foreign countries to audit the safety of food produced in these countries for export to the United States. Please indicate for fiscal year 1998 and fiscal year 1999: (a) each foreign country for which such an audit was conducted, (b) the particular food product that was the subject of the audit, and (c) the approximate dates of each such audit. Are there written reports prepared on the results of each such foreign audit? If so, are these reports available to the public? If they are not available to the public, why not? Was the FDA ever denied access to a foreign country in which it wanted to conduct an audit in fiscal year 1998 or fiscal year 1999? If so, please briefly describe the circumstances.

Answer. An Establishment Inspection Report is prepared for each inspection of a firm. Reports are also prepared from audits conducted in response to foodborne outbreaks in other countries. These reports can be obtained through the Freedom of Information Act. When an inspection results in a regulatory action such as issuance of a Warning Letter or the firm placed on Detention with Physical Examination and added to an Import Alert, these documents are available on the agency's internet Website, at www.fda.gov.

Although in the past Mexico has a very positive record of cooperation with FDA, FDA was denied access to Mexico once in 1999 in follow-up to a foodborne outbreak associated with the consumption of unpasteurized orange juice in the United States. The Mexican Ministry of Health would not allow FDA investigators to visit the processor or orchards implicated in the outbreak. The Ministry of Health did its own evaluation and provided FDA with information. We would like to note that Mexico participates in a number of cooperative efforts with the U.S. and collaborative exchanges are underway in the areas of research and outbreaks. Additionally, in September 1999, Mexico hosted a food safety practices symposium for more than 4,000 government officials in Mexico and Central America.

I would be happy to provide two tables that reflects the import information you are requesting, for the record.

[The information follows.]

Country (number of firms)	Product	Date
Fiscal Year 1998 Foreign Foods Inspections/Audits		
Thailand (13)	Low Acid Canned Food	1/98 thru 8/98
Spain (5)	Low Acid Canned Food	1/98 thru 2/98

Country (number of firms)	Product	Date
Germany (3)	Low Acid Canned Food	2/98 thru 4/98
China (14)	Low Acid Canned Food	3/98 thru 4/98
Philippines (1)	Low Acid Canned Food	2/98
Indonesia (1)	Low Acid Canned Food	2/98
Mexico	Parsley	10/98
Guatemala	Fresh Raspberries	3/98, 6/98, 11/98
Honduras	Country Evaluation	8/98
Fiscal Year 1999 Foreign Inspections/ Audits		
Mexico (6)	Cheese	2/99 thru 8/99
France (5)	Cheese	2/99 thru 8/99
Canada (1)	Cheese	2/99 thru 8/99
Germany (1)	Cheese	2/99 thru 8/99
El Salvador (1)	Cheese	2/99 thru 8/99
Singapore (1)	Seafood	6/99
Ecuador (11)	Seafood	7/99
Taiwan (9)	Seafood	5/99
Philippines (9)	Seafood	4/99
Vietnam (9)	Low Acid Canned Food	4/99
Equador (5)	Low Acid Canned Food	6/99 thru 7/99
Brazil (6)	Low Acid Canned Food	8/99
Canada (9)	Low Acid Canned Food	3/99 thru 7/99
Malaysia	Low Acid Canned Food	8/99
Philippines	Low Acid Canned Food	5/99 thru 6/99
India	Low Acid Canned Food	6/99 thru 8/99
Vietnam	Low Acid Canned Food	4/99
Mexico	Basil	12/99
	Green onions	3/99
	Parsley	2/99
	Celery/Lettuce	7/99
Costa Rica	Cilantro	7/99
	Country Evaluation	7/99
Guatemala	Raspberries	3/99
	Mamey	4/99
	Post-Hurricane Mitch Food Safety Assessment.	7/99
Honduras	Post-Hurricane Mitch Food Safety Assessment.	7/99
Trinidad and Tobago	Country Evaluation	
El Salvador	Post-Hurricane Mitch Food Safety Assessment.	7/99
Nicaragua	Post-Hurricane Mitch Food Safety Assessment.	7/99

Questions Submitted by Senator Byron L. Dorgan

I know that we all recognize the enormous public health contributions that vaccines have made in preventing a wide range of adult and childhood diseases. It is my understanding that the pace of development of new vaccines and vaccine combinations is quite dramatic. I am concerned that FDA may not have sufficient resources to give appropriate priority to the review of new vaccines that have a demonstrable public health benefit.

Can you provide me and the Subcommittee with data from your Office of Vaccine Research and Review (OVRR) in response to the following questions:

Question. For each of the past five years, what has been the funding and staffing at the OVRR?

Answer. We are happy to provide a table showing the OVRR funding and staffing for each of the past five years.

[The information follows:]

OFFICE OF VACCINE RESEARCH AND REVIEW FUNDING AND STAFFING

[In millions of dollars]

Resource	Fiscal years				
	1995	1996	1997	1998	1999
OVRR funding	18.6	18.5	18.7	18.4	19.3
FTE	171	185	179	166	177

Question. What is your proposed fiscal year 2001 request for funding and staffing at the OVRR?

Answer. The proposed fiscal year 2001 funding level for OVRR is $24.2 million based upon the President's budget request.

Question. For each of the past five years, please break down the resources of the OVRR between new vaccine application review activities and other activities. Please describe those other activities.

Answer. We are happy to provide a table showing the break down of OVRR resources between new vaccine application review activities and other activities for each of the past five years. New vaccine application review activities include: IND and license application review; lot-release processing and testing; and assay validation. Other activities include: mission-related product research; post-approval surveillance and enforcement activities; and miscellaneous other activities including training/professional development; processing information requests, and international harmonization activities.

As shown below, while we have been able to increase our resources related to application review, much of which is funded through user-fees, it has been at the expense of critical non-review activities, funded entirely through appropriations, that assure the expeditious review of future vaccines and the continued safety and effectiveness of vaccines already on the market.

[The information follows:]

OFFICE OF VACCINE RESEARCH AND REVIEW FTE DISTRIBUTION

Activity	Fiscal years				
	1995	1996	1997	1998	1999
Application Review	75.6	83.9	85.9	90.3	98.2
Other	95.4	100.8	93.5	75.3	78.3
Total	171.0	184.7	179.4	165.6	176.5

Question. For each of the past five years, please provide the number of Biological License Applications (BLA) and Investigation New Drug Exemptions (IND) received for new vaccines.

Answer. We are happy to provide a table showing the number of OVRR application receipts for each of the past five years.

[The information follows:]

OFFICE OF VACCINE RESEARCH AND REVIEW VACCINE APPLICATION RECEIPTS

Application	Fiscal years				
	1995	1996	1997	1998	1999
INDs [1]	70	63	65	52	49
BLAs [1]	6	4	4	3	4
BLA Supplements	62	30	60	77	116

[1] Note: INDs include commercial and non-commercial INDs. BLAs include: product license applications (PLAs), establishment license applications (ELAs), and biological license applications (BLAs).

Question. For each of the past five years, please provide the average review times for BLAs and INDs for vaccines.

Answer. INDs become effective automatically after 30 days unless the FDA imposes a clinical hold on the clinical trials. We are happy to provide a table showing the average BLA review times for each of the past five years. License application review time is the time to review completion for applications during the respective fiscal year. License applications may undergo several review cycles, in which an FDA action is taken and the sponsor responds, before approval.

[The information follows:]

OFFICE OF VACCINE RESEARCH AND REVIEW MEDIAN VACCINE LICENSE APPLICATION REVIEW TIME

	Fiscal years				
	1995	1996	1997	1998	1999
Median BLA Review Time (months)	26.84	8.83	16.29	34.00	15.19

Question. What information does FDA have about future vaccine development and the number of INDs and BLAs for new vaccine products this year and in the future?

Answer. A 1998 survey by the Pharmaceutical Research and Manufacturers of America (PhRMA) found 350 new biotechnology medicines in development and 140 pharmaceutical and biotechnology companies testing biotechnology products. Among the 350 new biotechnology medicines in development , 77 are vaccines. They include vaccines either to prevent or treat HIV infection, AIDS, colorectal, pancreatic, breast, lung, colon and prostate cancers, multiple sclerosis, and stroke. Senator Richard J. Durbin

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QUESTIONS SUBMITTED BY SENATOR RICHARD J. DURBIN

CODEX

Question. The Codex Alimentarius Commission ("Codex") is an international organization that seeks to set food safety standards that are then used by the World Trade Organization to determine whether a national food safety standard is a "trade barrier." Please indicate the amount spent by FDA in fiscal year 1999 in direct support of Codex, showing separately how much of the fiscal year 1999 amount is for travel.

Answer. The total amount spent by FDA in fiscal year 1999 in support of Codex activities was $1.4 million. This includes $1.3 million in salaries and support for approximately 12 FTE, and $100,000 for travel.

Question. FDA is part of the Codex Policy Committee, which is chaired by the Under Secretary for Food Safety of USDA and contains senior policy members from HHS, State, Commerce, USTR, and other parts of USDA. In June 1999, the U.S. acquiesced in four final decisions by Codex that provide less protection to U.S. consumers than current U.S. requirements: (a) international residue levels for methyl parathion and other pesticides even though in August 1999 the EPA banned methyl parathion for fruits and vegetables because of its potential adverse effects on children; (b) an international standard for natural mineral waters that permits higher levels of lead and other contaminants than the FDA now allows; (c) an international standard that does not require pasteurization of dairy products, as is now generally required by the FDA; and (d) an international standard for the labeling of a composite ingredient in prepackaged foods that permits it to be listed by a standardized name without declaring all its component ingredients if it is less than 5 percent of the food, even though the FDA now requires these components to always be listed in order to protect consumers who suffer from hypersensitivities. Please explain why the U.S. did not formally object last year to the approval of each of these four Codex standards?

Answer. Codex is the reference international organization for food safety standards under the World Trade Organization—or WTO, Agreement on Sanitary and Phytosanitary Measures—the SPS Agreement. While the SPS Agreement requires countries to base their food safety measures on Codex standards and guidelines unless they can scientifically justify a more stringent standard, there is no requirement under the WTO Trade Agreements for countries to adopt Codex standards. Codex standards remain voluntary. Additionally, under the SPS Agreement, counties are free to select their own level of public health protection.

While Codex maintains a provision for voting on standards—with each country, including the United States, having one vote—Codex operates on the basis of consensus. The United States works extensively within the Codex System to help assure that the U.S. position is well known, well supported and is the option selected by Codex. However, there is no assurance, under either the voting or consensus process, that the United States position on any given Codex standard or guideline will become the final Codex decision.

I would be happy to provide for the record details of certain CODEX standards.

[The information follows:]

SELECTED CODEX STANDARDS

International levels for methyl parathion.—At the time the Codex Alimentarius Commission adopted the standard for this compound in June of 1999, the Environmental Protection Agency had made no decision on canceling this compound—the voluntary cancellation notification was published in October, 1999. Therefore, there was no reason for the U.S. to object to the adoption of the Codex standard at the June 1999 Commission meeting.

International standard for natural mineral waters.—The United States was very much aware that the standard permitted higher levels of lead and other contaminants than FDA currently allows. During the consideration of this standard in the Committee on Natural Mineral Waters and in the Commission, the U.S. and other countries made strong objection. This standard was the result of a vote in the Commission; the United States position was not upheld.

International standard for milk products not requiring pasteurization.—At no time did the United States adopt a position or strategy that would lower U.S. public health levels for milk or dairy products. For several years, the U.S. worked strenuously to ensure that language in Codex food hygiene codes and dairy product standards codes did not result in default language that would make it difficult for the United States to prevent the importation of raw milk or dairy products containing raw milk. This effort was a top priority of the United States. The U.S. was instrumental in helping to craft language for Codex dairy product standards that permitted maintenance of the high U.S. public health standards for milk and milk products while at the same time allowing Codex to move forward with the adoption of Codex dairy product standards. This language involved the insertion of a specific provision into Codex dairy product standards, that states: "From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection." This language permits countries—including the U.S. to allow entry of dairy products only if they meet the country's level of public health protection, while at the same time not hindering a country's ability to produce dairy products in any manner they see fit. This is a classic example of how U.S. public health officials worked within an international forum to arrive at a solution that allowed the U.S. to maintain its high public health standards while also achieving updated dairy product standards that greatly assist the U.S. dairy industry in their international trade effort.

International labeling standard for composite food ingredients.—While the 5 percent cut off level for listing composite ingredients is less restrictive than current U.S. regulations that require full disclosure of most ingredients, the value is substantially better than the previous figure of 25 percent, that the 5 percent figure replaced. The 5 percent figure is also coupled with a requirement that ingredients that are food allergens be fully disclosed. This new Codex labeling requirement is far more stringent than its predecessor. While the U.S. would have preferred a more stringent standard, and worked towards that end, the U.S. position was not supported by many other countries within the Codex commission. The compromise solution obtained was a distinct improvement over the earlier standard and, coupled with the food allergen mandatory disclosure, was the best solution that could be expected in a forum in which the U.S. held the minority view.

IMPORTED FOOD

Question. FDA visits foreign countries to audit the safety of food produced in these countries for export in the U.S. Please indicate for fiscal year 1998 and fiscal year 1999 each foreign country for which such an audit was conducted, the particular food that was the subject of the audit, and the approximate dates of each such audit?

Answer. I would be happy to provide that information for the record.

[The information follows:]

FDA'S FISCAL YEAR 1998 AND FISCAL YEAR 1999 FOREIGN INSPECTIONS/AUDITS

Country (number of firms)	Product	Date
China (14)	Low Acid Canned Food	3/98 thru 4/98
Thailand (13)	Low Acid Canned Food	1/98 thru 8/98
Spain (5)	Low Acid Canned Food	1/98 thru 2/98
Germany (3)	Low Acid Canned Food	2/98 thru 4/98
Philippines (1)	Low Acid Canned Food	2/98
Indonesia (1)	Low Acid Canned Food	2/98
Mexico	Parsley	10/98
Guatemala	Fresh Raspberries	3/98, 6/98, 11/98
Honduras	Country Evaluation	8/98
Ecuador (11)	Seafood	7/99
Canada (9)	Low Acid Canned Food	3/99 thru 7/99
Philippines (9)	Seafood	4/99
Taiwan (9)	Seafood	5/99
Vietnam (9)	Low Acid Canned Food	4/99
Brazil (6)	Low Acid Canned Food	8/99
Mexico (6)	Cheese	2/99 thru 8/99
Equador (5)	Low Acid Canned Food	6/99 thru 7/99
France (5)	Cheese	2/99 thru 8/99
Canada (1)	Cheese	2/99 thru 8/99
El Salvador (1)	Cheese	2/99 thru 8/99
Germany (1)	Cheese	2/99 thru 8/99
Singapore (1)	Seafood	6/99
Costa Rica	Cilantro	7/99
	Country Evaluation	7/99
El Salvador	Post-Hurricane Mitch Food Safety Assessment.	7/99
Guatemala	Raspberries	3/99
	Mamey	4/99
	Post-Hurricane Mitch Food Safety Assessment.	7/99
Honduras	Post-Hurricane Mitch Food Safety Assessment.	7/99
India	Low Acid Canned Food	6/99 thru 8/99
Malaysia	Low Acid Canned Food	8/99
Mexico	Basil	12/99
	Green onions	3/99
	Parsley	2/99
	Celery/Lettuce	7/99
Nicaragua	Post-Hurricane Mitch Food Safety Assessment.	7/99
Philippines	Low Acid Canned Food	5/99 thru 6/99
Trinidad and Tobago	Country Evaluation	
Vietnam	Low Acid Canned Food	4/99

IMPORTED FOOD

Question. Was the FDA ever denied access to a foreign country in which it wanted to conduct an audit in fiscal year 1998 or fiscal year 1999? If so, please briefly describe the circumstances.

Answer. Although in the past Mexico has a very positive record of cooperation with FDA, FDA was denied access to Mexico once in 1999 in follow-up to a foodborne outbreak associated with the consumption of unpasteurized orange juice in the United States. The Mexican Ministry of Health would not allow FDA investigators to visit the processor or orchards implicated in the outbreak. The Ministry of Health did its own evaluation and provided FDA with information.

We would like to note that Mexico participates in a number of cooperative efforts with the U.S. and collaborative exchanges are underway in the areas of research and outbreaks. Additionally, in September 1999, Mexico hosted a food safety prac-

tices symposium for more than 4,000 government officials in Mexico and Central America.

Question. FDA inspects for safety a sample of imported food at the U.S. border. Please indicate for fiscal year 1999 the rejection rate by each major food product for each foreign country?

Answer. We will be happy to provide this information for the record. In the table we provide, the data will represent the total number of imported foods refused for entry into the United States by major food product category. We use the terms "rejection" and "refusal" interchangeably.

[The information follows:]

Imported Foods Rejection Rate

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
AFGHANISTAN			
- Fruit & Fruit Products	36	8	22%
- Nuts and Edible Seeds	1	0	0
- Vegetables and Vegetable Products	1	0	0
- Spices, Flavors, and Spices	1	0	0
ALBANIA			
- Fruit & Fruit Products	2	0	0
- Nuts and Edible Seeds	1	0	0
- Vegetables and Vegetables Products	5	0	0
- Spices, Flavors, and Spices	177	0	0
- Coffee and Tea	7	0	0
ALGERIA			
- Fruit & Fruit Products	3	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	2	0	0
AMERICAN SAMOA			
- Fishery/Fishery Products	6035	7	Less than 1%
- Fruit and Fruit Products	3	0	0
- Spices, Flavors, and Salts	1	0	0
- Alcoholic Beverages	2	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
ANDORRA			
- Vegetable and Vegetable Products	2	0	0
- Spices, Flavors, and Salts	1	0	0
ANGOLA			
- Soft Drinks and Waters	1	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	3	0	0
ANGUILLA			
- Dressings and Condiments	1	0	0
ANTIGUA & BARBUDA			
- Fishery/Fishery Products	19	0	0
- Fruit and Fruit Products	3	0	0
- Nuts and Edible Seeds	1	0	0
- Vegetable and Vegetable Products	1	0	0
- Alcoholic Beverages	2	0	0
- Multiple Food Dinners, Gravies, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
ARGENTINA			
- Whole Grains, Milled Grain Products and Starch	26	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	186	0	0
- Macaroni and Noodle Products	16	0	0
- Cereal Preparations, Breakfast Foods	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	6	0	0
- Milk, Butter and Dried Milk Products	45	0	0
- Cheese and Cheese Products	488	0	0
- Ice Cream and Related Products	18	0	0
- Filled/Imitation Milk Products	2	0	0
- Fishery/Fishery Products	2885	5	0
- Meat, Meat Products and Poultry	94	0	0
- Fruit and Fruit Products	2532	7	0
- Fruit and Fruit Products	111	0	0
- Fruit and Fruit Products	9	0	0
- Nuts and Edible Seeds	295	0	0
- Vegetable and Vegetable Products	247	1	0
- Vegetable and Vegetable Products	608	3	0
- Vegetable Oils (Includes Olive Oil)	44	0	0
- Dressings and Condiments	16	0	0
- Spices, Flavors, and Salts	233	0	0
- Soft Drinks and Waters	32	0	0
- Beverage Bases	74	0	0
- Coffee and Tea	1380	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Alcoholic Beverages	1380	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	804	1	0
- Chocolate and Cocoa Products	81	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	29	0	0
- Food Sweeteners (Nutritive)	835	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	15	0	0
- Soups	102	0	0
ARMENIA			
- Fruit and Fruit Products	6	0	0
- Fruit and Fruit Products	7	0	0
- Fruit and Fruit Products	3	0	0
- Nuts and Edible Seeds	6	0	0
- Soft Drinks and Waters	8	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	6	0	0
ARUBA			
- Spices, Flavors, and Salts	1	0	0
- Soft Drinks and Waters	1	0	0
- Alcoholic Beverages	1	0	0
AUSTRALIA			
- Whole Grains, Milled Grain Products and Starch	686	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	178	4	2%
- Macaroni and Noodle Products	45	0	0
- Cereal Preparations, Breakfast Foods	14	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	48	0	0
- Milk, Butter and Dried Milk Products	406	0	0
- Cheese and Cheese Products	266	0	0
- Ice Cream and Related Products	6	0	0
- Filled/Imitation Milk Products	4	0	0
- Egg and Egg Products	28	0	0
- Fishery/Fishery Products	3844	6	Less than 1%
- Meat, Meat Products and Poultry	73	1	1.3%
- Vegetable Protein Products (Simulated Meats)	29	0	0
- Fruit and Fruit Products	518	0	0
- Fruit and Fruit Products	321	2	Less than 1%
- Fruit and Fruit Products	12	0	0
- Nuts and Edible Seeds	185	0	0
- Vegetable and Vegetable Products	245	1	Less than 1%
- Vegetable and Vegetable Products	275	0	0
- Vegetable Oils (Includes Olive Oil)	31	0	0
- Dressings and Condiments	27	0	0
- Spices, Flavors, and Salts	292	0	0
- Soft Drinks and Waters	30	0	0
- Beverage Bases	31	0	0
- Coffee and Tea	64	0	0
- Alcoholic Beverages	10385	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	113	2	1.7%
- Chocolate and Cocoa Products	93	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	5	0	0
- Food Sweeteners (Nutritive)	255	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	33	0	0
- Soups	21	0	0
- Baby (Infant and Junior) Food Products	4	0	0
- Dietary Conventional Foods and Meal Replacements	12	0	0
AUSTRIA			
- Whole Grains, Milled Grain Products and Starch	16	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	516	0	0
- Macaroni and Noodle Products	11	0	0
- Cereal Preparations, Breakfast Foods	2	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	9	0	0
- Milk, Butter and Dried Milk Products	4	0	0
- Cheese and Cheese Products	248	0	0
- Ice Cream and Related Products	1	0	0
- Fishery/Fishery Products	2	0	0
- Meat, Meat Products and Poultry	2	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Fruit and Fruit Products	434	0	0
- Fruit and Fruit Products	144	1	Less than 1%
- Fruit and Fruit Products	2	0	0
- Nuts and Edible Seeds	18	0	0
- Vegetable and Vegetable Products	23	0	0
- Vegetable and Vegetable Products	18	0	0
- Vegetable Oils (Includes Olive Oil)	24	0	0
- Dressings and Condiments	16	0	0
- Spices, Flavors, and Salts	61	0	0
- Soft Drinks and Waters	296	1	Less than 1%
- Beverage Bases	168	0	0
- Coffee and Tea	65	0	0
- Alcoholic Beverages	322	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	73	0	0
- Chocolate and Cocoa Products	132	2	0
- Food Sweeteners (Nutritive)	42	0	0
- Soups	107	0	0
- Prepared Salad Products	5	0	0
- Baby (Infant and Junior) Food Products	3	0	0
- Dietary Conventional Foods and Meal Replacements	4	0	0
AZERBAIJAN			
- Fishery/Fishery Products	2	0	0
- Fruit & Fruit Products	3	0	0
- Fruit & Fruit Products	1	0	0
- Nuts and Edible Seeds	3	0	0
- Vegetable and Vegetable Products	1	0	0
- Spices, Flavors, and Salts	2	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	2	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
- Soups	1	0	0
BAHAMAS			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fishery/Fishery Products	301	2	Less than 1%
- Fruit & Fruit Products	121	0	0
- Fruit & Fruit Products	30	0	0
- Vegetable and Vegetable Products	11	0	0
- Spices, Flavors, and Salts	5	0	0
- Alcoholic Beverages	43	0	0
BAHRAIN			
- Fishery/Fishery Products	9	0	0
- Alcoholic Beverages	4	0	0
BANGLADESH			
- Whole Grains, Milled Grain Products, and Starch	13	0	0
- Bakery Products, Doughs, and Bakery Mixes, and Icings	15	0	0
- Macaroni and Noodle Products	4	0	0
- Cereal Preparations, Breakfast Foods	3	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	4	0	0
- Fishery/Fishery Products	2239	4	Less than 1%
- Fruit & Fruit Products	5	0	0
- Nuts and Edible Seeds	1	0	0
- Vegetable and Vegetable Products	11	0	0
- Vegetable and Vegetable Products	6	0	0
- Vegetable Oils (includes Olive Oil)	2	1	50%
- Spices, Flavors, and Salts	1	0	0
- Soft Drinks and Waters	1	0	0
- Coffee and Tea	6	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	17	0	0
- Food Sweeteners (Nutritive)	3	0	0
BARBADOS			
- Whole Grains, Milled Grain Products, and Starch	1	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	31	0	0
- Milk, Butter and Dried Milk Products	1	0	0
- Filled/Imitation Milk Products	2	1	50%
- Fishery/Fishery Products	184	1	Less than 1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Fruit & Fruit Products	2	0	0
- Fruit & Fruit Products	5	2	40%
- Fruit & Fruit Products	3	0	0
- Vegetable and Vegetable Products	37	0	0
- Vegetable Oils (including Olive Oil)	1	0	0
- Dressings and Condiments	17	0	0
- Spices, Flavors, and Salts	7	0	0
- Soft Drinks and Waters	13	1	7.6%
- Beverage Bases	3	0	0
- Alcoholic Beverages	6	0	0
- Food Sweeteners (Nutritive	5	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
BELGIUM			
- Whole Grains, Milled Grain Products and Starch	308	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	1977	3	Less than 1%
- Macaroni and Noodle Products	44	0	0
- Cereal Preparations, Breakfast Foods	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	15	0	0
- Milk, Butter and Dried Milk Products	53	0	0
- Cheese and Cheese Products	192	0	0
- Filled/Imitation Milk Products	10	0	0
- Fishery/Fishery Products	57	0	0
- Meat, Meat Products and Poultry	20	0	0
- Fruit and Fruit Products	454	1	Less than 1%
- Fruit and Fruit Products	942	0	0
- Fruit and Fruit Products	47	0	0
- Fruit and Fruit Products Nuts and Edible Seeds	59	1	1.6%
- Vegetable and Vegetable Products	3380	4	Less than 1%
- Vegetable and Vegetable Products	723	0	0
- Vegetable Oils (Includes Olive Oil)	9	0	0
- Dressings and Condiments	9	0	0
- Spices, Flavors, and Salts	101	0	0
- Soft Drinks and Waters	156	0	0
- Beverage Bases	13	1	7.6%
- Coffee and Tea	62	0	0
- Alcoholic Beverages	1062	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	288	1	Less than 1%
- Chocolate and Cocoa Products	3094	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	64	0	0
- Food Sweeteners (Nutritive)	148	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	29	0	0
- Soups	17	1	5.8%
- Prepared Salad Products	4	1	25%
- Baby (Infant and Junior) Food Products	45	0	0
- Dietary Conventional Foods and Meal Replacements	12	0	0
BELIZE			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fishery/Fishery Products	422	0	0
- Fruit & Fruit Products	72	0	0
- Fruit & Fruit Products	336	0	0
- Fruit & Fruit Products	14	0	0
- Vegetable and Vegetable Products	120	0	0
- Vegetable and Vegetable Products	2	0	0
- Dressings and Condiments	10	0	0
- Spices, Flavors, and Salts	12	0	0
- Alcoholic Beverages	1	0	0
- Food Sweeteners (Nutritive)	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	7	0	0
BENIN			
- Fishery/Fishery Products	4	0	0
- Vegetable Oils (includes Olive Oil)	3	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
BERMUDA			
- *Bakery Products, Doughs, Bakery Mixes, and Icings*	*1*	*0*	*0*
- *Fishery/Fishery Products*	*1*	*0*	*0*
- *Alcoholic Beverages*	*52*	*0*	*0*
BHUTAN			
- *Whole Grains, Milled Grain Products, and Starch*	*6*	*0*	*0*
- *Fruit & Fruit Products*	*1*	*0*	*0*
- *Spices, Flavors, and Salts*	*1*	*0*	*0*
- *Food Sweeteners (Nutritive)*	*1*	*0*	*0*
BOLIVIA			
- *Whole Grains, Milled Grain Products, and Starch*	*24*	*0*	*0*
- *Macaroni and Noodle Products*	*2*	*0*	*0*
- *Cereal Preparations, Breakfast Foods*	*1*	*0*	*0*
- *Fruit & Fruit Products*	*14*	*0*	*0*
- *Fruit & Fruit Products*	*3*	*0*	*0*
- *Nuts and Edible Seeds*	*227*	*0*	*0*
- *Vegetable and Vegetable Products*	*27*	*0*	*0*
- *Vegetable and Vegetable Products*	*7*	*0*	*0*
- *Vegetable Oils (include Olive Oils)*	*2*	*0*	*0*
- *Spices, Flavors, and Salts*	*12*	*0*	*0*
- *Soft Drinks and Waters*	*2*	*0*	*0*
- *Coffee and Tea*	*27*	*0*	*0*
- *Alcoholic Beverages*	*5*	*0*	*0*
- *Chocolate and Cocoa Products*	*1*	*0*	*0*
- *Food Sweeteners (Nutritive)*	*3*	*0*	*0*
- *Soups*	*1*	*0*	*0*
BOSNIA-HERCEGOVINA			
- *Bakery Products, Doughs, Bakery Mixes, and Icings*	*1*	*0*	*0*
- *Fruit & Fruit Products*	*7*	*0*	*0*
- *Fruit & Fruit Products*	*11*	*0*	*0*
- *Vegetable and Vegetable Products*	*10*	*0*	*0*
BRAZIL			
- *Whole Grains, Milled Grain Products and Starch*	*265*	*0*	*0*
- *Bakery Products, Doughs, Bakery Mixes and Icings*	*395*	*2*	*Less than 1%*
- *Macaroni and Noodle Products*	*16*	*0*	*0*
- *Cereal Preparations, Breakfast Foods*	*96*	*0*	*0*
- *Snack Food Items (Flour, Meal or Vegetable Base)*	*20*	*0*	*0*
- *Milk, Butter and Dried Milk Products*	*7*	*0*	*0*
- *Cheese and Cheese Products*	*3*	*0*	*0*
- *Ice Cream and Related Products*	*20*	*0*	*0*
- *Filled/Imitation Milk Products*	*1*	*1*	*100%*
- *Egg and Egg Products*	*1*	*0*	*0*
- *Fishery/Fishery Products*	*6312*	*9*	*Less than 1%*
- *Meat, Meat Products and Poultry*	*176*	*0*	*0*
- *Vegetable Protein Products (Simulated Meats)*	*1*	*0*	*0*
- *Fruit and Fruit Products*	*664*	*2*	*Less than 1%*
- *Fruit and Fruit Products*	*1610*	*8*	*Less than 1%*
- *Fruit and Fruit Products*	*48*	*0*	*0*
- *Nuts and Edible Seeds*	*973*	*0*	*0*
- *Vegetable and Vegetable Products*	*234*	*5*	*2.1%*
- *Vegetable and Vegetable Products*	*564*	*6*	*1%*
- *Vegetable Oils (Includes Olive Oil)*	*34*	*0*	*0*
- *Dressings and Condiments*	*26*	*0*	*0*
- *Spices, Flavors, and Salts*	*440*	*1*	*Less than 1%*
- *Soft Drinks and Waters*	*43*	*0*	*0*
- *Beverage Bases*	*86*	*0*	*0*
- *Coffee and Tea*	*4297*	*0*	*0*
- *Alcoholic Beverages*	*53*	*0*	*0*
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	*980*	*2*	*Less than 1%*
- *Chocolate and Cocoa Products*	*412*	*1*	*Less than 1%*
- *Gelatin, Rennet, Pudding Mixes and Pie Fillings*	*104*	*1*	*Less than 1%*
- *Food Sweeteners (Nutritive)*	*5593*	*0*	*0*
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	*34*	*3*	*8.8%*
- *Soups*	*34*	*2*	*5.8%*
- *Prepared Salad Products*	*1*	*0*	*0*

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Baby (Infant and Junior) Food Products	7	0	0
- Dietary Conventional Foods and Meal Replacements	6	0	0
BRITISH VIRGIN ISLANDS			
- Bakery Products, Doughs, Bakery Mixes, and Icings	2	0	0
- Fishery/Fishery Products	89	0	0
- Fruit and Fruit Products	1	0	0
- Fruit and Fruit Products	12	0	0
- Vegetable and Vegetable Products	1	0	0
- Vegetable Oils (includes Olive Oil)	1	0	0
- Dressings and Condiments	2	0	0
- Spices, Flavors, and Salts	86	0	0
- Coffee and Tea	26	0	0
- Alcoholic Beverages	1	0	0
- Candy without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
- Chocolate and Cocoa Products	2	0	0
- Food Sweeteners (Nutritive)	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	14	0	0
- Baby (Infant and Junior) Food Products	1	0	0
BRUNEI DARUSSALAM			
- Candy without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
BULGARIA			
- Whole Grains, Milled Grain Products, and Starch	3	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	3	0	0
- Macaroni and Noodle Products	4	0	0
- Cheese and Cheese Products	191	0	0
- Fishery/Fishery Products	9	0	0
- Fruit and Fruit Products	41	0	0
- Fruit and Fruit Products	41	1	2.4%
- Nuts and Edible Seeds	4	0	0
- Vegetable and Vegetable Products	298	9	3.0%
- Vegetable and Vegetable Products	230	5	2.1%
- Vegetable Oils (includes Olive Oil)	2	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	51	0	0
- Soft Drinks and Waters	3	0	0
- Beverages Bases	1	0	0
- Alcoholic Beverages	129	0	0
- Chocolate and Cocoa Products	1	0	0
- Food Sweeteners (Nutritive)	11	0	0
- Prepared Salad Products	2	0	0
BURMA			
- Fishery/Fishery Products	192	0	0
- Nuts and Edible Seeds	1	0	0
- Vegetable and Vegetable Products	3	0	0
- Vegetable and Vegetable Products	5	0	0
- Coffee and Tea	3	0	0
- Alcoholic Beverages	2	0	0
BURMA (MYANMAR)			
- Fishery/Fishery Products	67	0	0
- Nuts and Edible Seeds	2	0	0
- Vegetable and Vegetable Products	11	0	0
BURUNDI			
- Coffee and Tea	40	0	0
BELARUS			
- Milk, Butter and Dried Milk Products	3	0	0
CAMEROON			
- Whole Grains, Milled Grain Products, and Starch	2	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fruit & Fruit Products	3	0	0
- Nuts and Edible Seeds	4	0	0
- Vegetable and Vegetable Products	3	0	0
- Vegetable Oils (includes Olive Oil)	3	0	0
- Spices, Flavors, and Salts	7	0	0
- Coffee and Tea	25	0	0
- Chocolate and Cocoa Products	10	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- *Multiple Food Dinners, Gravies, Sauces, and Specialties*	*1*	*0*	*0*
CANADA			
- *Whole Grains, Milled Grain Products and Starch*	*53750*	*1*	*Less than 1%*
- *Bakery Products, Doughs, Bakery Mixes and Icings*	*121731*	*7*	*Less than 1%*
- *Macaroni and Noodle Products*	*11728*	*3*	*Less than 1%*
- *Cereal Preparations, Breakfast Foods*	*8850*	*3*	*Less than 1%*
- *Snack Food Items (Flour, Meal or Vegetable Base)*	*6846*	*11*	*Less than 1%*
- *Milk, Butter and Dried Milk Products*	*2647*	*15*	*Less than 1%*
- *Cheese and Cheese Products*	*3818*	*3*	*Less than 1%*
- *Ice Cream and Related Products*	*1579*	*0*	*0*
- *Filled/Imitation Milk Products*	*208*	*0*	*0*
- *Egg and Egg Products*	*591*	*0*	*0*
- *Fishery/Fishery Products*	*161581*	*7*	*Less than 1%*
- *Meat, Meat Products and Poultry*	*2116*	*1*	*Less than 1%*
- *Vegetable Protein Products (Simulated Meats)*	*7667*	*0*	*0*
- *Fruit and Fruit Products*	*23388*	*2*	*Less than 1%*
- *Fruit and Fruit Products*	*6294*	*5*	*Less than 1%*
- *Fruit and Fruit Products*	*1977*	*0*	*0*
- *Nuts and Edible Seeds*	*4030*	*3*	*Less than 1%*
- *Vegetable and Vegetable Products*	*80341*	*12*	*Less than 1%*
- *Vegetable and Vegetable Products*	*85406*	*12*	*Less than 1%*
- *Vegetable Oils (Includes Olive Oil)*	*19746*	*2*	*Less than 1%*
- *Dressings and Condiments*	*7109*	*4*	*Less than 1%*
- *Spices, Flavors, and Salts*	*20087*	*4*	*Less than 1%*
- *Soft Drinks and Waters*	*54491*	*1*	*Less than 1%*
- *Beverage Bases*	*2531*	*2*	*Less than 1%*
- *Coffee and Tea*	*16675*	*5*	*Less than 1%*
- *Alcoholic Beverages*	*49544*	*0*	*0*
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	*23409*	*2*	*Less than 1%*
- *Chocolate and Cocoa Products*	*14275*	*3*	*Less than 1%*
- *Gelatin, Rennet, Pudding Mixes and Pie Fillings*	*4993*	*1*	*Less than 1%*
- *Food Sweeteners (Nutritive)*	*12648*	*1*	*Less than 1%*
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	*9946*	*6*	*Less than 1%*
- *Soups*	*10020*	*3*	*Less than 1%*
- *Prepared Salad Products*	*2217*	*0*	*0*
- *Baby (Infant and Junior) Food Products*	*1485*	*0*	*0*
- *Dietary Conventional Foods and Meal Replacements*	*4551*	*3*	*Less than 1%*
CAPE VERDE			
- *Fishery/Fishery Products*	*1*	*0*	*0*
- *Coffee and Tea*	*2*	*0*	*0*
CAYMAN ISLANDS			
- *Bakery Products, Doughs, Bakery Mixes, and Icings*	*94*	*0*	*0*
- *Fishery/Fishery Products*	*1*	*0*	*0*
- *Coffee and Tea*	*3*	*0*	*0*
- *Chocolate and Cocoa Products*	*1*	*0*	*0*
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	*9*	*0*	*0*

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
CENTRAL AFRICAN REPUBLIC			
- *Fishery/Fishery Products*	*10*	*0*	*0*
- *Coffee and Tea*	*2*	*0*	*0*
CHAD			
- *Fishery/Fishery Products*	*1*	*0*	*0*
- *Nuts and Edible Seeds*	*21*	*0*	*0*
- *Spices, Flavors, and Salts*	*10*	*0*	*0*
CHILE			
- *Whole Grains, Milled Grain Products, and Starch*	*63*	*0*	*0*
- *Bakery Products, Doughs, Bakery Mixes, and Icings*	*82*	*0*	*0*
- *Macaroni and Noodle Products*	*215*	*0*	*0*
- *Cereal Preparations, Breakfast Foods*	*1*	*0*	*0*
- *Milk, Butter and Dried Milk Products*	*127*	*2*	*1%*
- *Ice Cream and Related Products*	*6*	*0*	*0*
- *Egg and Egg Products*	*1*	*0*	*0*
- *Fishery/Fishery Products*	*19677*	*12*	*Less than 1%*
- *Meat, Meat Products, and Poultry*	*2*	*0*	*0*
- *Vegetable Protein Products (Simulated Meats)*	*2*	*0*	*0*
- *Fruit & Fruit Products*	*12566*	*1*	*Less than 1%*
- *Fruit & Fruit Products*	*7713*	*0*	*0*
- *Fruit & Fruit Products*	*330*	*0*	*0*
- *Nuts and Edible Seeds*	*40*	*0*	*0*
- *Vegetable and Vegetable Products*	*2327*	*4*	*Less than 1%*
- *Vegetable and Vegetable Products*	*488*	*2*	*Less than 1%*
- *Vegetable Oils (includes Olive Oil)*	*12*	*0*	*0*
- *Dressings and Condimenis*	*5*	*0*	*0*
- *Spices, Flavors, and Salts*	*119*	*0*	*0*
- *Soft Drinks and Waters*	*14*	*0*	*0*
- *Beverages Bases*	*28*	*0*	*0*
- *Coffee and Tea*	*101*	*0*	*0*
- *Alcoholic Beverages*	*9849*	*0*	*0*
- *Candy Without Chocolate, Candy Specialties and Chewing Gum*	*160*	*0*	*0*
- *Chocolate and Cocoa Products*	*88*	*0*	*0*
- *Gelatin, Rennet, Pudding Mixes, and Pie Fillings*	*59*	*0*	*0*
- *Food Sweeteners (Nutritive)*	*4*	*0*	*0*
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	*6*	*0*	*0*
- *Soups*	*22*	*0*	*0*
- *Baby (Infant and Junior) Food Products*	*10*	*0*	*0*
CHINA (MAINLAND)			
- *Whole Grains, Milled Grain Products, and Starch*	*613*	*8*	*1.3%*
- *Bakery Products, Doughs, Bakery Mixes and Icings*	*1421*	*9*	*Less than 1%*
- *Macaroni and Noodle Products*	*2111*	*20*	*Less than 1%*
- *Cereal Preparations, Breakfast Foods*	*12*	*2*	*16%*
- *Snack Food Items (Flour, Meal or Vegetable Base)*	*114*	*2*	*1.7%*
- *Milk, Butter and Dried Milk Products*	*14*	*0*	*0*
- *Cheese and Cheese Products*	*51*	*0*	*0*
- *Ice Cream and Related Products*	*6*	*0*	*0*
- *Filled/Imitation Milk Products*	*11*	*0*	*0*
- *Egg and Egg Products*	*395*	*0*	*0*
- *Fishery/Fishery Products*	*8536*	*12*	*Less than 1%*
- *Meat, Meat Products and Poultry*	*571*	*1*	*Less than 1%*
- *Vegetable Protein Products (Simulated Meats)*	*99*	*0*	*0*
- *Fruit and Fruit Products*	*273*	*11*	*4%*
- *Fruit and Fruit Products*	*1065*	*24*	*2.2%*
- *Fruit and Fruit Products*	*99*	*8*	*8%*
- *Nuts and Edible Seeds*	*1441*	*5*	*Less than 1%*
- *Vegetable and Vegetable Products*	*5168*	*18*	*Less than 1%*
- *Vegetable and Vegetable Products*	*6206*	*10*	*Less than 1%*
- *Vegetable Oils (Includes Olive Oil)*	*108*	*0*	*0*
- *Dressings and Condiments*	*466*	*0*	*0*
- *Spices, Flavors, and Salts*	*3408*	*12*	*Less than 1%*
- *Soft Drinks and Waters*	*112*	*3*	*2.6%*
- *Beverage Bases*	*327*	*6*	*1.8%*
- *Coffee and Tea*	*3019*	*3*	*Less than 1%*
- *Alcoholic Beverages*	*559*	*12*	*2.1%*

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2226	0	0
- Chocolate and Cocoa Products	95	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	213	3	1.4%
- Food Sweeteners (Nutritive)	601	2	Less than 1%
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1359	7	Less than 1%
- Soups	141	6	4.2%
- Baby (Infant and Junior) Food Products	2	0	0
- Dietary Conventional Foods and Meal	29	0	0
CHRISTMAS ISLANDS (INDIAN)			
- Fishery/Fishery Products	2	0	0
- Spices, Flavors, and Salts	1	0	0
COCOS ISLANDS			
- Cheese and Cheese Products	1	0	0
- Fishery/Fishery Products	3	0	0
COLUMBIA			
- Whole Grains, Milled Grain Products, and Starch	87	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	322	0	0
- Cereal Preparations, Breakfast Foods	18	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	32	0	0
- Milk, Butter and Dried Milk Products	1	0	0
- Cheese and Cheese Products	1	0	0
- Ice Cream and Related Products	8	0	0
- Filled/Imitation Milk Products	5	0	0
- Egg and Egg Products	1	0	0
- Fishery/Fishery Products	1623	0	0
- Fruit & Fruit Products	194	5	2.5%
- Fruit & Fruit Products	1903	6	Less than 1%
- Fruit & Fruit Products	50	1	2%
- Nuts and Edible Seeds	6	0	0
- Vegetable and Vegetable Products	949	0	0
- Vegetable and Vegetable Products	587	1	Less than 1%
- Vegetable Oils (Includes Olive Oil)	4	2	50%
- Dressings and Condiments	14	0	0
- Spices, Flavors, and Salts	4488	0	0
- Soft Drinks and Waters	9	2	22%
- Beverage Bases	48	0	0
- Coffee and Tea	5460	1	Less than 1%
- Alcoholic Beverages	25	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	654	0	0
- Chocolate and Cocoa Products	74	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	44	0	0
- Food Sweeteners (Nutritive)	13802	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	11	0	0
- Soups	9	0	0
- Prepared Salad Products	1	1	100%
- Baby (Infant and Junior) Food Products	2	0	0
- Dietary Conventional Foods and Meal	8	0	0
COMOROS			
- Fruit & Fruit Products	1	0	0
- Spices, Flavors, and Salts	15	0	0
CONGO (BRAZZAVILLE)			
- Coffee and Tea	11	0	0
- Chocolate and Cocoa Products	1	0	0
- Food Sweeteners (Nutritive)	5	0	0
CONGO. DEM REP OF (KINSHA)			
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
- Chocolate and Cocoa Products	1	0	0
COOK ISLANDS			
- Fruit & Fruit Products	2	0	0
- Fruit & Fruit Products	8	0	0
- Vegetable and Vegetable Products	1	0	0
COSTA RICA			
- Whole Grains, Milled Grain Products and Starch	9	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	28	0	0
- Macaroni and Noodle Products	38	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Cereal Preparations, Breakfast Foods	23	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	3	0	0
- Milk, Butter and Dried Milk Products	7	0	0
- Cheese and Cheese Products	13	0	0
- Fishery/Fishery Products	13735	3	Less than 1%
- Fruit and Fruit Products	601	0	0
- Fruit and Fruit Products	4219	1	Less than 1%
- Fruit and Fruit Products	1001	2	Less than 1%
- Nuts and Edible Seeds	130	0	0
- Vegetable and Vegetable Products	1675	12	Less than 1%
- Vegetable and Vegetable Products	7310	2	Less than 1%
- Vegetable Oils (Includes Olive Oil)	3	0	0
- Dressings and Condiments	139	1	Less than 1%
- Spices, Flavors, and Salts	1530	7	Less than 1%
- Soft Drinks and Waters	3	0	0
- Beverage Bases	29	0	0
- Coffee and Tea	1584	0	0
- Alcoholic Beverages	20	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	13	0	0
- Chocolate and Cocoa Products	19	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	14	0	0
- Food Sweeteners (Nutritive)	257	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	75	1	1.3%
- Soups	1	0	0
- Baby (Infant and Junior) Food Products	191	0	0
CROATIA			
- Whole Grains, Milled Grain Products and Starch	4	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	147	0	0
- Macaroni and Noodle Products	3	0	0
- Cereal Preparations, Breakfast Foods	10	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	2	0	0
- Fishery/Fishery Products	12	0	0
- Meat and Meat Products, and Poultry	2	1	50%
- Fruit and Fruit Products	16	0	0
- Fruit and Fruit Products	37	0	0
- Fruit and Fruit Products	4	0	0
- Nuts and Edible Seeds	7	0	0
- Vegetable and Vegetable Products	16	0	0
- Vegetable and Vegetable Products	9	0	0
- Vegetable Oils (Includes Olive Oil)	12	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	41	0	0
- Soft Drinks and Waters	6	0	0
- Beverage Bases	2	0	0
- Coffee and Tea	49	0	0
- Alcoholic Beverages	31	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	59	0	0
- Chocolate and Cocoa Products	84	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	11	0	0
- Food Sweeteners (Nutritive)	4	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	8	0	0
- Soups	94	0	0
CYPRUS			
- Whole Grains, Milled Grain Products, and Starch	9	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	22	0	0
- Macaroni and Noodle Products	5	0	0
- Cheese and Cheese Product	70	0	0
- Fishery/Fishery Products	49	0	0
- Fruit & Fruit Products	21	0	0
- Fruit & Fruit Products	19	0	0
- Fruit & Fruit Products	2	0	0
- Nuts and Edible Seeds	2	0	0
- Vegetable and Vegetable Products	14	0	0
- Spices, Flavors, and Salts	19	0	0
- Soft Drinks and Waters	9	0	0
- Coffee and Tea	9	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- *Alcoholic Beverages*	52	0	0
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	14	0	0
- *Gelatin, Rennet, Pudding Mixes, and Pie Fillings*	2	0	0
- *Food Sweeteners (Nutritive)*	2	0	0
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	1	0	0
- *Soups*	2	0	0
CZECH REPUBLIC			
- *Whole Grains, Milled Grain Products, and Starch*	152	0	0
- *Bakery Products, Doughs, Bakery Mixes and Icings*	26	0	0
- *Macaroni and Noodle Products*	3	0	0
- *Cereal Preparations, Breakfast Foods*	1	0	0
- *Milk, Butter and Dried Milk Products*	30	0	0
- *Cheese and Cheese Products*	39	0	0
- *Fishery/Fishery Products*	5	1	20%
- *Meat, Meat Products, and Poultry*	9	0	0
- *Vegetable Protein Products (Simulated Meats)*	1	0	0
- *Fruit & Fruit Products*	45	0	0
- *Fruit & Fruit Products*	51	0	0
- *Nuts & Edible Seeds*	6	0	0
- *Vegetable and Vegetable Products*	1	0	0
- *Vegetable and Vegetable Products*	1	0	0
- *Vegetable Oils (includes Olive Oil)*	2	0	0
- *Dressings and Condiments*	3	0	0
- *Spices, Flavors, and Salts*	141	0	0
- *Soft Drinks and Waters*	15	0	0
- *Beverage Bases*	1	0	0
- *Coffee and Tea*	6	0	0
- *Alcoholic Beverages*	1208	0	0
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	6	0	0
- *Dietary Conventional Foods and Meal Replacements*	2	0	0
CZECHOSLOVAKIA (DO NOT USE)			
- *Whole Grains, Milled Grain Products, and Starch*	1	0	0
- *Bakery Products, Doughs, Bakery Mixes, and Icings*	6	0	0
- *Fishery/Fishery Products*	4	0	0
- *Meat, Meat Products, and Poultry*	1	0	0
- *Fruit & Fruit Products*	2	0	0
- *Fruit & Fruit Products*	1	0	0
- *Vegetable and Vegetable Products*	1	0	0
- *Vegetable and Vegetable Products*	2	0	0
- *Vegetable Oils (includes Olive Oil)*	1	0	0
- *Gelatin, Rennet, Pudding Mixes, and Pie Fillings*	1	0	0
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	1	0	0
DENMARK			
- *Whole Grains, Milled Grain Products, and Starch*	97	0	0
- *Bakery Products, Doughs, Bakery Mixes, and Icings*	2068	1	Less than 1%
- *Macaroni and Noodle Products*	31	0	0
- *Cereal Preparations, Breakfast Foods*	1	0	0
- *Snack Food Items (Flour, Meal or Vegetable Base)*	10	0	0
- *Milk Butter and Dried Milk Products*	241	2	Less than 1%
- *Cheese and Cheese Products*	3275	6	Less than 1%
- *Fishery/Fishery Products*	808	8	Less than 1%
- *Meat, Meat Products, and Poultry*	98	0	0
- *Vegetable Protein Products (Simulated Meats)*	24	0	0
- *Fruit & Fruit Products*	274	1	Less than 1%
- *Fruit & Fruit Products*	141	1	Less than 1%
- *Fruit & Fruit Products*	61	0	0
- *Nuts and Edible Seeds*	12	0	0
- *Vegetable and Vegetable Products*	81	0	0
- *Vegetable and Vegetable Products*	72	0	0
- *Vegetable Oils (includes Olive Oil)*	23	0	0
- *Dressing and Condiments*	20	0	0
- *Spices, Flavors, and Salts*	39	0	0
- *Soft Drinks and Waters*	10	0	0
- *Beverages Bases*	3	0	0
- *Coffee and Tea*	17	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Alcoholic Beverages	111	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	96	0	0
- Chocolate and Cocoa Products	214	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	34	0	0
- Food Sweeteners (Nutritive)	3	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	15	0	0
- Soups	5	0	0
- Baby (Infant and Junior) Food Products	3	0	0
DJIBOUTI			
- Nuts and Edible Seeds	2	0	0
- Coffee and Tea	2	0	0
DOMINICA			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fruit & Fruit Products	6	0	0
- Fruit & Fruit Products	13	0	0
- Vegetable and Vegetable Products	3	1	33%
- Vegetable and Vegetable Products	29	0	0
- Dressings and Condiments	12	0	0
- Spices, Flavors, and Salts	3	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	4	0	0
- Alcoholic Beverages	2	0	0
DOMINICAN REPUBLIC			
- Whole Grains, Milled Grain Products, and Starch	17	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	240	0	0
- Cereal Preparations, Breakfast Foods	35	0	0
- Cheese and Cheese Products	20	3	15%
- Filled/Imitation Milk Products	4	2	50%
- Fishery/Fishery Products	39	6	15%
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit & Fruit Products	845	0	0
- Fruit & Fruit Products	3488	11	Less than 1%
- Fruit & Fruit Products	1120	1	Less than 1%
- Nuts and Edible Seeds	1076	2	Less than 1%
- Vegetable and Vegetable Products	5943	21	Less than 1%
- Vegetable and Vegetable Products	2772	1	Less than 1%
- Vegetable Oils (including Olive Oil)	6	0	0
- Dressings and Condiments	79	0	0
- Spices, Flavors, and Salts	332	0	0
- Soft Drinks and Waters	17	0	0
- Beverage Bases	677	5	Less than 1%
- Coffee and Tea	115	0	0
- Alcoholic Beverages	152	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	102	0	0
- Chocolate and Cocoa Products	333	0	0
- Food Sweeteners (Nutritive)	100	1	1%
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	57	0	0
- Soups	76	0	0
- Baby (Infant and Junior) Food Products	2	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
ECUADOR			
- Whole Grains, Milled Grain Products, and Starch	111	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	48	0	0
- Macaroni and Noodle Products	25	1	4%
- Cereal Preparations, Breakfast Foods	7	1	14.2%
- Snack Food Items (Flour, Meal or Vegetable Base)	2	0	0
- Milk, Butter and Dried Milk Products	7	0	0
- Cheese and Cheese Products	5	0	0
- Ice Cream and Related Products	2	0	0
- Filled/Imitation Milk Products	6	0	0
- Fishery/Fishery Products	30383	21	Less than 1%
- Meat, Meat Products and Poultry	1	0	0
- Fruit and Fruit Products	170	0	0
- Fruit and Fruit Products	4551	1	Less than 1%
- Fruit and Fruit Products	249	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Nuts and Edible Seeds	6	0	0
- Vegetable and Vegetable Products	495	2	Less than 1%
- Vegetable and Vegetable Products	89	0	0
- Vegetable Oils (Includes Olive Oil)	5	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	42	0	0
- Soft Drinks and Waters	126	0	0
- Beverage Bases	4	0	0
- Coffee and Tea	719	0	0
- Alcoholic Beverages	22	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	117	1	Less than 1%
- Chocolate and Cocoa Products	710	1	Less than 1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	5	0	0
- Food Sweeteners (Nutritive)	1466	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	9	0	0
- Soups	2	0	0
- Baby (Infant and Junior) Food Products	3	0	0
EGYPT			
- Whole Grains, Milled Grain Products, and Starch	33	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	38	0	0
- Macaroni and Noodle Products	7	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
- Milk, Butter and Dried Milk Products	4	0	0
- Cheese and Cheese Products	35	0	0
- Ice Cream and Related Products	4	0	0
- Filled/Imitation Milk Products	1	0	0
- Fishery/Fishery Products	4	0	0
- Meat, Meat Products and Poultry	1	0	0
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit and Fruit Products	182	2	1%
- Fruit and Fruit Products	284	0	0
- Fruit and Fruit Products	3	0	0
- Nuts and Edible Seeds	19	3	15.7%
- Vegetable and Vegetable Products	229	6	2.6%
- Vegetable and Vegetable Products	46	0	0
- Vegetable Oils (Includes Olive Oil)	18	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	967	3	Less than 1%
- Soft Drinks and Waters	32	1	3.1%
- Beverage Bases	24	0	0
- Coffee and Tea	63	1	1.5%
- Alcoholic Beverages	7	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	91	1	1%
- Chocolate and Cocoa Products	1	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	9	0	0
- Food Sweeteners (Nutritive)	18	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	8	0	0
- Soups	28	0	0
- Baby (Infant and Junior) Food Products	2	0	0
EL SALVADOR			
- Whole Grains, Milled Grain Products, and Starch	59	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	244	2	Less than 1%
- Cereal Preparations, Breakfast Foods	30	0	0
- Macaroni and Noodle Products	29	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	122	0	0
- Milk, Butter and Dried Milk Products	1	0	0
- Cheese and Cheese Products	39	0	0
- Fishery/Fishery Products	1828	4	Less than 1%
- Meat, Meat Products and Poultry	1	0	0
- Vegetable Protein Products (Simulated Meats)	10	0	0
- Fruit and Fruit Products	18	0	0
- Fruit and Fruit Products	169	1	Less than 1%
- Fruit and Fruit Products	13	0	0
- Nuts and Edible Seeds	69	0	0
- Vegetable and Vegetable Products	297	0	0
- Vegetable and Vegetable Products	2	1	50%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- *Vegetable Oils (Includes Olive Oil)*	*13*	*0*	*0*
- *Dressings and Condiments*	*20*	*0*	*0*
- *Spices, Flavors, and Salts*	*139*	*1*	*Less than 1%*
- *Soft Drinks and Waters*	*54*	*0*	*0*
- *Beverage Bases*	*63*	*1*	*1.5%*
- *Coffee and Tea*	*596*	*0*	*0*
- *Alcoholic Beverages*	*121*	*0*	*0*
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	*59*	*0*	*0*
- *Chocolate and Cocoa Products*	*34*	*0*	*0*
- *Gelatin, Rennet, Pudding Mixes and Pie Fillings*	*6*	*0*	*0*
- *Food Sweeteners (Nutritive)*	*55*	*0*	*0*
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	*34*	*1*	*2.9%*
- *Soups*	*63*	*0*	*0*
- *Dietary Conventional Foods and Meal Replacements*	*1*	*0*	*0*
ERITREA			
- *Fishery/Fishery Products*	*1*	*0*	*0*
- *Fruit & Fruit Products*	*1*	*0*	*0*
ESTONIA			
- *Milk, Butter and Dried Milk Products*	*1*	*0*	*0*
- *Cheese and Cheese Products*	*1*	*0*	*0*
- *Filled/Imitation Milk Products*	*16*	*0*	*0*
- *Fishery/Fishery Products*	*22*	*0*	*0*
- *Vegetable and Vegetable Products*	*2*	*0*	*0*
- *Alcoholic Beverages*	*5*	*0*	*0*
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	*1*	*0*	*0*
- *Chocolate and Cocoa Products*	*2*	*0*	*0*
- *Dietary Conventional Foods and Meal Replacements*	*1*	*0*	*0*
ETHIOPIA			
- *Whole Grains, Milled Grain Products, and Starch*	*16*	*0*	*0*
- *Nuts and Edible Seeds*	*85*	*0*	*0*
- *Vegetable and Vegetable Products*	*7*	*2*	*28%*
- *Vegetable Oils (includes Olive Oil)*	*2*	*0*	*0*
- *Spices, Flavors, and Salts*	*20*	*0*	*0*
- *Coffee and Tea*	*230*	*0*	*0*
- *Alcoholic Beverages*	*6*	*0*	*0*
FALKLAND ISLANDS			
- *Fishery/Fishery Products*	*5*	*0*	*0*
FAROE ISLANDS			
- *Fishery/Fishery Products*	*447*	*0*	*0*
FIJI			
- *Whole Grains, Milled Grain Products, and Starch*	*2*	*0*	*0*
- *Bakery Products, Doughs, Bakery Mixes and Icings*	*71*	*2*	*2.8%*
- *Macaroni and Noodle Products*	*8*	*0*	*0*
- *Cereal Preparations, Breakfast Foods*	*7*	*0*	*0*
- *Snack Food Items (Flour, Meal or Vegetable Base)*	*53*	*1*	*1.8%*
- *Milk, Butter and Dried Milk Products*	*18*	*0*	*0*
- *Ice Cream and Related Products*	*1*	*0*	*0*
- *Fishery/Fishery Products*	*5195*	*5*	*Less than 1%*
- *Meat, Meat Products and Poultry*	*4*	*0*	*0*
- *Fruit and Fruit Products*	*1*	*0*	*0*
- *Fruit and Fruit Products*	*31*	*0*	*0*
- *Fruit and Fruit Products*	*1*	*0*	*0*
- *Nuts and Edible Seeds*	*13*	*0*	*0*
- *Vegetable and Vegetable Products*	*26*	*1*	*3.8%*
- *Vegetable and Vegetable Products*	*642*	*0*	*0*
- *Vegetable Oils (Includes Olive Oil)*	*9*	*0*	*0*
- *Spices, Flavors, and Salts*	*127*	*0*	*0*
- *Soft Drinks and Waters*	*64*	*0*	*0*
- *Beverage Bases*	*1*	*0*	*0*
- *Coffee and Tea*	*6*	*0*	*0*
- *Alcoholic Beverages*	*1*	*0*	*0*
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	*9*	*0*	*0*
- *Chocolate and Cocoa Products*	*7*	*0*	*0*
- *Gelatin, Rennet, Pudding Mixes and Pie Fillings*	*1*	*0*	*0*
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	*9*	*0*	*0*

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- *Soups*	2	0	0
- *Baby (Infant and Junior) Food Products*	1	0	0
- *Dietary Conventional Foods and Meal Replacements*	2	0	
FINLAND			
- *Whole Grains, Milled Grain Products, and Starch*	20	0	0
- *Bakery Products, Doughs, Bakery Mixes and Icings*	24	0	0
- *Cheese and Cheese Products*	338	0	0
- *Ice Cream and Related Products*	1	0	0
- *Fishery/Fishery Products*	16	1	6.2%
- *Meat, Meat Products and Poultry*	8	0	0
- *Vegetable Protein Products (Simulated Meats)*	1	0	0
- *Fruit and Fruit Products*	2	0	0
- *Fruit and Fruit Products*	1	0	0
- *Vegetable and Vegetable Products*	5	0	0
- *Vegetable Oils (Includes Olive Oil)*	41	0	0
- *Spices, Flavors, and Salts*	48	0	0
- *Soft Drinks and Waters*	7	0	0
- *Beverage Bases*	5	0	0
- *Coffee and Tea*	1	0	0
- *Alcoholic Beverages*	4	0	0
- *Candy Without Chocolate, Candy Specialties, and Chewing Gum*	90	1	1.1%
- *Chocolate and Cocoa Products*	43	0	0
- *Food Sweeteners (Nutritive)*	11	0	0
- *Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)*	4	0	0
- *Dietary Conventional Foods and Meal Replacements*	1	0	0

Imported Foods Rejection Rate

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
FRANCE			
- Whole Grains, Milled Grain Products, and Starch	742	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	2668	3	Less than 1%
- Macaroni and Noodle Products	142	1	Less than 1%
- Cereal Preparations, Breakfast Foods	9	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	17	0	0
- Milk, Butter and Dried Milk Products	1298	1	Less than 1%
- Cheese and Cheese Products	34808	16	Less than 1%
- Ice Cream and Related Products	177	0	0
- Filled/Imitation Milk Products	21	0	0
- Egg and Egg Products	6	0	0
- Fishery/Fishery Products	2317	2	Less than 1%
- Meat, Meat Products and Poultry	260	0	0
- Vegetable Protein Products (Simulated Meats)	16	0	0
- Fruit and Fruit Products	2702	0	0
- Fruit and Fruit Products	3202	5	Less than 1%
- Fruit and Fruit Products	213	0	0
- Nuts and Edible Seeds	558	0	0
- Vegetable and Vegetable Products	922	7	Less than 1%
- Vegetable and Vegetable Products	2351	6	Less than 1%
- Vegetable Oils (Includes Olive Oil)	687	3	Less than 1%
- Dressings and Condiments	2356	0	0
- Spices, Flavors, and Salts	2400	5	Less than 1%
- Soft Drinks and Waters	9791	0	0
- Beverage Bases	33	0	0
- Coffee and Tea	569	2	Less than 1%
- Alcoholic Beverages	58471	7	Less than 1%
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	838	1	Less than 1%
- Chocolate and Cocoa Products	1984	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	246	0	0
- Food Sweeteners (Nutritive)	535	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	465	0	0
- Soups	227	0	0
- Prepared Salad Products	23	0	0
- Baby (Infant and Junior) Food Products	19	0	0
- Dietary Conventional Foods and Meal Replacements	5	0	0
FRENCH GUIANA			
- Fishery/Fishery Products	1	0	0
FRENCH POLYNESIA			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fishery/Fishery Products	108	1	Less than 1%
- Fruit & Fruit Products	31	0	0
- Fruit & Fruit Products	1	0	0
- Nuts and Edible Seeds	22	0	0
- Vegetable and Vegetable Products	1	0	0
- Spices, Flavors, and Salts	27	0	0
- Soft Drinks and Waters	37	0	0
- Beverage Bases	6	0	0
- Coffee and Tea	3	0	0
- Alcoholic Beverages	5	0	0
- Baby (Infant and Junior) Food Products	1	0	0
GABON			
- Soft Drinks and Waters	1	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	6	0	0
GAMBIA, THE			
- Whole Grains, Milled Grain Products, and Starch	2	0	0
- Milk, Butter and Dried Milk Products	1	0	0
- Fishery/Fishery Products	12	2	16%
- Vegetable and Vegetable Products	6	0	0
- Vegetable Oils (includes Olive Oil)	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Spices, Flavors, and Salts	3	0	0
- Coffee and Tea	1	0	0
GAZA STRIP			
- Vegetable and Vegetable Products	3	0	0
GEORGIA			
- Fruit & Fruit Products	1	0	0
- Dressings and Condiments	2	0	0
- Soft Drinks and Waters	16	1	6.2%
- Coffee and Tea	14	0	0
- Alcoholic Beverages	13	0	0
GERMANY, FEDERAL REPUBLIC			
- Whole Grains, Milled Grain Products, and Starch	861	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	3575	1	Less than 1%
- Macaroni and Noodle Products	111	1	Less than 1%
- Cereal Preparations, Breakfast Foods	100	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	38	0	0
- Milk, Butter and Dried Milk Products	436	0	0
- Cheese and Cheese Products	1492	0	0
- Ice Cream and Related Products	3	0	0
- Filled/Imitation Milk Products	4	0	0
- Egg and Egg Products	9	0	0
- Fishery/Fishery Products	475	9	1.8%
- Meat, Meat Products and Poultry	132	0	0
- Vegetable Protein Products (Simulated Meats)	17	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	949	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	322	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	249	0	0
- Nuts and Edible Seeds	129	0	0
- Vegetable and Vegetable Products	960	1	Less than 1%
- Vegetable and Vegetable Products	369	0	0
- Vegetable Oils (Includes Olive Oil)	105	1	Less than 1%
- Dressings and Condiments	442	0	0
- Spices, Flavors, and Salts	1444	3	Less than 1%
- Soft Drinks and Waters	1273	0	0
- Beverage Bases	205	0	0
- Coffee and Tea	2213	5	Less than 1%
- Alcoholic Beverages	24613	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2233	1	Less than 1%
- Chocolate and Cocoa Products	2676	2	Less than 1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	728	0	0
- Food Sweeteners (Nutritive)	175	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	294	0	0
- Soups	599	4	Less than 1%
- Prepared Salad Products	20	0	0
- Baby (Infant and Junior) Food Products	50	1	2%
- Dietary Conventional Foods and Meal Replacements	24	0	0
GHANA			
- Whole Grains, Milled Grain Products, and Starch	57	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	5	1	20%
- Macaroni and Noodle Products	2	0	0
- Cereal Preparations, Breakfast Foods	21	1	4.7%
- Milk, Butter and Dried Milk Products	10	0	0
- Filled/Imitation Milk Products	1	0	0
- Fishery/Fishery Products	52	2	3.8%
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	2	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	7	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	2	0	0
- Nuts and Edible Seeds	32	0	0
- Vegetable and Vegetable Products	33	0	0
- Vegetable and Vegetable Products	184	0	0
- Vegetable Oils (includes Olive Oil)	66	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	49	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Soft Drinks and Waters	5	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	4	0	0
- Alcoholic Beverages	1	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	1	50%
- Chocolate and Cocoa Products	142	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	1	0	0
- Food Sweeteners (Nutritive)	2	0	0
- Soups	20	2	10%
- Baby (Infant and Junior) Food Products	2	0	0
GREECE			
- Whole Grains, Milled Grain Products, and Starch	68	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	274	0	0
- Macaroni and Noodle Products	387	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	32	0	0
- Milk, Butter and Dried Milk Products	131	0	0
- Cheese and Cheese Products	415	0	0
- Ice Cream and Related Products	5	0	0
- Fishery/Fishery Products	901	2	Less than 1%
- Fruit and Fruit Products – Product Class and Subclass Codes	133	11	8.2%
- Fruit and Fruit Products – Product Class and Subclass Codes	2422	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	13	0	0
- Nuts and Edible Seeds	51	0	0
- Vegetable and Vegetable Products	1329	15	1.1%
- Vegetable and Vegetable Products	147	0	0
- Vegetable Oils (Includes Olive Oil)	600	0	0
- Dressings and Condiments	30	1	3.3%
- Spices, Flavors, and Salts	484	1	Less than 1%
- Soft Drinks and Waters	40	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	70	0	0
- Alcoholic Beverages	851	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	87	0	0
- Chocolate and Cocoa Products	78	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	7	0	0
- Food Sweeteners (Nutritive)	46	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	69	1	1.4%
- Soups	6	0	0
- Prepared Salad Products	2	0	0
GREENLAND			
- Fishery/Fishery Products	107	0	0
- Alcoholic Beverages	1	0	0
GRENADA			
- Fishery/Fishery Products	614	1	Less than 1%
- Fruit & Fruit Products	31	0	0
- Fruit & Fruit Products	314	1	Less than 1%
- Fruit & Fruit Products	8	0	0
- Nuts and Edible Seeds	2	0	0
- Vegetable and Vegetable Products	86	0	0
- Vegetable and Vegetable Products	2	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	132	0	0
GUADELOUPE			
- Cheese and Cheese Products	3	0	0
- Fishery/Fishery Products	1	0	0
- Fruit & Fruit Products	1	0	0
- Fruit & Fruit Products	1	0	0
- Soft Drinks and Waters	4	0	0
- Coffee and Tea	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
GUAM			
- Whole Grains, Milled Grain Products, and Starch	1	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Cereal Preparations, Breakfast Foods	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Fishery/Fishery Products	182	2	1%
- Fruit & Fruit Products	3	0	0
- Fruit & Fruit Products	1	0	0
- Vegetable and Vegetable Products	4	0	0
- Vegetable and Vegetable Products	1	0	0
- Vegetable Oils (including Olive Oils)	6	0	0
- Spices, Flavors, and Salts	2	0	0
GUATEMALA			
- Whole Grains, Milled Grain Products and Starch	21	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	56	0	0
- Macaroni and Noodle Products	21	0	0
- Cereal Preparations, Breakfast Foods	187	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	23	0	0
- Milk, Butter and Dried Milk Products	2	0	0
- Fishery/Fishery Products	1144	4	Less than 1%
- Meat, Meat Products and Poultry	7	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	2729	1	Less than 1%
- Fruit and Fruit Products – Product Class and Subclass Codes	1372	4	Less than 1%
- Fruit and Fruit Products – Product Class and Subclass Codes	1619	0	0
- Nuts and Edible Seeds	525	0	0
- Vegetable and Vegetable Products	10547	13	Less than 1%
- Vegetable and Vegetable Products	813	4	Less than 1%
- Vegetable Oils (Includes Olive Oil)	12	0	0
- Dressings and Condiments	2	0	0
- Spices, Flavors, and Salts	478	1	Less than 1%
- Soft Drinks and Waters	8	1	12%
- Beverage Bases	68	1	1.4%
- Coffee and Tea	2870	0	0
- Alcoholic Beverages	60	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	66	2	3%
- Chocolate and Cocoa Products	72	1	1.3%
- Food Sweeteners (Nutritive)	433	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	41	0	0
- Soups	611	5	Less than 1%
- Prepared Salad Products	8	0	0
GUINEA			
- Whole Grains, Milled Grain Products, and Starch	7	0	0
- Macaroni and Noodle Products	1	0	0
- Fishery/Fishery Products	42	0	0
- Fruit & Fruit Products	2	0	0
- Nuts and Edible Seeds	1	0	0
- Vegetable and Vegetable Products	7	0	0
- Vegetable and Vegetable Products	9	0	0
- Vegetable Oils (includes Olive Oil)	16	0	0
- Spices, Flavors, and Salts	4	0	0
- Soft Drinks and Waters	1	0	0
- Coffee and Tea	15	0	0
- Soups	2	0	0
GUINEA-BISSAU			
- Spices, Flavors, and Salts	1	0	0
GUYANA			
- Whole Grains, Milled Grain Products and Starch	4	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	2	0	0
- Macaroni and Noodle Products	11	0	0
- Cereal Preparations, Breakfast Foods	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
- Milk, Butter and Dried Milk Products	5	0	0
- Cheese and Cheese Products	2	0	0
- Fishery/Fishery Products	1693	4	Less than 1%
- Fruit & Fruit Products	1	1	100%
- Fruit & Fruit Products	8	0	0
- Nuts and Edible Seeds	3	1	33%
- Vegetable and Vegetable Products	7	0	0
- Vegetable and Vegetable Products	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Spices, Flavors, and Salts	11	0	0
- Soft Drinks and Waters	3	0	0
- Alcoholic Beverages	7	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
- Food Sweeteners (Nutritive)	5	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	12	0	0
HAITI			
- Whole Grains, Milled Grain Products and Starch	113	1	Less than 1%
- Bakery Products, Doughs, Bakery Mixes and Icings	1	0	0
- Milk, Butter and Dried Milk Products	4	0	0
- Fishery/Fishery Products	210	0	0
- Meat, Meat Products and Poultry	22	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	12	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	1166	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	65	0	0
- Nuts and Edible Seeds	20	0	0
- Vegetable and Vegetable Products	168	0	0
- Vegetable and Vegetable Products	138	1	Less than 1%
- Vegetable Oils (Includes Olive Oil)	53	0	0
- Dressings and Condiments	135	9	6.6%
- Spices, Flavors, and Salts	75	0	0
- Soft Drinks and Waters	3	0	0
- Beverage Bases	6	0	0
- Coffee and Tea	12	0	0
- Alcoholic Beverages	18	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	8	0	0
- Chocolate and Cocoa Products	45	0	0
- Food Sweeteners (Nutritive)	6	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	72	1	1.3%
- Soups	1	0	0
HEARD & MCDONALD ISLANDS			
- Fruit & Fruit Products	1	0	0
- Chocolate and Cocoa Products	1	0	0
HONDURAS			
- Bakery Products, Doughs, Bakery Mixes and Icings	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
- Milk, Butter and Dried Milk Products	109	1	Less than 1%
- Cheese and Cheese Products	60	0	0
- Fishery/Fishery Products	2612	5	Less than 1%
- Meat, Meat Products and Poultry	5	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	28	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	810	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	3510	0	0
- Nuts and Edible Seeds	20	0	0
- Vegetable and Vegetable Products	1444	6	Less than 1%
- Vegetable and Vegetable Products	250	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	78	0	0
- Soft Drinks and Waters	17	0	0
- Beverage Bases	2	0	0
- Coffee and Tea	471	0	0
- Alcoholic Beverages	12	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
- Chocolate and Cocoa Products	32	0	0
- Food Sweeteners (Nutritive)	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2	0	0
- Soups	1	0	0
HONG KONG			
- Whole Grains, Milled Grain Products and Starch	267	4	1.4%
- Bakery Products, Doughs, Bakery Mixes and Icings	1191	5	Less than 1%
- Macaroni and Noodle Products	642	4	Less than 1%
- Cereal Preparations, Breakfast Foods	20	2	10%
- Snack Food Items (Flour, Meal or Vegetable Base)	70	0	0
- Milk, Butter and Dried Milk Products	2	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Ice Cream and Related Products	17	0	0
- Filled/Imitation Milk Products	6	0	0
- Fishery/Fishery Products	550	9	1.6%
- Meat, Meat Products and Poultry	40	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	41	2	4.8%
- Fruit and Fruit Products – Product Class and Subclass Codes	213	7	3.2%
- Fruit and Fruit Products – Product Class and Subclass Codes	21	1	4.7%
- Nuts and Edible Seeds	212	6	2.8%
- Vegetable and Vegetable Products	584	13	2.2%
- Vegetable and Vegetable Products	398	10	2.5%
- Vegetable Oils (Includes Olive Oil)	144	0	0
- Dressings and Condiments	410	2	Less than 1%
- Spices, Flavors, and Salts	401	0	0
- Soft Drinks and Waters	229	1	Less than 1%
- Beverage Bases	118	0	0
- Coffee and Tea	349	0	0
- Alcoholic Beverages	27	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	590	1	Less than 1%
- Chocolate and Cocoa Products	9	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	38	1	2.6%
- Food Sweeteners (Nutritive)	46	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	4081	9	Less than 1%
- Soups	70	2	2.8%
- Baby (Infant and Junior) Food Products	3	0	0
- Dietary Conventional Foods and Meal Replacements	3	0	0
HUNGARY			
- Whole Grains, Milled Grain Products and Starch	7	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	24	0	0
- Macaroni and Noodle Products	26	0	0
- Milk, Butter and Dried Milk Products	46	0	0
- Cheese and Cheese Products	62	0	0
- Fishery/Fishery Products	9	0	0
- Fruit and Fruit Products	314	0	0
- Fruit and Fruit Products	225	1	Less than 1%
- Fruit and Fruit Products	5	0	0
- Nuts and Edible Seeds	2	0	0
- Vegetable and Vegetable Products	247	6	2.4%
- Vegetable and Vegetable Products	79	1	1.2%
- Dressings and Condiments	7	0	0
- Spices, Flavors, and Salts	37	0	0
- Soft Drinks and Waters	30	0	0
- Beverage Bases	20	0	0
- Coffee and Tea	6	0	0
- Alcoholic Beverages	280	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	54	0	0
- Chocolate and Cocoa Products	51	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	7	0	0
- Food Sweeteners (Nutritive)	8	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	8	0	0
- Prepared Salad Products	4	0	0
- Baby (Infant and Junior) Food Products	2	0	0
ICELAND			
- Whole Grains, Milled Grain Products and Starch	1	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
- Cheese and Cheese Products	2	0	0
- Fishery/Fishery Products	12491	5	Less than 1%
- Meat, Meat Products and Poultry	48	0	0
- Vegetable and Vegetable Products	3	0	0
- Vegetable and Vegetable Products	1	0	0
- Vegetable Oils (Includes Olive Oil)	1	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	9	0	0
- Soft Drinks and Waters	35	0	0
- Coffee and Tea	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Alcoholic Beverages	1	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	5	0	0
- Chocolate and Cocoa Products	3	0	0
INDIA			
- Whole Grains, Milled Grain Products and Starch	1867	8	Less than 1%
- Bakery Products, Doughs, Bakery Mixes and Icings	534	10	1.8%
- Macaroni and Noodle Products	317	6	1.8%
- Cereal Preparations, Breakfast Foods	347	3	Less than 1%
- Snack Food Items (Flour, Meal or Vegetable Base)	546	6	1%
- Milk, Butter and Dried Milk Products	352	0	0
- Cheese and Cheese Products	14	0	0
- Ice Cream and Related Products	20	3	15%
- Filled/Imitation Milk Products	5	0	0
- Fishery/Fishery Products	7540	14	Less than 1%
- Meat, Meat Products and Poultry	4	0	0
- Vegetable Protein Products (Simulated Meats)	16	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	172	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	875	15	0
- Fruit and Fruit Products – Product Class and Subclass Codes	43	1	2.3%
- Nuts and Edible Seeds	3384	13	Less than 1%
- Vegetable and Vegetable Products	2681	20	Less than 1%
- Vegetable and Vegetable Products	1870	14	Less than 1%
- Vegetable Oils (Includes Olive Oil)	228	3	1.3%
- Dressings and Condiments	181	2	1.1%
- Spices, Flavors, and Salts	7230	12	Less than 1%
- Soft Drinks and Waters	56	1	1.7%
- Beverage Bases	156	1	Less than 1%
- Coffee and Tea	1978	6	Less than 1%
- Alcoholic Beverages	107	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	341	1	Less than 1%
- Chocolate and Cocoa Products	45	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	53	0	0
- Food Sweeteners (Nutritive)	132	3	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	289	2	0
- Soups	65	1	1.5%
- Baby (Infant and Junior) Food Products	19	0	0
- Dietary Conventional Foods and Meal Replacements	64	3	0
INDONESIA			
- Whole Grains, Milled Grain Products and Starch	10	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	231	1	Less than 1%
- Macaroni and Noodle Products	148	0	0
- Cereal Preparations, Breakfast Foods	3	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	93	0	0
- Milk, Butter and Dried Milk Products	4	0	0
- Cheese and Cheese Products	5	0	0
- Ice Cream and Related Products	2	0	0
- Fishery/Fishery Products	8619	5	Less than 1%
- Meat, Meat Products and Poultry	1	0	0
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit and Fruit Products	20	0	0
- Fruit and Fruit Products	3995	0	0
- Fruit and Fruit Products	24	1	4.1%
- Nuts and Edible Seeds	107	1	Less than 1%
- Vegetable and Vegetable Products	110	0	0
- Vegetable and Vegetable Products	1660	0	0
- Vegetable Oils (Includes Olive Oil)	88	0	0
- Dressings and Condiments	18	0	0
- Spices, Flavors, and Salts	2807	4	Less than 1%
- Soft Drinks and Waters	7	0	0
- Beverage Bases	43	1	2.3%
- Coffee and Tea	2077	0	0
- Alcoholic Beverages	99	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	236	2	Less than 1%
- Chocolate and Cocoa Products	806	2	Less than 1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	14	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Food Sweeteners (Nutritive)	35	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	230	2	Less than 1%
- Soups	127	0	0
- Prepared Salad Products	11	0	0
- Baby (Infant and Junior) Food Products	1	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
IRAN			
- Macaroni and Noodle Products	2	0	0
- Cheese and Cheese Products	1	0	0
- Vegetable Oils (Includes Olive Oil)	2	0	0
- Dressings and Condiments	1	0	0
- Alcoholic Beverages	9	0	0
IRELAND			
- Whole Grains, Milled Grain Products and Starch	129	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	810	0	0
- Macaroni and Noodle Products	1	0	0
- Cereal Preparations, Breakfast Foods	117	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	156	0	0
- Milk, Butter and Dried Milk Products	615	0	0
- Cheese and Cheese Products	244	0	0
- Fishery/Fishery Products	227	1	Less than 1%
- Meat, Meat Products and Poultry	1	0	0
- Fruit and Fruit Products	334	0	0
- Fruit and Fruit Products	79	0	0
- Fruit and Fruit Products	15	0	0
- Nuts and Edible Seeds	5	1	20%
- Vegetable and Vegetable Products	285	5	1.7%
- Vegetable and Vegetable Products	67	0	0
- Dressings and Condiments	226	0	0
- Spices, Flavors, and Salts	99	0	0
- Soft Drinks and Waters	380	0	0
- Beverage Bases	61	0	0
- Coffee and Tea	210	0	0
- Alcoholic Beverages	12802	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	287	0	0
- Chocolate and Cocoa Products	747	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	99	0	0
- Food Sweeteners (Nutritive)	63	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	276	0	0
- Soups	193	0	0
- Prepared Salad Products	10	0	0
- Baby (Infant and Junior) Food Products	11	0	0
ISRAEL			
- Whole Grains, Milled Grain Products and Starch	16	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	594	0	0
- Macaroni and Noodle Products	36	0	0
- Cereal Preparations, Breakfast Foods	33	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	275	0	0
- Milk, Butter and Dried Milk Products	60	0	0
- Cheese and Cheese Products	58	0	0
- Ice Cream and Related Products	9	0	0
- Filled/Imitation Milk Products	4	0	0
- Egg and Egg Products	8	0	0
- Fishery/Fishery Products	38	0	0
- Meat, Meat Products and Poultry	5	0	0
- Vegetable Protein Products (Simulated Meats)	41	0	0
- Fruit and Fruit Products	603	1	Less than 1%
- Fruit and Fruit Products	587	1	Less than 1%
- Fruit and Fruit Products	152	0	0
- Nuts and Edible Seeds	62	0	0
- Vegetable and Vegetable Products	3716	10	Less than 1%
- Vegetable and Vegetable Products	356	0	0
- Vegetable Oils (Includes Olive Oil)	24	0	0
- Dressings and Condiments	18	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Spices, Flavors, and Salts	4568	1	Less than 1%
- Soft Drinks and Waters	88	1	1.1%
- Beverage Bases	38	0	0
- Coffee and Tea	57	1	1.7%
- Alcoholic Beverages	258	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	204	1	Less than 1%
- Chocolate and Cocoa Products	163	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	49	0	0
- Food Sweeteners (Nutritive)	33	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	95	0	0
- Soups	111	0	0
- Prepared Salad Products	15	0	0
- Baby (Infant and Junior) Food Products	12	0	0
- Dietary Conventional Foods and Meal Replacements	8	5	62

Imported Foods Rejection Rate

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
ITALY			
1. Whole Grains, Milled Grain Products and Starch	1086	3	Less than 1%
2. Bakery Products, Doughs, Bakery Mixes and Icings	3947	2	Less than 1%
3. Macaroni and Noodle Products	14523	3	Less than 1%
4. Cereal Preparations, Breakfast Foods	28	0	0
5. Snack Food Items (Flour, Meal or Vegetable Base)	435	0	0
6. Milk, Butter and Dried Milk Products	101	0	0
7. Cheese and Cheese Products	8161	3	Less than 1%
8. Ice Cream and Related Products	156	0	0
9. Filled/Imitation Milk Products	8	0	0
10. Egg and Egg Products	3	0	0
11. Fishery/Fishery Products	530	10	1.8%
12. Meat, Meat Products and Poultry	46	0	0
13. Vegetable Protein Products (Simulated Meats)	2	0	0
14. Fruit and Fruit Products – Product Class and Subclass Codes	1761	0	0
15. Fruit and Fruit Products – Product Class and Subclass Codes	1472	7	Less than 1%
16. Fruit and Fruit Products – Product Class and Subclass Codes	49	2	4%
17. Nuts and Edible Seeds	490	0	0
18. Vegetable and Vegetable Products	4206	24	Less than 1%
19. Vegetable and Vegetable Products	1882	21	1.1%
20. Vegetable Oils (Includes Olive Oil)	9118	0	0
21. Dressings and Condiments	2606	3	Less than 1%
22. Spices, Flavors, and Salts	665	3	Less than 1%
23. Soft Drinks and Waters	6437	2	Less than 1%
24. Beverage Bases	81	0	0
25. Coffee and Tea	1411	0	0
26. Alcoholic Beverages	51028	0	0
27. Candy Without Chocolate, Candy Specialties, and Chewing Gum	801	3	Less than 1%
28. Chocolate and Cocoa Products	761	1	Less than 1%
29. Gelatin, Rennet, Pudding Mixes and Pie Fillings	91	0	0
30. Food Sweeteners (Nutritive)	206	1	Less than 1%
31. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1008	4	Less than 1%
32. Soups	124	1	Less than 1%
33. Prepared Salad Products	14	0	0
34. Baby (Infant and Junior) Food Products	14	0	0
35. Dietary Conventional Foods and Meal Replacements	5	0	0
IVORY COAST			
36. Whole Grains, Milled Grain Products and Starch	9	0	0
37. Bakery Products, Doughs, Bakery Mixes and Icings	1	0	0
38. Macaroni and Noodle Products	5	0	0
39. Cereal Preparations, Breakfast Foods	4	0	0
40. Milk, Butter and Dried Milk Products	2	0	0
41. Filled/Imitation Milk Products	2	0	0
42. Fishery/Fishery Products	55	1	1.8%
43. Fruit and Fruit Products – Product Class and Subclass Codes	2	0	0
44. Fruit and Fruit Products – Product Class and Subclass Codes	7	0	0
45. Fruit and Fruit Products – Product Class and Subclass Codes	1	0	0
46. Nuts and Edible Seeds	15	0	0
47. Vegetable and Vegetable Products	34	1	2.9%
48. Vegetable and Vegetable Products	36	0	0
49. Vegetable Oils (Includes Olive Oil)	19	0	0
50. Spices, Flavors, and Salts	43	0	0
51. Beverage Bases	1	0	0
52. Coffee and Tea	50	0	0
53. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
54. Chocolate and Cocoa Products	555	0	0
55. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
56. Soups	15	0	0
57. Baby (Infant and Junior) Food Products	1	0	0
JAMAICA			
58. Whole Grains, Milled Grain Products and Starch	5	0	0
59. Bakery Products, Doughs, Bakery Mixes and Icings	352	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
60. Cereal Preparations, Breakfast Foods	2	0	0
61. Snack Food Items (Flour, Meal or Vegetable Base)	44	0	0
62. Milk, Butter and Dried Milk Products	4	4	100%
63. Cheese and Cheese Products	64	1	1.5%
64. Fishery/Fishery Products	523	7	1.3%
65. Vegetable Protein Products (Simulated Meats)	1	0	0
66. Fruit and Fruit Products – Product Class and Subclass Codes	178	0	0
67. Fruit and Fruit Products – Product Class and Subclass Codes	1017	10	Less than 1%
68. Fruit and Fruit Products – Product Class and Subclass Codes	102	0	0
69. Nuts and Edible Seeds	26	0	0
70. Vegetable and Vegetable Products	751	6	Less than 1%
71. Vegetable and Vegetable Products	804	1	Less than 1%
72. Vegetable Oils (Includes Olive Oil)	17	0	0
73. Dressings and Condiments	270	1	Less than 1%
74. Spices, Flavors, and Salts	464	2	Less than 1%
75. Soft Drinks and Waters	219	6	2.7%
76. Beverage Bases	96	1	1%
77. Coffee and Tea	174	0	0
78. Alcoholic Beverages	909	0	0
79. Candy Without Chocolate, Candy Specialties, and Chewing Gum	151	1	Less than 1%
80. Chocolate and Cocoa Products	37	0	0
81. Food Sweeteners (Nutritive)	33	0	0
82. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	190	0	0
83. Soups	96	3	3.1%
84. Baby (Infant and Junior) Food Products	1	0	0
85. Dietary Conventional Foods and Meal Replacements	7	0	0
JAPAN			
86. Whole Grains, Milled Grain Products and Starch	3612	0	0
87. Bakery Products, Doughs, Bakery Mixes and Icings	17629	1	Less than 1%
88. Macaroni and Noodle Products	8825	1	Less than 1%
89. Cereal Preparations, Breakfast Foods	73	0	0
90. Snack Food Items (Flour, Meal or Vegetable Base)	1227	0	0
91. Milk, Butter and Dried Milk Products	48	0	0
92. Cheese and Cheese Products	11	0	0
93. Ice Cream and Related Products	200	0	0
94. Filled/Imitation Milk Products	46	0	0
95. Egg and Egg Products	417	0	0
96. Fishery/Fishery Products	32023	21	Less than 1%
97. Meat, Meat Products and Poultry	20	0	0
98. Vegetable Protein Products (Simulated Meats)	18	0	0
99. Fruit and Fruit Products	214	0	0
100. Fruit and Fruit Products	1703	1	Less than 1%
101. Fruit and Fruit Products	93	0	0
102. Nuts and Edible Seeds	1536	2	Less than 1%
103. Vegetable and Vegetable Products	15679	16	Less than 1%
104. Vegetable and Vegetable Products	9287	12	Less than 1%
105. Vegetable Oils (Includes Olive Oil)	1212	0	0
106. Dressings and Condiments	3048	0	0
107. Spices, Flavors, and Salts	6866	1	Less than 1%
108. Soft Drinks and Waters	2411	13	Less than 1%
109. Beverage Bases	262	0	0
110. Coffee and Tea	3196	5	Less than 1%
111. Alcoholic Beverages	4190	0	0
112. Candy Without Chocolate, Candy Specialties, and Chewing Gum	7292	1	Less than 1%
113. Chocolate and Cocoa Products	1164	0	0
114. Gelatin, Rennet, Pudding Mixes and Pie Fillings	1134	0	0
115. Food Sweeteners (Nutritive)	205	0	0
116. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	10638	0	0
117. Soups	4203	3	Less than 1%
118. Prepared Salad Products	44	0	0
119. Baby (Infant and Junior) Food Products	133	0	0
120. Dietary Conventional Foods and Meal Replacements	54	0	0
JORDAN			
121. Whole Grains, Milled Grain Products and Starch	10	0	0
122. Bakery Products, Doughs, Bakery Mixes and Icings	4	1	25%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
123. Macaroni and Noodle Products	4	0	0
124. Milk, Butter and Dried Milk Products	4	0	0
125. Cheese and Cheese Products	7	0	0
126. Ice Cream and Related Products	1	0	0
127. Fishery/Fishery Products	1	0	0
128. Fruit and Fruit Products	4	0	0
129. Fruit and Fruit Products	12	0	0
130. Nuts and Edible Seeds	5	2	40%
131. Vegetable and Vegetable Products	6	3	50%
132. Vegetable Oils (Includes Olive Oil)	17	0	0
133. Spices, Flavors, and Salts	41	0	0
134. Beverage Bases	2	0	0
135. Coffee and Tea	6	0	0
136. Alcoholic Beverages	5	0	0
137. Chocolate and Cocoa Products	18	0	0
138. Gelatin, Rennet, Pudding Mixes and Pie Fillings	4	0	0
139. Food Sweeteners (Nutritive)	2	0	0
140. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	5	0	0
141. Soups	9	0	0
KAMPUCHEA			
142. Macaroni and Noodle Products	1	0	0
143. Fishery/Fishery Products	70	2	2.8%
144. Fruit and Fruit Products	1	0	0
145. Alcoholic Beverages	2	0	0
KAZAKHSTAN			
146. Fishery/Fishery Products	37	0	0
KENYA			
- Whole Grains, Milled Grain Products, and Starch	1	0	0
147. Bakery Products, Doughs, Bakery Mixes, and Icings	4	0	0
148. Macaroni and Noodle Products	10	0	0
149. Fishery/Fishery Products	23	0	0
150. Fruit & Fruit Products	18	0	0
151. Fruit & Fruit Products	1	0	0
152. Nuts and Edible Seeds	43	0	0
153. Vegetable and Vegetable Products	12	0	0
154. Spices, Flavors, and Salts	3	0	0
155. Soft Drinks and Waters	1	0	0
156. Beverage Bases	1	0	0
157. Coffee and Tea	633	0	0
158. Alcoholic Beverages	10	0	0
159. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
KIRIBATI			
160. Fishery/Fishery Products	107	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
KOREA, REPUBLIC OF (SOUTH			
161. Whole Grains, Milled Grain Products, and Starch	1440	2	Less than 1%
162. Bakery Products, Doughs, Bakery Mixes, and Icings	5762	12	Less than 1%
163. Macaroni and Noodle Products	7102	0	0
164. Cereal Preparations, Breakfast Foods	123	0	0
165. Snack Food Items (Flour, Meal or Vegetable Base)	1769	0	0
166. Milk, Butter and Dried Milk Products	4	0	0
167. Ice Cream and Related Products	229	1	Less than 1%
168. Filled/Imitation Milk Products	22	0	0
169. Egg and Egg products	1	0	0
170. Fishery/Fishery Products	6938	11	Less than 1%
171. Meat, Meat Products, and Poultry	11	2	18%
172. Vegetable Protein Products (Simulated Meats)	12	0	0
173. Fruit & Fruit Products	235	1	Less than 1%
174. Fruit & Fruit Products	40	1	2.5%
175. Fruit & Fruit Products	55	1	1.8%
176. Nuts and Edible Seeds	187	2	1%
177. Vegetable and Vegetable Products	4783	12	Less than 1%
178. Vegetable and Vegetable Products	1268	5	Less than 1%
179. Vegetable Oils (includes Olive Oil)	67	0	0
180. Dressings and Condiments	628	1	Less than 1%
181. Spices, and Flavors, and Salts	1510	0	0
182. Soft Drinks and Waters	1342	10	Less than 1%
183. Beverages Bases	124	1	Less than 1%
184. Coffee and Tea	1017	2	Less than 1%
185. Alcoholic Beverages	295	0	0
186. Candy without chocolate, Candy Specialties, and Chewing Gum	953	12	1.2%
187. Chocolate and Cocoa Products	13	0	0
188. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	91	2	2.1%
189. Food Sweeteners (Nutritive)	515	0	0
190. Multiple Food dinners, Gravies, Sauces, and Specialties (Total Diet)	2394	9	Less than 1%
191. Soups	1578	1	Less than 1%
192. Prepared Salad Products	1	0	0
193. Baby (Infant and Junior) Food Products	6	0	0
194. Dietary Conventional Foods and Meal Replacements	5	0	0
KUWAIT			
195. Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
196. Milk, Butter and Dried Milk Products	1	0	0
197. Filled/Imitation Milk Products	1	0	0
198. Fishery/Fishery Products	44	0	0
199. Fruit & Fruit Products	2	0	0
200. Nuts and Edible Seeds	1	0	0
201. Vegetable and Vegetable Products	9	0	0
202. Vegetable and Vegetable Products	5	0	0
203. Spices, Flavors, and Salts	3	0	0
204. Coffee and Tea	1	0	0
205. Chocolate and Cocoa Products	2	0	0
206. Food Sweeteners (Nutritive)	1	0	0
KYRGYZSTAN			
207. Fishery/Fishery Products	1	0	0
208. Coffee and Tea	1	0	0
209. Chocolate and Cocoa Products	5	0	0
LAO PEOPLES DEMOCRATIC RE			
210. Bakery Products, Doughs, Bakery Mixes, and Icing	1	0	0
211. Vegetable and Vegetable Products	1	0	0
212. Spices, Flavors, and Salts	2	0	0
213. Chocolate and Cocoa Products	1	0	0
LATVIA			
214. Whole Grains, milled Grain Products, and Starch	3	1	33%
215. Bakery Products, Doughs, Bakery Mixes, and Icings	21	3	14.2%
216. Milk, Butter and Dried Milk Products	34	12	35.2%
217. Fishery/Fishery Products	93	1	1%
218. Vegetables and Vegetable Products	1	0	0
219. Vegetable Oils (includes Olive Oil)	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
220. Alcoholic Beverages	8	0	0
221. Candy Without Chocolate, Candy Specialties, and Chewing Gum	12	0	0
222. Chocolate and Cocoa Products	20	0	0
LEBANON			
223. Whole Grains, Milled Grain Products, and Starch	55	0	0
224. Bakery Products, Doughs, Bakery Mixes, and Icing	68	2	2.9%
225. Macaroni and noodle Products	12	0	0
226. Cereal Preparations, Breakfast Foods	4	0	0
227. Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
228. Milk, Butter and Dried Milk Products	6	0	0
229. Cheese and Cheese Products	7	0	0
230. Ice Cream and Related Products	1	0	0
231. Fishery/Fishery Products	1	0	0
232. Fruit & Fruit Products	121	1	Less than 1%
233. Fruit & Fruit Products	289	2	Less than 1%
234. Fruit & Fruit Products	76	8	10.5%
235. Nuts and Edible Seeds	159	7	4.4%
236. Vegetable and Vegetable Products	528	5	Less than 1%
237. Vegetable and Vegetable Products	81	2	2.4%
238. Vegetable Oils (includes Olive Oil)	130	0	0
239. Dressings and Condiments	21	0	0
240. Spices, Flavors, and Salts	124	1	Less than 1%
241. Soft Drinks and Waters	113	0	0
242. Beverage Bases	17	1	5.8%
243. Coffee and Tea	65	0	0
244. Alcoholic Beverages	38	0	0
245. Candy Without Chocolate, Candy Specialties (Total Diet)	150	6	4%
246. Chocolate and Cocoa Products	41	2	4.8%
247. Gelatin, Rennet, pudding Mixes, and Pie Fillings	24	0	0
248. Food Sweeteners (Nutritive)	84	1	1.1%
249. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	94	0	0
250. Soups	1	0	0
251. Dietary Conventional foods and Meal Replacements	1	0	0
LESOTHO			
252. Whole Grains, Milled Grain Products, and Starch	3	0	0
253. Macaroni and Noodle Products	1	0	0
254. Vegetable and Vegetable Products	4	0	0
255. Spices, Flavors, and Salts	1	0	0
LIBERIA			
256. Whole Grains, Milled Grain Products, and Starch	2	0	0
257. Fishery/Fishery Products	1	0	0
258. Vegetable and Vegetable Products	1	0	0
259. Vegetables Oils (includes Olive Oil)	14	0	0
260. Spices, Flavors, and Salts	1	0	0
261. Soft Drinks and Water	1	0	0
262. Candy Without Chocolate, Candy Specialties, and (Total Diet)	1	0	0
LIBYA			
- Candy Without Chocolate, Candy Specialties, and chewing Gum	1	0	0
LIECHTENSTEIN			
263. Nuts and Edible Seeds	1	0	0
264. Vegetable Oils (includes olive Oil)	1	0	0
265. Alcoholic Beverages	4	0	0
266. Coffee and Tea	1	0	0
LITHUNIA			
267. Whole Grains, Milled Grain Products, and Starch	1	0	0
268. Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
269. Milk, Butter and Dried Milk Products)	15	0	0
270. Cheese and Cheese Products	402	2	
271. Fishery/Fishery Products	4	0	Less than 1%
272. Alcoholic Beverages	2	0	0
LUXEMBOURG			
273. Fishery/Fishery Products	1	0	0
274. Fruit & Fruit Products	2	0	0
275. Fruit & Fruit Products	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
276. Soft Drinks and Waters	1	0	0
277. Alcoholic Beverages	23	0	0
278. Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
MACAU			
279. Bakery Products, Doughs, Bakery Mixes, and Icings	48	0	0
280. Fishery/Fishery Products	37	2	5.4%
281. Fruit & Fruit Products	35	0	0
282. Nuts and Edible Seeds	1	0	0
283. Vegetable and Vegetable Products	2	0	0
284. Spices, Flavors, and Salts	3	0	0
285. Alcoholic Beverages	1	0	0
286. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	1	0	0
MACEDONIA			
287. Whole Grains, Milled Grain Products, and Starch	1	0	0
288. Bakery Products, Doughs, Bakery Mixes, and Icings	15	0	0
289. Fruit & Fruit Products	94	0	0
290. Fruit & Fruit Products	2	0	0
291. Vegetable and Vegetable Products	12	0	0
292. Vegetable and Vegetable Products	2	0	0
293. Dressings and Condiments	7	0	0
294. Spices, Flavors, and Salts	17	0	0
295. Beverage Bases	1	0	0
296. Alcoholic Beverages	40	0	0
297. Candy Without Chocolate, Candy Specialties, and Chewing Gum	5	0	0
298. Chocolate and cocoa Products	11	0	0
299. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	7	0	0
300. Soups	7	0	0
301. Prepared Salad Products	9	0	0
MADAGASCAR			
302. Spices, Flavors, and Salts	296	0	0
303. Coffee and Tea	75	0	0
304. Chocolate and Cocoa Products	7	0	0
MALAWI			
305. Nuts and Edible Seeds	17	0	0
306. Vegetable and Vegetable Products	13	0	0
307. Coffee and Tea	273	0	0
308. Food Sweeteners (Nutritive)	1	0	0
309. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	2	66%
MALAYSIA			
310. Whole Grains, Milled Grain Products, and Starch	8	0	0
311. Bakery Products, Doughs, Bakery Mixes, and Icings	851	1	Less than 1%
312. Macaroni and Noodle Products	55	0	0
313. Cereal Preparations, Breakfast Foods	10	0	0
314. Snack Food Items (Flour, Meal or Vegetable Base)	12	0	0
315. Milk, Butter and Dried Milk Products	9	0	0
316. Filled/Imitation Milk Products	2	0	0
317. Egg and Egg Products	1	0	0
318. Fishery/Fishery Products	1089	10	Less than 1%
319. Vegetable Protein Products (Simulated Meats)	3	0	0
320. Fruit & Fruit Products	6	2	33%
321. Fruit & Fruit Products	364	1	Less than 1%
322. Fruit & Fruit Products	5	0	0
323. Nuts and Edible Seeds	27	0	0
324. Vegetable and Vegetable Products	168	3	1.7%
325. Vegetable and Vegetable Products	54	0	0
326. Vegetable oils (includes Olive Oil)	302	0	0
327. Dressing and Condiments	1	0	0
328. Spices, Flavors, and Salts	279	0	0
329. Soft Drinks and Water	94	0	0
330. Beverage Bases	35	0	0
331. Coffee and Tea	37	0	0
332. Alcoholic Beverages	3	0	0
333. Candy Without Chocolate, Candy Specialties, and Chewing Gum	43	0	0
334. Chocolate and Cocoa Products	429	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
335. Gelatin, Rennet, Pudding Mixes, and Pie Filing	44	0	0
336. Food Sweeteners (Nutritive)	2	0	0
337. Multiple Food Dinners, Gravies, Sauces, and Specialties Total Diet)	108	2	1.8%
338. Soups	10	0	0
339. Baby (Infant and Junior) Food Products	3	0	0
340. Dietary conventional Foods and Meal Replacements	5	0	0
MALAWI			
341. Nuts and Edible Seeds	17	2	11%
342. Vegetable and Vegetable Products	13	0	0
343. Coffee and Tea	273	0	0
344. Food Sweeteners (Nutritive)	1	0	0
345. Multiple Food Dinners, Gravies, Sauces, and Specialties	3	0	0
MALDIVES			
- Fishery/Fishery Products	9	0	0
MALI			
346. Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
347. Spices, Flavors, and Salts	1	0	0
MALTA & GOZO			
348. Whole Grains, Milled Grain Products, and Starch	1	0	0
349. Bakery Products, Doughs, Bakery Mixes, and Icings	8	0	0
350. Cheese and Cheese Products	1	0	0
351. Fishery/Fishery Products	1	0	0
352. Vegetable and Vegetable Products	1	0	0
353. Vegetable Oils (includes Olive Oil)	1	0	0
354. Beverage Bases	3	0	0
355. Alcoholic Beverages	4	0	0
356. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	2	1	50%
357. Food Sweeteners (Nutritive)	2	0	0
MARSHALL ISLANDS			
- Vegetable Oils (includes Olive Oil)	7	0	0
MARTINIQUE			
358. Vegetable and Vegetable Products	2	0	0
359. Soft Drinks and Waters	2	0	0
MAURITANIA			
360. Fishery/Fishery Products	3	0	0
361. Fruit & Fruit Products	1	0	0
362. Vegetables and Vegetable Products	1	0	0
MAURITUS			
363. Cheese and Cheese Products	1	0	0
364. Filled/Imitation Milk Products	1	0	0
365. Fishery/Fishery Products	14	0	0
366. Fruit & Fruit Products	48	0	0
367. Fruit & Fruit Products	12	0	0
368. Vegetables and Vegetable Products	25	0	0
369. Spices, Flavors, and Salts	2	0	0
370. Candy Without Chocolate, Candy Specialties, and Chewing Gum	31	0	0
371. Food Sweeteners (Nutritive)	73	0	0
MEXICO			
372. Whole Grains, Milled Grain Products, and Starch	2114	2	Less than 1%
373. Bakery Products, Doughs, Bakery Mixes, and Icings	47793	10	Less than 1%
374. Macaroni and Noodle Products	2818	2	Less than 1%
375. Cereal Preparations, Breakfast Foods	1535	1	Less than 1%
376. Snack food Items (Flour, Meal or Vegetable Base)	9149	6	Less than 1%
377. Milk, Butter and Dried Milk Products	556	14	2.5%
378. Cheese and Cheese Products	199	2	1%
379. Ice Cream and Related Products	369	0	0
380. Filled/Imitation Milk Products	12	0	0
381. Egg and Egg Products	13	0	0
382. Fishery/Fishery Products	43857	13	Less than 1%
383. Meat, Meat Products and Poultry	375	0	0
384. Vegetable Protein Products (Simulated Meats)	89	0	0
385. Fruit & Fruit Products	46629	24	Less than 1%
386. Fruit & Fruit Products	44267	24	Less than 1%
387. Fruit & Fruit Products	79968	2	Less than 1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
388. Nuts and Edible Seeds	7483	4	Less than 1%
389. Vegetable and Vegetable Products	384647	8	Less than 1%
390. Vegetable and Vegetable Products	74718	0	0
391. Vegetable Oils (includes Olive Oil)	734	0	0
392. Dressings and Condiments	1350	13	Less than 1%
393. Spices, Flavors, and Salts	21016	18	Less than 1%
394. Soft Drinks and Waters	23636	6	Less than 1%
395. Beverage Bases	1729	13	Less than 1%
396. Coffee and Tea	8656	4	Less than 1%
397. Alcoholic Beverages	38041	6	Less than 1%
398. Candy Without Chocolate, Candy Specialties, and Chewing Gum	28719	18	Less than 1%
399. Chocolate and Cocoa Products	2319	7	Less than 1%
400. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	971	7	Less than 1%
401. Food Sweeteners (Nutritive)	1302	6	Less than 1%
402. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2009	16	Less than 1%
403. Soups	1341	1	Less than 1%
404. Prepared Salad Products	1	0	0
405. Baby (Infant and Junior) Food Products	417	5	1.1%
- Dietary Conventional Foods and Meal Replacements	127	0	0
MICRONESIA, FEDERATED STA			
- Fishery/Fishery Products	33	2	6%
MOLDOVA			
406. Cereal Preparations, Breakfast Foods	1	0	0
407. Fruit & Fruit Products	24	0	0
408. Fruit & Fruit Products	16	0	0
409. Fruit & Fruit Products	4	0	0
410. Nuts and Edible Seeds	8	0	0
411. Vegetable and Vegetable Products	4	0	0
412. Vegetable and Vegetable Products	3	0	0
413. Vegetable Oils (includes Olive Oil)	3	0	0
414. Spices, Flavors, and Salts	4	0	0
415. Alcoholic Beverages	88	0	0
416. Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
417. Chocolate and Cocoa Products	2	0	0
MONACO			
418. Fishery/Fishery Products	1	0	0
419. Fruit & Fruit Products	2	0	0
420. Vegetables and Vegetable Products	11	0	0
421. Vegetables and Vegetable Products	1	0	0
422. Spices, Flavors, and Salts	4	0	0
423. Alcoholic Beverages	5	0	0
424. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
425. Chocolate and Cocoa Products	2	0	0
MONGOLIA			
426. Nuts and Edible Seeds	1	0	0
427. Vegetables and Vegetable Products	1	0	0
428. Vegetables and Vegetable Products	1	0	0
MONSTSERRAT			
429. Fishery/Fishery Products	5	0	0
430. Fruits & Fruits Products	3	0	0
431. Vegetables and Vegetable Products	3	0	0
432. Coffee and Tea	1	0	0
MOROCCO			
433. Whole Grains, Milled Grain Products, and Starch	2	0	0
434. Macaroni and Noodle Products	1	0	0
435. Fishery/Fishery Products	569	3	Less than 1%
436. Meat, Meat Products, and Poultry	1	1	1
437. Fruit & Fruit Products	146	0	0
438. Fruit & Fruit Products	584	0	0
439. Nuts and Edible Seeds	6	0	0
440. Vegetables and Vegetable Products	205	0	0
441. Vegetables and Vegetable Products	14	0	0
442. Vegetables Oils (includes Olive Oil)	130	0	0
443. Spices, Flavors, and Salts	329	1	Less than 1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
444. Coffee and Tea	6	0	0
445. Alcoholic Beverages	21	0	0
446. Candy Without Chocolate, Candy Specialties, and Chewing Gum	4	0	0
447. Chocolate and Cocoa Products	1	0	0
448. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	25	0	0
449. Food Sweeteners (Nutritive)	1	0	0
450. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2	0	0
451. Soups	1	0	0
MOZAMBIQUE			
452. Fruits & Fruits Products	1	0	0
453. Nuts and Edible Seeds	102	0	0
454. Coffee and Tea	1	0	0
455. Food Sweeteners (Nutritive)	1	0	0
NAMIBIA			
456. Fishery/Fishery Products	214	1	Less than 1%
457. Soft Drinks and Waters	1	0	0
458. Coffee and Tea	1	0	0
459. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
NAURU			
460. Whole Grains, Milled Grain Products, and Starch	1	0	0
- Fishery/Fishery Products	1	0	0
NEPAL			
461. Whole Grains, Milled Grain Products, and Starch	1	0	0
462. Macaroni and Noodle Products	1	0	0
463. Nuts and Edible Seeds	5	1	20%
464. Spices, Flavors, and Salts	2	0	0
465. Coffee and Tea	27	0	0
466. Alcoholic Beverages	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
NETHERLANDS			
467. Whole Grains, Milled Grain Products, and Starch	1238	0	0
468. Bakery Products, Doughs, Bakery Mixes, and Icings	1514	3	Less than 1%
469. Macaroni and Noodle Products	19	0	0
470. Cereal Preparations, Breakfast foods	13	0	0
471. Snack Food Items (Flour, Meal or Vegetable Base)	40	0	0
472. Milk, Butter and Dried Milk Products	373	0	0
473. Cheese and Cheese Products	1399	0	0
474. Ice Cream and Related Products	1	1	1
475. Filled/Imitation Milk Products	32	0	0
476. Fishery/Fishery Products	1667	1	Less than 1%
477. Meat, Meat Products, and Poultry	75	0	0
478. Vegetable Protein Products (Simulated Meats)	1	0	0
479. Fruit & Fruit Products	155	0	0
480. Fruit & Fruit Products	128	0	0
481. Fruit & Fruit Products	14	0	0
482. Nuts and Edible Seeds	694	0	0
483. Vegetable and Vegetable Products	40026	8	Less than 1%
484. Vegetable and Vegetable Products	1001	2	Less than 1%
485. Vegetable Oils (includes Olive Oil)	87	0	0
486. Dressings and Condiments	231	2	Less than 1%
487. Spices, Flavors, and Salts	1066	0	0
488. Soft Drinks and Waters	173	1	Less than 1%
489. Beverage Bases	355	0	0
490. Coffee and Tea	766	0	0
491. Alcoholic Beverages	46706	0	0
492. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1378	1	Less than .1%
493. Chocolate and Cocoa Products	3047	0	0
494. Gelatin, Rennet, Pudding Mixes, and Pie Filing	21	0	0
495. Food Sweeteners (Nutritive)	229	0	0
496. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	284	0	0
497. Soups	197	0	0
498. Prepared Salad Products	2	0	0
499. Baby (Infant and Junior) Food Products	35	0	0
500. Dietary Conventional Foods and Meal Replacement	71	1	1.4%
NETHERLANDS ANTILLES			
501. Fishery/Fishery Products	51	0	0
502. Vegetable and Vegetable Products	1	0	0
503. Vegetable and Vegetable Products	1	0	0
504. Spices, Flavors, and Salts	2	0	0
505. Coffee and Tea	3	0	0
506. Alcoholic Beverage	3	0	0
NEW CALEDONIA			
507. Fisher/Fishery Products	3	0	0
508. Alcoholic Beverages	1	0	0
NEW ZEALAND			
509. Whole Grains, Milled Grain Products, and Starch	6	0	0
510. Bakery Products, Doughs, Bakery Mixes, and Icings	322	0	0
511. Cereal Preparations, Breakfast Foods	12	0	0
512. Snack Food Items (Flour, Meal or Vegetable Base)	23	0	0
513. Milk, Butter and Dried Milk Products	1850	0	0
514. Cheese and Cheese Products	522	0	0
515. Ice Cream and Related Products	2	0	0
516. Filled/Imitation Milk Products	2	0	0
517. Egg and Egg Products	74	0	0
518. Fishery/Fishery Products	10927	15	Less than 1%
519. Meat, Meat Products, and Poultry	1368	0	0
520. Fruit & Fruit Products	1686	1	Less than 1%
521. Fruit & Fruit Products	655	1	Less than 1%
522. Fruit & Fruit Products	23	2	8.6%
523. Vegetables and Vegetables Products	135	0	0
524. Vegetables and Vegetables Products	153	0	0
525. Vegetable Oils (includes Olive Oil)	6	0	0
526. Dressings and Condiments	15	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
527. Spices, Flavors, and Salts	64	0	0
528. Soft Drinks and Waters	52	0	0
529. Beverage Bases	2	0	0
530. Coffee and Tea	6	0	0
531. Alcoholic Beverages	1130	0	0
532. Candy Without Chocolate, Candy Specialties, and Chewing Gum	51	0	0
533. Chocolate and Coca Products	14	0	0
534. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	17	0	0
535. Food Sweeteners (Nutritive)	53	0	0
536. Multiple Food Dinners, Gravies, Sauces, and Specialists (Total Diet)	36	0	0
537. Baby (Infant and Junior) Food Products	1	0	0
538. Dietary Conventional Foods and Meal Replacements	10	0	0
NICARAGUA			
539. Whole Grains, Milled Grain Products, and Starch	91	1	1%
540. Bakery Products, Doughs, Bakery Mixes, and Icing	17	0	0
541. Cereal Preparations, Breakfast Foods	40	0	0
542. Snack Food Items (Flour, Meal or Vegetable Base)	50	0	0
543. Milk, Butter and Dried Milk Products	83	0	0
544. Cheese and Cheese Products	198	4	2%
545. Fishery/Fishery Products	4360	9	Less than 1%
546. Fruit & Fruit Products	4	2	50%
547. Fruit & Fruit Products	216	0	0
548. Fruit & Fruit Products	148	0	0
549. Nuts and Edible Seeds	66	0	0
550. Vegetable and Vegetable Products	481	2	Less than 1%
551. Vegetable and Vegetable Products	213	0	0
552. Vegetable Oils (includes Olive Oil)	1	0	0
553. Dressings and Condiments	1	0	0
554. Spices, Flavors, and Salts	144	0	0
555. Soft Drinks and Waters	2	0	0
556. Beverage Bases	60	0	0
557. Coffee and Tea	306	0	0
558. Alcoholic Beverages	2	0	0
559. Candy Without Chocolate, Candy Specialties, and Chewing Gum	72	0	0
560. Chocolate and Cocoa Products	41	0	0
561. Food Sweeteners (Nutritive)	27	0	0
562. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	5	0	0
563. Soups	21	0	0
NIGER			
564. Whole Grains, Milled Grain Products, and Starch	3	0	0
565. Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
566. Fishery/Fishery Products	1	0	0
567. Fruit & Fruit Products	3	0	0
568. Fruit & Fruit Products	1	0	0
569. Vegetable and Vegetable Products	3	0	0
570. Vegetable Oils (includes Olive Oil)	1	0	0
571. Dressings and Condiments	1	0	0
572. Spices, Flavors, and Salts	1	0	0
- Chocolate and Cocoa Products	1	0	0
NIGERIA			
573. Whole Grains, Milled Grain Products, and Starchy	88	0	0
574. Bakery Products, Doughs, Bakery Mixes, and Icings	10	0	0
575. Macaroni and Noodle Products	1	0	0
576. Cereal Preparations, Breakfast Foods	13	0	0
577. Milk, Butter and Dried Milk Products	11	1	9%
578. Ice Cream and Related Products	4	0	0
579. Filled/Imitation Milk Products	1	0	0
580. Fishery/Fishery Products	148	9	6%
581. Meat, Meat Products and Poultry	1	0	0
582. Vegetable Protein Products (Simulated Meats)	1	0	0
583. Fruit & Fruit Products	7	0	0
584. Fruit & Fruit Products	13	0	0
585. Nuts and Edible Seeds	60	0	0
586. Vegetable and Vegetable Products	98	3	3%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
587. Vegetable and Vegetable Products	82	0	0
588. Vegetable Oils (include Olive Oil)	39	0	0
589. Dressings and Condiments	4	0	0
590. Spices, Flavors, and Salts	164	0	0
591. Soft Drinks and Waters	16	1	6%
592. Beverage Bases	2	0	0
593. Coffee and Tea	6	0	0
594. Alcoholic Beverage	13	0	0
595. Candy Without Chocolate, Candy Specialties, and Chewing Gum	23	0	0
596. Chocolate and Cocoa Products	35	0	0
597. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	8	0	0
598. Food Sweeteners (Nutritive)	5	0	0
599. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
600. Soups	24	0	0
601. Prepared Salad Products	1	0	0
- Baby (Infant and Junior) Food Products	4	0	0
NORFOLK ISLAND			
- Fishery/Fishery Products	3	3	100%
NORWAY			
602. Whole Grains, Milled Grain Products, and Starch	5	0	0
603. Bakery Products, Doughs, Bakery Mixes, and Icings	83	0	0
604. Macaroni and Noodle Products	1	0	0
605. Cereal Preparations, Breakfast Foods	2	0	0
606. Snack Food Items (Flour, Meal or Vegetable Base)	16	0	0
607. Milk, Butter and Dried Milk Products	68	0	0
608. Cheese and Cheese Products	683	0	0
609. Ice Cream and Related Products	1	0	0
610. Filled /Imitation Milk Products	1	0	0
611. Fishery/Fishery Products	4272	7	Less than 1%
612. Meat, Meat Products and Poultry	6	0	0
613. Fruit & Fruit Products	77	0	0
614. Fruit & Fruit Products	8	0	0
615. Nuts and Edible Seeds	2	0	0
616. Vegetable and Vegetable Products	2	0	0
617. Vegetable and Vegetable Products	13	0	0
618. Vegetable Oils (includes Olive Oil)	3	0	0
619. Dressings and Condiments	7	0	0
620. Spices, Flavors, and Salts	23	0	0
621. Soft Drinks and Waters	93	0	0
622. Beverage Bases	32	0	0
623. Alcoholic Beverages	9	0	0
624. Candy Without Chocolate, Candy Specialties, and Chewing Gum	24	0	0
625. Chocolate and Cocoa Products	33	0	0
626. Gelatin, Rennet, Pudding mixes, and Pie Fillings	185	0	0
627. Food Sweeteners (Nutritive)	7	0	0
628. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	0	0
629. Soups	34	0	0
630. Dietary Conventional Foods and Meal Replacements	28	0	0
OMAN			
631. Fishery/Fishery Products	143	1	Less than 1%
632. Fruit & Fruit Products	8	1	12%
633. Fruit & Fruit Products	1	0	0
634. Fruit & Fruit Products	2	0	0
635. Nuts and Edible Seeds	1	0	0
636. Vegetable and Vegetable Products	1	0	0
637. Vegetable Oils (include Olive Oil)	5	0	0
638. Spices, Flavors, and Salts	1	0	0

Imported Foods Rejection Rate

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
ITALY			
1. Whole Grains, Milled Grain Products and Starch	1086	3	Less than 1%
2. Bakery Products, Doughs, Bakery Mixes and Icings	3947	2	Less than 1%
3. Macaroni and Noodle Products	14523	3	Less than 1%
4. Cereal Preparations, Breakfast Foods	28	0	0
5. Snack Food Items (Flour, Meal or Vegetable Base)	435	0	0
6. Milk, Butter and Dried Milk Products	101	0	0
7. Cheese and Cheese Products	8161	3	Less than 1%
8. Ice Cream and Related Products	156	0	0
9. Filled/Imitation Milk Products	8	0	0
10. Egg and Egg Products	3	0	0
11. Fishery/Fishery Products	530	10	1.8%
12. Meat, Meat Products and Poultry	46	0	0
13. Vegetable Protein Products (Simulated Meats)	2	0	0
14. Fruit and Fruit Products – Product Class and Subclass Codes	1761	0	0
15. Fruit and Fruit Products – Product Class and Subclass Codes	1472	7	Less than 1%
16. Fruit and Fruit Products – Product Class and Subclass Codes	49	2	4%
17. Nuts and Edible Seeds	490	0	0
18. Vegetable and Vegetable Products	4206	24	Less than 1%
19. Vegetable and Vegetable Products	1882	21	1.1%
20. Vegetable Oils (Includes Olive Oil)	9118	0	0
21. Dressings and Condiments	2606	3	Less than 1%
22. Spices, Flavors, and Salts	665	3	Less than 1%
23. Soft Drinks and Waters	6437	2	Less than 1%
24. Beverage Bases	81	0	0
25. Coffee and Tea	1411	0	0
26. Alcoholic Beverages	51028	0	0
27. Candy Without Chocolate, Candy Specialties, and Chewing Gum	801	3	Less than 1%
28. Chocolate and Cocoa Products	761	1	Less than 1%
29. Gelatin, Rennet, Pudding Mixes and Pie Fillings	91	0	0
30. Food Sweeteners (Nutritive)	206	1	Less than 1%
31. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1008	4	Less than 1%
32. Soups	124	1	Less than 1%
33. Prepared Salad Products	14	0	0
34. Baby (Infant and Junior) Food Products	14	0	0
35. Dietary Conventional Foods and Meal Replacements	5	0	0
IVORY COAST			
36. Whole Grains, Milled Grain Products and Starch	9	0	0
37. Bakery Products, Doughs, Bakery Mixes and Icings	1	0	0
38. Macaroni and Noodle Products	5	0	0
39. Cereal Preparations, Breakfast Foods	4	0	0
40. Milk, Butter and Dried Milk Products	2	0	0
41. Filled/Imitation Milk Products	2	0	0
42. Fishery/Fishery Products	55	1	1.8%
43. Fruit and Fruit Products – Product Class and Subclass Codes	2	0	0
44. Fruit and Fruit Products – Product Class and Subclass Codes	7	0	0
45. Fruit and Fruit Products – Product Class and Subclass Codes	1	0	0
46. Nuts and Edible Seeds	15	0	0
47. Vegetable and Vegetable Products	34	1	2.9%
48. Vegetable and Vegetable Products	36	0	0
49. Vegetable Oils (Includes Olive Oil)	19	0	0
50. Spices, Flavors, and Salts	43	0	0
51. Beverage Bases	1	0	0
52. Coffee and Tea	50	0	0
53. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
54. Chocolate and Cocoa Products	555	0	0
55. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
56. Soups	15	0	0
57. Baby (Infant and Junior) Food Products	1	0	0
JAMAICA			
58. Whole Grains, Milled Grain Products and Starch	5	0	0
59. Bakery Products, Doughs, Bakery Mixes and Icings	352	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
60. Cereal Preparations, Breakfast Foods	2	0	0
61. Snack Food Items (Flour, Meal or Vegetable Base)	44	0	0
62. Milk, Butter and Dried Milk Products	4	4	100%
63. Cheese and Cheese Products	64	1	1.5%
64. Fishery/Fishery Products	523	7	1.3%
65. Vegetable Protein Products (Simulated Meats)	1	0	0
66. Fruit and Fruit Products – Product Class and Subclass Codes	178	0	0
67. Fruit and Fruit Products – Product Class and Subclass Codes	1017	10	Less than 1%
68. Fruit and Fruit Products – Product Class and Subclass Codes	102	0	0
69. Nuts and Edible Seeds	26	0	0
70. Vegetable and Vegetable Products	751	6	Less than 1%
71. Vegetable and Vegetable Products	804	1	Less than 1%
72. Vegetable Oils (Includes Olive Oil)	17	0	0
73. Dressings and Condiments	270	1	Less than 1%
74. Spices, Flavors, and Salts	464	2	Less than 1%
75. Soft Drinks and Waters	219	6	2.7%
76. Beverage Bases	96	1	1%
77. Coffee and Tea	174	0	0
78. Alcoholic Beverages	909	0	0
79. Candy Without Chocolate, Candy Specialties, and Chewing Gum	151	1	Less than 1%
80. Chocolate and Cocoa Products	37	0	0
81. Food Sweeteners (Nutritive)	33	0	0
82. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	190	0	0
83. Soups	96	3	3.1%
84. Baby (Infant and Junior) Food Products	1	0	0
85. Dietary Conventional Foods and Meal Replacements	7	0	0
JAPAN			
86. Whole Grains, Milled Grain Products and Starch	3612	0	0
87. Bakery Products, Doughs, Bakery Mixes and Icings	17629	1	Less than 1%
88. Macaroni and Noodle Products	8825	1	Less than 1%
89. Cereal Preparations, Breakfast Foods	73	0	0
90. Snack Food Items (Flour, Meal or Vegetable Base)	1227	0	0
91. Milk, Butter and Dried Milk Products	48	0	0
92. Cheese and Cheese Products	11	0	0
93. Ice Cream and Related Products	200	0	0
94. Filled/Imitation Milk Products	46	0	0
95. Egg and Egg Products	417	0	0
96. Fishery/Fishery Products	32023	21	Less than 1%
97. Meat, Meat Products and Poultry	20	0	0
98. Vegetable Protein Products (Simulated Meats)	18	0	0
99. Fruit and Fruit Products	214	0	0
100. Fruit and Fruit Products	1703	1	Less than 1%
101. Fruit and Fruit Products	93	0	0
102. Nuts and Edible Seeds	1536	2	Less than 1%
103. Vegetable and Vegetable Products	15679	16	Less than 1%
104. Vegetable and Vegetable Products	9287	12	Less than 1%
105. Vegetable Oils (Includes Olive Oil)	1212	0	0
106. Dressings and Condiments	3048	0	0
107. Spices, Flavors, and Salts	6866	1	Less than 1%
108. Soft Drinks and Waters	2411	13	Less than 1%
109. Beverage Bases	262	0	0
110. Coffee and Tea	3196	5	Less than 1%
111. Alcoholic Beverages	4190	0	0
112. Candy Without Chocolate, Candy Specialties, and Chewing Gum	7292	1	Less than 1%
113. Chocolate and Cocoa Products	1164	0	0
114. Gelatin, Rennet, Pudding Mixes and Pie Fillings	1134	0	0
115. Food Sweeteners (Nutritive)	205	0	0
116. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	10638	0	0
117. Soups	4203	3	Less than 1%
118. Prepared Salad Products	44	0	0
119. Baby (Infant and Junior) Food Products	133	0	0
120. Dietary Conventional Foods and Meal Replacements	54	0	0
JORDAN			
121. Whole Grains, Milled Grain Products and Starch	10	0	0
122. Bakery Products, Doughs, Bakery Mixes and Icings	4	1	25%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
123. Macaroni and Noodle Products	4	0	0
124. Milk, Butter and Dried Milk Products	4	0	0
125. Cheese and Cheese Products	7	0	0
126. Ice Cream and Related Products	1	0	0
127. Fishery/Fishery Products	1	0	0
128. Fruit and Fruit Products	4	0	0
129. Fruit and Fruit Products	12	0	0
130. Nuts and Edible Seeds	5	2	40%
131. Vegetable and Vegetable Products	6	3	50%
132. Vegetable Oils (Includes Olive Oil)	17	0	0
133. Spices, Flavors, and Salts	41	0	0
134. Beverage Bases	2	0	0
135. Coffee and Tea	6	0	0
136. Alcoholic Beverages	5	0	0
137. Chocolate and Cocoa Products	18	0	0
138. Gelatin, Rennet, Pudding Mixes and Pie Fillings	4	0	0
139. Food Sweeteners (Nutritive)	2	0	0
140. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	5	0	0
141. Soups	9	0	0
KAMPUCHEA			
142. Macaroni and Noodle Products	1	0	0
143. Fishery/Fishery Products	70	2	2.8%
144. Fruit and Fruit Products	1	0	0
145. Alcoholic Beverages	2	0	0
KAZAKHSTAN			
146. Fishery/Fishery Products	37	0	0
KENYA			
- Whole Grains, Milled Grain Products, and Starch	1	0	0
147. Bakery Products, Doughs, Bakery Mixes, and Icings	4	0	0
148. Macaroni and Noodle Products	10	0	0
149. Fishery/Fishery Products	23	0	0
150. Fruit & Fruit Products	18	0	0
151. Fruit & Fruit Products	1	0	0
152. Nuts and Edible Seeds	43	0	0
153. Vegetable and Vegetable Products	12	0	0
154. Spices, Flavors, and Salts	3	0	0
155. Soft Drinks and Waters	1	0	0
156. Beverage Bases	1	0	0
157. Coffee and Tea	633	0	0
158. Alcoholic Beverages	10	0	0
159. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
KIRIBATI			
160. Fishery/Fishery Products	107	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
KOREA, REPUBLIC OF (SOUTH			
161. Whole Grains, Milled Grain Products, and Starch	1440	2	Less than 1%
162. Bakery Products, Doughs, Bakery Mixes, and Icings	5762	12	Less than 1%
163. Macaroni and Noodle Products	7102	0	0
164. Cereal Preparations, Breakfast Foods	123	0	0
165. Snack Food Items (Flour, Meal or Vegetable Base)	1769	0	0
166. Milk, Butter and Dried Milk Products	4	0	0
167. Ice Cream and Related Products	229	1	Less than 1%
168. Filled/Imitation Milk Products	22	0	0
169. Egg and Egg products	1	0	0
170. Fishery/Fishery Products	6938	11	Less than 1%
171. Meat, Meat Products, and Poultry	11	2	18%
172. Vegetable Protein Products (Simulated Meats)	12	0	0
173. Fruit & Fruit Products	235	1	Less than 1%
174. Fruit & Fruit Products	40	1	2.5%
175. Fruit & Fruit Products	55	1	1.8%
176. Nuts and Edible Seeds	187	2	1%
177. Vegetable and Vegetable Products	4783	12	Less than 1%
178. Vegetable and Vegetable Products	1268	5	Less than 1%
179. Vegetable Oils (includes Olive Oil)	67	0	0
180. Dressings and Condiments	628	1	Less than 1%
181. Spices, and Flavors, and Salts	1510	0	0
182. Soft Drinks and Waters	1342	10	Less than 1%
183. Beverages Bases	124	1	Less than 1%
184. Coffee and Tea	1017	2	Less than 1%
185. Alcoholic Beverages	295	0	0
186. Candy without chocolate, Candy Specialties, and Chewing Gum	953	12	1.2%
187. Chocolate and Cocoa Products	13	0	0
188. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	91	2	2.1%
189. Food Sweeteners (Nutritive)	515	0	0
190. Multiple Food dinners, Gravies, Sauces, and Specialties (Total Diet)	2394	9	Less than 1%
191. Soups	1578	1	Less than 1%
192. Prepared Salad Products	1	0	0
193. Baby (Infant and Junior) Food Products	6	0	0
194. Dietary Conventional Foods and Meal Replacements	5	0	0
KUWAIT			
195. Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
196. Milk, Butter and Dried Milk Products	1	0	0
197. Filled/Imitation Milk Products	1	0	0
198. Fishery/Fishery Products	44	0	0
199. Fruit & Fruit Products	2	0	0
200. Nuts and Edible Seeds	1	0	0
201. Vegetable and Vegetable Products	9	0	0
202. Vegetable and Vegetable Products	5	0	0
203. Spices, Flavors, and Salts	3	0	0
204. Coffee and Tea	1	0	0
205. Chocolate and Cocoa Products	2	0	0
206. Food Sweeteners (Nutritive)	1	0	0
KYRGYZSTAN			
207. Fishery/Fishery Products	1	0	0
208. Coffee and Tea	1	0	0
209. Chocolate and Cocoa Products	5	0	0
LAO PEOPLES DEMOCRATIC RE			
210. Bakery Products, Doughs, Bakery Mixes, and Icing	1	0	0
211. Vegetable and Vegetable Products	1	0	0
212. Spices, Flavors, and Salts	2	0	0
213. Chocolate and Cocoa Products	1	0	0
LATVIA			
214. Whole Grains, milled Grain Products, and Starch	3	1	33%
215. Bakery Products, Doughs, Bakery Mixes, and Icings	21	3	14.2%
216. Milk, Butter and Dried Milk Products	34	12	35.2%
217. Fishery/Fishery Products	93	1	1%
218. Vegetables and Vegetable Products	1	0	0
219. Vegetable Oils (includes Olive Oil)	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
220. Alcoholic Beverages	8	0	0
221. Candy Without Chocolate, Candy Specialties, and Chewing Gum	12	0	0
222. Chocolate and Cocoa Products	20	0	0
LEBANON			
223. Whole Grains, Milled Grain Products, and Starch	55	0	0
224. Bakery Products, Doughs, Bakery Mixes, and Icing	68	2	2.9%
225. Macaroni and noodle Products	12	0	0
226. Cereal Preparations, Breakfast Foods	4	0	0
227. Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
228. Milk, Butter and Dried Milk Products	6	0	0
229. Cheese and Cheese Products	7	0	0
230. Ice Cream and Related Products	1	0	0
231. Fishery/Fishery Products	1	0	0
232. Fruit & Fruit Products	121	1	Less than 1%
233. Fruit & Fruit Products	289	2	Less than 1%
234. Fruit & Fruit Products	76	8	10.5%
235. Nuts and Edible Seeds	159	7	4.4%
236. Vegetable and Vegetable Products	528	5	Less than 1%
237. Vegetable and Vegetable Products	81	2	2.4%
238. Vegetable Oils (includes Olive Oil)	130	0	0
239. Dressings and Condiments	21	0	0
240. Spices, Flavors, and Salts	124	1	Less than 1%
241. Soft Drinks and Waters	113	0	0
242. Beverage Bases	17	1	5.8%
243. Coffee and Tea	65	0	0
244. Alcoholic Beverages	38	0	0
245. Candy Without Chocolate, Candy Specialties (Total Diet)	150	6	4%
246. Chocolate and Cocoa Products	41	2	4.8%
247. Gelatin, Rennet, pudding Mixes, and Pie Fillings	24	0	0
248. Food Sweeteners (Nutritive)	84	1	1.1%
249. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	94	0	0
250. Soups	1	0	0
251. Dietary Conventional foods and Meal Replacements	1	0	0
LESOTHO			
252. Whole Grains, Milled Grain Products, and Starch	3	0	0
253. Macaroni and Noodle Products	1	0	0
254. Vegetable and Vegetable Products	4	0	0
255. Spices, Flavors, and Salts	1	0	0
LIBERIA			
256. Whole Grains, Milled Grain Products, and Starch	2	0	0
257. Fishery/Fishery Products	1	0	0
258. Vegetable and Vegetable Products	1	0	0
259. Vegetables Oils (includes Olive Oil)	14	0	0
260. Spices, Flavors, and Salts	1	0	0
261. Soft Drinks and Water	1	0	0
262. Candy Without Chocolate, Candy Specialties, and (Total Diet)	1	0	0
LIBYA			
- Candy Without Chocolate, Candy Specialties, and chewing Gum	1	0	0
LIECHTENSTEIN			
263. Nuts and Edible Seeds	1	0	0
264. Vegetable Oils (includes olive Oil)	1	0	0
265. Alcoholic Beverages	4	0	0
266. Coffee and Tea	1	0	0
LITHUNIA			
267. Whole Grains, Milled Grain Products, and Starch	1	0	0
268. Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
269. Milk, Butter and Dried Milk Products)	15	0	0
270. Cheese and Cheese Products	402	2	
271. Fishery/Fishery Products	4	0	Less than 1%
272. Alcoholic Beverages	2	0	0
LUXEMBOURG			
273. Fishery/Fishery Products	1	0	0
274. Fruit & Fruit Products	2	0	0
275. Fruit & Fruit Products	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
276. Soft Drinks and Waters	1	0	0
277. Alcoholic Beverages	23	0	0
278. Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
MACAU			
279. Bakery Products, Doughs, Bakery Mixes, and Icings	48	0	0
280. Fishery/Fishery Products	37	2	5.4%
281. Fruit & Fruit Products	35	0	0
282. Nuts and Edible Seeds	1	0	0
283. Vegetable and Vegetable Products	2	0	0
284. Spices, Flavors, and Salts	3	0	0
285. Alcoholic Beverages	1	0	0
286. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	1	0	0
MACEDONIA			
287. Whole Grains, Milled Grain Products, and Starch	1	0	0
288. Bakery Products, Doughs, Bakery Mixes, and Icings	15	0	0
289. Fruit & Fruit Products	94	0	0
290. Fruit & Fruit Products	2	0	0
291. Vegetable and Vegetable Products	12	0	0
292. Vegetable and Vegetable Products	2	0	0
293. Dressings and Condiments	7	0	0
294. Spices, Flavors, and Salts	17	0	0
295. Beverage Bases	1	0	0
296. Alcoholic Beverages	40	0	0
297. Candy Without Chocolate, Candy Specialties, and Chewing Gum	5	0	0
298. Chocolate and cocoa Products	11	0	0
299. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	7	0	0
300. Soups	7	0	0
301. Prepared Salad Products	9	0	0
MADAGASCAR			
302. Spices, Flavors, and Salts	296	0	0
303. Coffee and Tea	75	0	0
304. Chocolate and Cocoa Products	7	0	0
MALAWI			
305. Nuts and Edible Seeds	17	0	0
306. Vegetable and Vegetable Products	13	0	0
307. Coffee and Tea	273	0	0
308. Food Sweeteners (Nutritive)	1	0	0
309. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	2	66%
MALAYSIA			
310. Whole Grains, Milled Grain Products, and Starch	8	0	0
311. Bakery Products, Doughs, Bakery Mixes, and Icings	851	1	Less than 1%
312. Macaroni and Noodle Products	55	0	0
313. Cereal Preparations, Breakfast Foods	10	0	0
314. Snack Food Items (Flour, Meal or Vegetable Base)	12	0	0
315. Milk, Butter and Dried Milk Products	9	0	0
316. Filled/Imitation Milk Products	2	0	0
317. Egg and Egg Products	1	0	0
318. Fishery/Fishery Products	1089	10	Less than 1%
319. Vegetable Protein Products (Simulated Meats)	3	0	0
320. Fruit & Fruit Products	6	2	33%
321. Fruit & Fruit Products	364	1	Less than 1%
322. Fruit & Fruit Products	5	0	0
323. Nuts and Edible Seeds	27	0	0
324. Vegetable and Vegetable Products	168	3	1.7%
325. Vegetable and Vegetable Products	54	0	0
326. Vegetable oils (includes Olive Oil)	302	0	0
327. Dressing and Condiments	1	0	0
328. Spices, Flavors, and Salts	279	0	0
329. Soft Drinks and Water	94	0	0
330. Beverage Bases	35	0	0
331. Coffee and Tea	37	0	0
332. Alcoholic Beverages	3	0	0
333. Candy Without Chocolate, Candy Specialties, and Chewing Gum	43	0	0
334. Chocolate and Cocoa Products	429	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
335. Gelatin, Rennet, Pudding Mixes, and Pie Filing	44	0	0
336. Food Sweeteners (Nutritive)	2	0	0
337. Multiple Food Dinners, Gravies, Sauces, and Specialties Total Diet)	108	2	1.8%
338. Soups	10	0	0
339. Baby (Infant and Junior) Food Products	3	0	0
340. Dietary conventional Foods and Meal Replacements	5	0	0
MALAWI			
341. Nuts and Edible Seeds	17	2	11%
342. Vegetable and Vegetable Products	13	0	0
343. Coffee and Tea	273	0	0
344. Food Sweeteners (Nutritive)	1	0	0
345. Multiple Food Dinners, Gravies, Sauces, and Specialties	3	0	0
MALDIVES			
- Fishery/Fishery Products	9	0	0
MALI			
346. Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
347. Spices, Flavors, and Salts	1	0	0
MALTA & GOZO			
348. Whole Grains, Milled Grain Products, and Starch	1	0	0
349. Bakery Products, Doughs, Bakery Mixes, and Icings	8	0	0
350. Cheese and Cheese Products	1	0	0
351. Fishery/Fishery Products	1	0	0
352. Vegetable and Vegetable Products	1	0	0
353. Vegetable Oils (includes Olive Oil)	1	0	0
354. Beverage Bases	3	0	0
355. Alcoholic Beverages	4	0	0
356. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	2	1	50%
357. Food Sweeteners (Nutritive)	2	0	0
MARSHALL ISLANDS			
- Vegetable Oils (includes Olive Oil)	7	0	0
MARTINIQUE			
358. Vegetable and Vegetable Products	2	0	0
359. Soft Drinks and Waters	2	0	0
MAURITANIA			
360. Fishery/Fishery Products	3	0	0
361. Fruit & Fruit Products	1	0	0
362. Vegetables and Vegetable Products	1	0	0
MAURITUS			
363. Cheese and Cheese Products	1	0	0
364. Filled/Imitation Milk Products	1	0	0
365. Fishery/Fishery Products	14	0	0
366. Fruit & Fruit Products	48	0	0
367. Fruit & Fruit Products	12	0	0
368. Vegetables and Vegetable Products	25	0	0
369. Spices, Flavors, and Salts	2	0	0
370. Candy Without Chocolate, Candy Specialties, and Chewing Gum	31	0	0
371. Food Sweeteners (Nutritive)	73	0	0
MEXICO			
372. Whole Grains, Milled Grain Products, and Starch	2114	2	Less than 1%
373. Bakery Products, Doughs, Bakery Mixes, and Icings	47793	10	Less than 1%
374. Macaroni and Noodle Products	2818	2	Less than 1%
375. Cereal Preparations, Breakfast Foods	1535	1	Less than 1%
376. Snack food Items (Flour, Meal or Vegetable Base)	9149	6	Less than 1%
377. Milk, Butter and Dried Milk Products	556	14	2.5%
378. Cheese and Cheese Products	199	2	1%
379. Ice Cream and Related Products	369	0	0
380. Filled/Imitation Milk Products	12	0	0
381. Egg and Egg Products	13	0	0
382. Fishery/Fishery Products	43857	13	Less than 1%
383. Meat, Meat Products and Poultry	375	0	0
384. Vegetable Protein Products (Simulated Meats)	89	0	0
385. Fruit & Fruit Products	46629	24	Less than 1%
386. Fruit & Fruit Products	44267	24	Less than 1%
387. Fruit & Fruit Products	79968	2	Less than 1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
388. Nuts and Edible Seeds	7483	4	Less than 1%
389. Vegetable and Vegetable Products	384647	8	Less than 1%
390. Vegetable and Vegetable Products	74718	0	0
391. Vegetable Oils (includes Olive Oil)	734	0	0
392. Dressings and Condiments	1350	13	Less than 1%
393. Spices, Flavors, and Salts	21016	18	Less than 1%
394. Soft Drinks and Waters	23636	6	Less than 1%
395. Beverage Bases	1729	13	Less than 1%
396. Coffee and Tea	8656	4	Less than 1%
397. Alcoholic Beverages	38041	6	Less than 1%
398. Candy Without Chocolate, Candy Specialties, and Chewing Gum	28719	18	Less than 1%
399. Chocolate and Cocoa Products	2319	7	Less than 1%
400. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	971	7	Less than 1%
401. Food Sweeteners (Nutritive)	1302	6	Less than 1%
402. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2009	16	Less than 1%
403. Soups	1341	1	Less than 1%
404. Prepared Salad Products	1	0	0
405. Baby (Infant and Junior) Food Products	417	5	1.1%
- Dietary Conventional Foods and Meal Replacements	127	0	0
MICRONESIA, FEDERATED STA			
- Fishery/Fishery Products	33	2	6%
MOLDOVA			
406. Cereal Preparations, Breakfast Foods	1	0	0
407. Fruit & Fruit Products	24	0	0
408. Fruit & Fruit Products	16	0	0
409. Fruit & Fruit Products	4	0	0
410. Nuts and Edible Seeds	8	0	0
411. Vegetable and Vegetable Products	4	0	0
412. Vegetable and Vegetable Products	3	0	0
413. Vegetable Oils (includes Olive Oil)	3	0	0
414. Spices, Flavors, and Salts	4	0	0
415. Alcoholic Beverages	88	0	0
416. Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
417. Chocolate and Cocoa Products	2	0	0
MONACO			
418. Fishery/Fishery Products	1	0	0
419. Fruit & Fruit Products	2	0	0
420. Vegetables and Vegetable Products	11	0	0
421. Vegetables and Vegetable Products	1	0	0
422. Spices, Flavors, and Salts	4	0	0
423. Alcoholic Beverages	5	0	0
424. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
425. Chocolate and Cocoa Products	2	0	0
MONGOLIA			
426. Nuts and Edible Seeds	1	0	0
427. Vegetables and Vegetable Products	1	0	0
428. Vegetables and Vegetable Products	1	0	0
MONSTSERRAT			
429. Fishery/Fishery Products	5	0	0
430. Fruits & Fruits Products	3	0	0
431. Vegetables and Vegetable Products	3	0	0
432. Coffee and Tea	1	0	0
MOROCCO			
433. Whole Grains, Milled Grain Products, and Starch	2	0	0
434. Macaroni and Noodle Products	1	0	0
435. Fishery/Fishery Products	569	3	Less than 1%
436. Meat, Meat Products, and Poultry	1	1	1
437. Fruit & Fruit Products	146	0	0
438. Fruit & Fruit Products	584	0	0
439. Nuts and Edible Seeds	6	0	0
440. Vegetables and Vegetable Products	205	0	0
441. Vegetables and Vegetable Products	14	0	0
442. Vegetables Oils (includes Olive Oil)	130	0	0
443. Spices, Flavors, and Salts	329	1	Less than 1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
444. Coffee and Tea	6	0	0
445. Alcoholic Beverages	21	0	0
446. Candy Without Chocolate, Candy Specialties, and Chewing Gum	4	0	0
447. Chocolate and Cocoa Products	1	0	0
448. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	25	0	0
449. Food Sweeteners (Nutritive)	1	0	0
450. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2	0	0
451. Soups	1	0	0
MOZAMBIQUE			
452. Fruits & Fruits Products	1	0	0
453. Nuts and Edible Seeds	102	0	0
454. Coffee and Tea	1	0	0
455. Food Sweeteners (Nutritive)	1	0	0
NAMIBIA			
456. Fishery/Fishery Products	214	1	Less than 1%
457. Soft Drinks and Waters	1	0	0
458. Coffee and Tea	1	0	0
459. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
NAURU			
460. Whole Grains, Milled Grain Products, and Starch	1	0	0
- Fishery/Fishery Products	1	0	0
NEPAL			
461. Whole Grains, Milled Grain Products, and Starch	1	0	0
462. Macaroni and Noodle Products	1	0	0
463. Nuts and Edible Seeds	5	1	20%
464. Spices, Flavors, and Salts	2	0	0
465. Coffee and Tea	27	0	0
466. Alcoholic Beverages	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
NETHERLANDS			
467. Whole Grains, Milled Grain Products, and Starch	1238	0	0
468. Bakery Products, Doughs, Bakery Mixes, and Icings	1514	3	Less than 1%
469. Macaroni and Noodle Products	19	0	0
470. Cereal Preparations, Breakfast foods	13	0	0
471. Snack Food Items (Flour, Meal or Vegetable Base)	40	0	0
472. Milk, Butter and Dried Milk Products	373	0	0
473. Cheese and Cheese Products	1399	0	0
474. Ice Cream and Related Products	1	1	1
475. Filled/Imitation Milk Products	32	0	0
476. Fishery/Fishery Products	1667	1	Less than 1%
477. Meat, Meat Products, and Poultry	75	0	0
478. Vegetable Protein Products (Simulated Meats)	1	0	0
479. Fruit & Fruit Products	155	0	0
480. Fruit & Fruit Products	128	0	0
481. Fruit & Fruit Products	14	0	0
482. Nuts and Edible Seeds	694	0	0
483. Vegetable and Vegetable Products	40026	8	Less than 1%
484. Vegetable and Vegetable Products	1001	2	Less than 1%
485. Vegetable Oils (includes Olive Oil)	87	0	0
486. Dressings and Condiments	231	2	Less than 1%
487. Spices, Flavors, and Salts	1066	0	0
488. Soft Drinks and Waters	173	1	Less than 1%
489. Beverage Bases	355	0	0
490. Coffee and Tea	766	0	0
491. Alcoholic Beverages	46706	0	0
492. Candy Without Chocolate, Candy Specialties, and Chewing Gum	1378	1	Less than .1%
493. Chocolate and Cocoa Products	3047	0	0
494. Gelatin, Rennet, Pudding Mixes, and Pie Filing	21	0	0
495. Food Sweeteners (Nutritive)	229	0	0
496. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	284	0	0
497. Soups	197	0	0
498. Prepared Salad Products	2	0	0
499. Baby (Infant and Junior) Food Products	35	0	0
500. Dietary Conventional Foods and Meal Replacement	71	1	1.4%
NETHERLANDS ANTILLES			
501. Fishery/Fishery Products	51	0	0
502. Vegetable and Vegetable Products	1	0	0
503. Vegetable and Vegetable Products	1	0	0
504. Spices, Flavors, and Salts	2	0	0
505. Coffee and Tea	3	0	0
506. Alcoholic Beverage	3	0	0
NEW CALEDONIA			
507. Fisher/Fishery Products	3	0	0
508. Alcoholic Beverages	1	0	0
NEW ZEALAND			
509. Whole Grains, Milled Grain Products, and Starch	6	0	0
510. Bakery Products, Doughs, Bakery Mixes, and Icings	322	0	0
511. Cereal Preparations, Breakfast Foods	12	0	0
512. Snack Food Items (Flour, Meal or Vegetable Base)	23	0	0
513. Milk, Butter and Dried Milk Products	1850	0	0
514. Cheese and Cheese Products	522	0	0
515. Ice Cream and Related Products	2	0	0
516. Filled/Imitation Milk Products	2	0	0
517. Egg and Egg Products	74	0	0
518. Fishery/Fishery Products	10927	15	Less than 1%
519. Meat, Meat Products, and Poultry	1368	0	0
520. Fruit & Fruit Products	1686	1	Less than 1%
521. Fruit & Fruit Products	655	1	Less than 1%
522. Fruit & Fruit Products	23	2	8.6%
523. Vegetables and Vegetables Products	135	0	0
524. Vegetables and Vegetables Products	153	0	0
525. Vegetable Oils (includes Olive Oil)	6	0	0
526. Dressings and Condiments	15	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
527. Spices, Flavors, and Salts	64	0	0
528. Soft Drinks and Waters	52	0	0
529. Beverage Bases	2	0	0
530. Coffee and Tea	6	0	0
531. Alcoholic Beverages	1130	0	0
532. Candy Without Chocolate, Candy Specialties, and Chewing Gum	51	0	0
533. Chocolate and Coca Products	14	0	0
534. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	17	0	0
535. Food Sweeteners (Nutritive)	53	0	0
536. Multiple Food Dinners, Gravies, Sauces, and Specialists (Total Diet)	36	0	0
537. Baby (Infant and Junior) Food Products	1	0	0
538. Dietary Conventional Foods and Meal Replacements	10	0	0
NICARAGUA			
539. Whole Grains, Milled Grain Products, and Starch	91	1	1%
540. Bakery Products, Doughs, Bakery Mixes, and Icing	17	0	0
541. Cereal Preparations, Breakfast Foods	40	0	0
542. Snack Food Items (Flour, Meal or Vegetable Base)	50	0	0
543. Milk, Butter and Dried Milk Products	83	0	0
544. Cheese and Cheese Products	198	4	2%
545. Fishery/Fishery Products	4360	9	Less than 1%
546. Fruit & Fruit Products	4	2	50%
547. Fruit & Fruit Products	216	0	0
548. Fruit & Fruit Products	148	0	0
549. Nuts and Edible Seeds	66	0	0
550. Vegetable and Vegetable Products	481	2	Less than 1%
551. Vegetable and Vegetable Products	213	0	0
552. Vegetable Oils (includes Olive Oil)	1	0	0
553. Dressings and Condiments	1	0	0
554. Spices, Flavors, and Salts	144	0	0
555. Soft Drinks and Waters	2	0	0
556. Beverage Bases	60	0	0
557. Coffee and Tea	306	0	0
558. Alcoholic Beverages	2	0	0
559. Candy Without Chocolate, Candy Specialties, and Chewing Gum	72	0	0
560. Chocolate and Cocoa Products	41	0	0
561. Food Sweeteners (Nutritive)	27	0	0
562. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	5	0	0
563. Soups	21	0	0
NIGER			
564. Whole Grains, Milled Grain Products, and Starch	3	0	0
565. Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
566. Fishery/Fishery Products	1	0	0
567. Fruit & Fruit Products	3	0	0
568. Fruit & Fruit Products	1	0	0
569. Vegetable and Vegetable Products	3	0	0
570. Vegetable Oils (includes Olive Oil)	1	0	0
571. Dressings and Condiments	1	0	0
572. Spices, Flavors, and Salts	1	0	0
- Chocolate and Cocoa Products	1	0	0
NIGERIA			
573. Whole Grains, Milled Grain Products, and Starchy	88	0	0
574. Bakery Products, Doughs, Bakery Mixes, and Icings	10	0	0
575. Macaroni and Noodle Products	1	0	0
576. Cereal Preparations, Breakfast Foods	13	0	0
577. Milk, Butter and Dried Milk Products	11	1	9%
578. Ice Cream and Related Products	4	0	0
579. Filled/Imitation Milk Products	1	0	0
580. Fishery/Fishery Products	148	9	6%
581. Meat, Meat Products and Poultry	1	0	0
582. Vegetable Protein Products (Simulated Meats)	1	0	0
583. Fruit & Fruit Products	7	0	0
584. Fruit & Fruit Products	13	0	0
585. Nuts and Edible Seeds	60	0	0
586. Vegetable and Vegetable Products	98	3	3%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
587. Vegetable and Vegetable Products	82	0	0
588. Vegetable Oils (include Olive Oil)	39	0	0
589. Dressings and Condiments	4	0	0
590. Spices, Flavors, and Salts	164	0	0
591. Soft Drinks and Waters	16	1	6%
592. Beverage Bases	2	0	0
593. Coffee and Tea	6	0	0
594. Alcoholic Beverage	13	0	0
595. Candy Without Chocolate, Candy Specialties, and Chewing Gum	23	0	0
596. Chocolate and Cocoa Products	35	0	0
597. Gelatin, Rennet, Pudding Mixes, and Pie Fillings	8	0	0
598. Food Sweeteners (Nutritive)	5	0	0
599. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
600. Soups	24	0	0
601. Prepared Salad Products	1	0	0
- Baby (Infant and Junior) Food Products	4	0	0
NORFOLK ISLAND			
- Fishery/Fishery Products	3	3	100%
NORWAY			
602. Whole Grains, Milled Grain Products, and Starch	5	0	0
603. Bakery Products, Doughs, Bakery Mixes, and Icings	83	0	0
604. Macaroni and Noodle Products	1	0	0
605. Cereal Preparations, Breakfast Foods	2	0	0
606. Snack Food Items (Flour, Meal or Vegetable Base)	16	0	0
607. Milk, Butter and Dried Milk Products	68	0	0
608. Cheese and Cheese Products	683	0	0
609. Ice Cream and Related Products	1	0	0
610. Filled /Imitation Milk Products	1	0	0
611. Fishery/Fishery Products	4272	7	Less than 1%
612. Meat, Meat Products and Poultry	6	0	0
613. Fruit & Fruit Products	77	0	0
614. Fruit & Fruit Products	8	0	0
615. Nuts and Edible Seeds	2	0	0
616. Vegetable and Vegetable Products	2	0	0
617. Vegetable and Vegetable Products	13	0	0
618. Vegetable Oils (includes Olive Oil)	3	0	0
619. Dressings and Condiments	7	0	0
620. Spices, Flavors, and Salts	23	0	0
621. Soft Drinks and Waters	93	0	0
622. Beverage Bases	32	0	0
623. Alcoholic Beverages	9	0	0
624. Candy Without Chocolate, Candy Specialties, and Chewing Gum	24	0	0
625. Chocolate and Cocoa Products	33	0	0
626. Gelatin, Rennet, Pudding mixes, and Pie Fillings	185	0	0
627. Food Sweeteners (Nutritive)	7	0	0
628. Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	0	0
629. Soups	34	0	0
630. Dietary Conventional Foods and Meal Replacements	28	0	0
OMAN			
631. Fishery/Fishery Products	143	1	Less than 1%
632. Fruit & Fruit Products	8	1	12%
633. Fruit & Fruit Products	1	0	0
634. Fruit & Fruit Products	2	0	0
635. Nuts and Edible Seeds	1	0	0
636. Vegetable and Vegetable Products	1	0	0
637. Vegetable Oils (include Olive Oil)	5	0	0
638. Spices, Flavors, and Salts	1	0	0

Imported Foods Rejection Rate

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
PAKISTAN			
- Whole Grains, Milled grain Products, and Starch	551	8	1.4%
- Bakery Products, Doughs, Bakery Mixes, and Icings	68	3	4.4%
- Macaroni and Noodle Products	60	2	3.3%
- Cereal Preparations, Breakfast Foods	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	6	0	0
- Milk, Butter and Dried Milk Products	4	0	0
- Ice Cream and Related Products	15	0	0
- Fishery/Fishery Products	512	9	1.7%
- Meat, Meat Products, and Poultry	46	0	0
- Fruit & Fruit Products	121	1	Less than 1%
- Fruit & Fruit Products	501	4	Less than 1%
- Fruit & Fruit Products	18	1	5.5%
- Nuts and Edible Seeds	32	8	25%
- Vegetable and Vegetable Products	41	0	0
- Vegetable and Vegetable Products	87	0	0
- Vegetable Oils (includes Olive Oil)	2	0	0
- Dressings and Condiments	18	13	72%
- Spices, Flavors, and Salts	1722	0	0
- Soft Drinks and Waters	26	0	0
- Beverage Bases	22	3	13.6%
- Coffee and Tea	7	1	14.2%
- Alcoholic Beverages	2	0	0
- Candy Without Chocolate, Candy specialties, and Chewing Gum	45	0	0
- Chocolate and Cocoa Products	1	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	69	5	7.2%
- Food Sweeteners (Nutritive)	51	3	5.8%
- Multiple Food Dinners, Gravies, Sauces, and Specialties	16	0	0
- Soups	26	0	0
PANAMA			
- Bakery Products, Doughs, Bakery Mixes, and Icings	4	0	0
- Cheese and Cheese Products	1	0	0
- Egg and Egg Products	7	0	0
- Fishery/Fishery Products	10640	14	Less than 1%
- Fruit & Fruit Products	5	0	0
- Fruit & Fruit Products	118	0	0
- Fruit & Fruit Products	819	0	0
- Nuts and Edible Seeds	5	0	0
- Vegetable and Vegetable Products	429	0	0
- Vegetable and Vegetable Products	63	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	5	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	319	0	0
- Alcoholic Beverages	17	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	30	0	0
- Chocolate and Cocoa Products	10	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	86	0	0
- Food Sweeteners (Nutritive)	14	0	0
PAPUA NEW GUINES			
- Fishery/Fishery Products	264	6	2.2%
- Spices, Flavors, and Salts	3	0	0
- Coffee and Tea	322	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
- Chocolate and Cocoa Products	164	0	0
- Food Sweeteners (Nutritive)	1	0	0
PARAGUAY			
- Whole Grains, Milled Grain Products, and Starch	2	0	0
- Fishery/Fishery Products	1	0	0
- Meat, Meat Products and Poultry	1	0	0
- Vegetable and Vegetable Products	4	0	0
- Spices, Flavors, and Salts			

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Beverage Bases	11	0	0
- Coffee and Tea	6	0	0
- Alcoholic Beverages	8	0	0
- Food Sweeteners (Nutritive)	2	0	0
	43	0	0
PERU			
- Whole Grains, Milled Grain Products, and Starch	92	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	43	1	2.3%
- Cereal Preparations, Breakfast Foods	12	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	6	0	0
- Milk, Butter and Dried Milk Products	6	0	0
- Fishery/Fishery Products	1908	9	Less than 1%
- Fruit & Fruit Products	14	0	0
- Fruit & Fruit Products	351	4	1.1%
- Fruit & Fruit Products	3	0	0
- Nuts and Edible Seeds	114	0	0
- Vegetable and Vegetable Products	5186	11	Less than 1%
- Vegetable and Vegetable Products	759	0	0
- Vegetable Oils (includes Olive Oil)	4	0	0
- Dressings and Condiments	70	0	0
- Spices, Flavors, and Salts	584	1	Less than 1%
- Soft Drinks and Waters	10	0	0
- Beverages Bases	11	0	0
- Coffee and Tea	847	0	0
- Alcoholic Beverages	85	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	6	1	16%
- Chocolate and Cocoa Products	87	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	6	0	0
- Food Sweeteners (Nutritive)	16	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	30	0	0
- Soups	2	0	0
- Baby (Infant and Junior) Food Products	1	0	0
PHILIPPINES			
- Whole Grains, Milled Grain Products, and Starch	203	9	4.4%
- Bakery Products, Doughs, Bakery Mixes, and Icings	2066	16	Less than 1%
- Macaroni and Noodle Products	1388	11	Less than 1%
- Cereal Preparations, Breakfast Foods	17	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1017	17	1.6%
- Milk, Butter and Dried Milk Products	16	0	0
- Cheese and Cheese Products	8	0	0
- Ice Cream and Related Products	85	0	0
- Filled/Imitation Milk Products	1	0	0
- Egg and Egg Products	1	0	0
- Fishery/Fishery Products	8597	19	Less than 1%
- Meat, Meat Products, and Poultry	4	0	0
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit & Fruit Products	42	0	0
- Fruit & Fruit Products	8119	7	Less than 1%
- Fruit & Fruit Products	54	1	1.8%
- Nuts and Edible Seeds	2529	10	Less than 1%
- Vegetable and Vegetable Products	853	13	1.5%
- Vegetable and Vegetable Products	587	1	Less than 1%
- Vegetable Oils (include Olive Oil)	204	0	0
- Dressings and Condiments	732	1	Less than 1%
- Spices, Flavors, and Salts	743	0	0
- Soft Drinks and Waters	264	6	2.2%
- Beverage Bases	242	3	1.2%
- Coffee and Tea	26	0	0
- Alcoholic Beverage	55	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	382	5	1.3%
- Chocolate and Cocoa Products	233	2	Less than 1%
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	449	13	2.8%
- Food Sweeteners (Nutritive)	38	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1558	4	Less than 1%
- Soups	147	2	1.3%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Prepared Salad Products	2	0	0
- Baby (Infant and Junior) Food Products	16	0	0
PITCAIM ISLAND			
- Fruit & Fruit Products	1	0	0
POLAND			
- Whole Grains, Milled Grain Products, and Starch	282	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	1378	2	Less than 1%
- Macaroni and Noodle Products	40	0	0
- Cereal Preparations, Breakfast Foods	46	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	85	0	0
- Milk, Butter and Dried Milk Products	97	0	0
- Cheese and Cheese Products	314	0	0
- Ice Cream and Related Products	1	0	0
- Filled/Imitation Milk Products	1	0	0
- Egg and Egg Products	4	0	0
- Fishery/Fishery Products	316	5	1.5%
- Meat, Meat Products, and Poultry	3	0	0
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit & Fruit Products	778	2	Less than 1%
- Fruit & Fruit Products	587	4	Less than 1%
- Fruit & Fruit Products	18	0	0
- Nuts and Edible Seeds	11	0	0
- Vegetable and Vegetable Products	929	17	1.8%
- Vegetable and Vegetable Products	564	10	1.7%
- Vegetable Oils (include Olive Oil)	9	0	0
- Dressings and Condiments	134	0	0
- Spices, Flavors, and Salts	268	1	Less than 1%
- Soft Drinks and Waters	306	0	0
- Beverage Bases	30	0	0
- Coffee and Tea	394	0	0
- Alcoholic Beverage	319	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	400	12	3%
- Chocolate and Cocoa Products	1496	5	Less than 1%
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	192	4	2%
- Food Sweeteners (Nutritive)	31	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	103	1	Less than 1%
- Soups	440	8	1.8%
- Prepared Salad Products	114	8	7%
- Baby (Infant and Junior) Food Products	21	1	4.7%
- Dietary Conventional Foods and Meal Replacements	1	0	0
PORTUGAL			
- Whole Grains, Milled Grain Products, and Starch	29	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icing	146	4	2.7%
- Macaroni and Noodle Products	25	0	0
- Cereal Preparations, Breakfast Foods	37	0	0
- Milk, Butter and Dried Milk Products	8	0	0
- Cheese and Cheese Products	242	8	3.3%
- Fishery/Fishery Products	2815	4	Less than 1%
- Meat, Meat Products and Poultry	21	0	0
- Fruit & Fruit Products	36	0	0
- Fruit & Fruit Products	86	0	0
- Fruit & Fruit Products	1	0	0
- Nuts and Edible Seeds	41	0	0
- Vegetable and Vegetable Products	68	0	0
- Vegetable and Vegetable Products	32	0	0
- Vegetable Oils (includes Olive Oil)	120	0	0
- Dressings and Condiments	19	0	0
- Spices, Flavors, and Salts	22	0	0
- Soft Drinks and Waters	196	0	0
- Beverage Bases	2	0	0
- Coffee and Tea	51	0	0
- Alcoholic Beverages	2816	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	23	1	4.3%
- Chocolate and Cocoa Products	23	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	49	3	6.1%
- Food Sweeteners (Nutritive)	6	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	0	0
- Soups	68	0	0
PUERTO RICO			
- Fruit & Fruit Products	2	0	0
- Vegetable and Vegetable Products	1	0	0
- Spices, Flavors, and Salts	2	0	0
- Beverage Bases	1	0	0
- Alcoholic Beverages	3	0	0
- Chocolate and Cocoa Products	9	0	0
REUNION			
- Cheese and Cheese Products	3	0	0
- Fishery/Fishery Products	1	0	0
- Spices, Flavors, and Salts	2	0	0
ROMANIA			
- Bakery Products, Doughs, Bakery Mixes, and Icings	34	0	0
- Cheese and Cheese Products	10	1	10%
- Fishery/Fishery Products	6	0	0
- Fruit & Fruit Products	19	0	0
- Fruit & Fruit Products	16	0	0
- Nuts and Edible Seeds	1	0	0
- Vegetable and Vegetable Products	12	0	0
- Vegetable and Vegetable Products	13	1	7.6%
- Spices, Flavors, and Salts	8	0	0
- Soft Drinks and Waters	255	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	161	0	0
RUSSIA			
- Whole Grains, Milled Grain Products, and Starch	25	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	75	0	0
- Macaroni and Noodle Products	2	0	0
- Cereal Preparations, Breakfast Foods	11	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	3	0	0
- Milk, Butter and Dried Milk Products	167	0	0
- Cheese and Cheese Products	2	0	0
- Fishery/Fishery Products	2993	7	Less than 1%
- Fruit and Fruit Products	77	0	0
- Fruit and Fruit Products	31	0	0
- Fruit and Fruit Products	13	0	0
- Nuts and Edible Seeds	2	0	0
- Vegetable and Vegetable Products	19	1	5.2%
- Vegetable and Vegetable Products	24	2	8.3%
- Vegetable Oils (Includes Olive Oil)	18	0	0
- Dressings and Condiments	16	0	0
- Spices, Flavors, and Salts	36	0	0
- Soft Drinks and Waters	107	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	19	0	0
- Alcoholic Beverages	24	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	42	0	0
- Chocolate and Cocoa Products	45	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	8	0	0
- Food Sweeteners (Nutritive)	16	0	0
- Baby (Infant and Junior) Food Products	3	0	0
- Dietary Conventional Foods and Meal Replacements	2	0	0
RWANDA			
- Coffee and Tea	19	0	0
SAINT CHRISTOPHER & NEVIS			
- Whole Grains, Milled Grain Products, and Starch	1	0	0
- Soft Drinks and Waters	3	0	0
- Alcoholic Beverages	8	0	0
SAINT HELENA			
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
SAINT LUCIA			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fruit & Fruit Products	14	0	0
- Vegetable and Vegetable Products	102	0	0
- Vegetable and Vegetable Products	14	0	0
- Vegetable Oils (includes Olive Oil)	1	0	0
- Dressings and Condiments	17	0	0
- Spices, Flavors, and Salts	41	0	0
- Soft Drinks and Waters	1	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	2	0	0
- Chocolate and Cocoa Products	2	0	0
- Food Sweeteners (Nutritive)	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	15	0	0
SAINT PIERRE & MIQUELON			
- Fishery/Fishery Products	159	1	Less than 1%
SAN MARINO			
- Vegetable and Vegetable Products	2	0	0
SAO TOME & PRINCIPE			
- Fruit & Fruit Products	1	0	0
SAUDI ARABIA			
- Whole Grains, Milled Grain Products, and Starch	2	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	26	3	11.5%
- Milk, Butter and Dried Milk Products	1	0	0
- Cheese and Cheese Products	6	1	16.6%
- Fishery/Fishery Products	39	0	0
- Fruit & Fruit Products	4	0	0
- Fruit & Fruit Products	33	4	12.1%
- Nuts and Edible Seeds	5	2	40%
- Vegetable and Vegetable Products	1	0	0
- Vegetable and Vegetable Products	1	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	12	0	0
- Soft Drinks and Waters	4	2	50%
- Beverage Bases	2	0	0
- Coffee and Tea	6	0	0
- Alcoholic Beverages	2	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	8	3	37.5%
- Chocolate and Cocoa Products	4	0	0
- Food Sweeteners (Nutritive)	2	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2	0	0
- Soups	9	0	0
SENEGAL			
- Whole Grains, Milled Grain Products, and Starch	12	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	3	0	0
- Macaroni and Noodle Products	4	0	0
- Cereal Preparations, Breakfast Foods	4	0	0
- Milk, Butter and Dried Milk Products	1	0	0
- Fishery/Fishery Products	496	0	0
- Fruit & Fruit Products	1	0	0
- Nuts and Edible Seeds	2	0	0
- Vegetable and Vegetable Products	1	0	0
- Vegetable and Vegetable Products	1	0	0
- Spices, Flavors, and Salts	1	0	0
- Coffee and Tea	7	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
- Soups	2	0	0
- Baby (Infant and Junior) Food Products	1	0	0
SEYCHELLES			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fishery/Fishery Products	4	0	0
SIERRA LEONE			

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Whole Grains, Milled Grain Products, and Starch	1	0	0
- Fishery/Fishery Products	2	0	0
- Meat, Meat Products, and Poultry	1	0	0
- Vegetable Oils (includes Olive Oil)	12	0	0
- Spices, Flavors, and Salts	2	0	0
- Coffee and Tea	2	0	0
- Alcoholic Beverages	2	0	0
SINGAPORE			
- Whole Grains, Milled Grain Products, and Starch	63	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	914	0	0
- Macaroni and Noodle Products	256	1	Less than 1%
- Cereal Preparations, Breakfast Foods	71	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	10	0	0
- Milk, Butter and Dried Milk Products	5	0	0
- Filled/Imitation Milk Products	1	0	0
- Fishery/Fishery Products	1127	4	Less than 1%
- Vegetable Protein Products (Simulated Meats)	3	0	0
- Fruit and Fruit Products	19	0	0
- Fruit and Fruit Products	294	1	Less than 1%
- Fruit and Fruit Products	3	1	33%
- Nuts and Edible Seeds	42	0	0
- Vegetable and Vegetable Products	123	0	0
- Vegetable and Vegetable Products	53	0	0
- Vegetable Oils (Includes Olive Oil)	46	0	0
- Dressings and Condiments	2	0	0
- Spices, Flavors, and Salts	198	0	0
- Soft Drinks and Waters	179	0	0
- Beverage Bases	71	0	0
- Coffee and Tea	260	0	0
- Alcoholic Beverages	64	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	100	4	4%
- Chocolate and Cocoa Products	282	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	2	0	0
- Food Sweeteners (Nutritive)	4	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	288	0	0
- Soups	16	0	0
- Baby (Infant and Junior) Food Products	2	0	0
SLOVAKIA			
- Whole Grains, Milled Grain Products, and Starch	27	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	3	0	0
- Macaroni and Noodle Products	24	1	4.1%
- Cheese and Cheese Products	51	0	0
- Fishery/Fishery Products	4	0	0
- Vegetable and Vegetable Products	4	0	0
- Vegetable and Vegetable Products	4	0	0
- Vegetable Oils (includes Olive Oil)	1	0	0
- Coffee and Tea	1	0	0
- Alcoholic Beverages	28	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	22	0	0
- Chocolate and Cocoa Products	14	0	0
SLOVENIA			
- Whole Grains, Milled Grain Products and Starch	1	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	26	0	0
- Macaroni and Noodle Products	16	0	0
- Cereal Preparations, Breakfast Foods	3	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
- Milk, Butter and Dried Milk Products	5	0	0
- Cheese and Cheese Products	32	0	0
- Fishery/Fishery Products	5	0	0
- Fruit and Fruit Products	54	0	0
- Fruit and Fruit Products	33	0	0
- Fruit and Fruit Products	6	0	0
- Vegetable and Vegetable Products	3	0	0
- Vegetable and Vegetable Products	11	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Vegetable Oils (Includes Olive Oil)	3	0	0
- Dressings and Condiments	2	0	0
- Spices, Flavors, and Salts	6	0	0
- Soft Drinks and Waters	54	0	0
- Beverage Bases	15	0	0
- Coffee and Tea	25	0	0
- Alcoholic Beverages	479	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	17	0	0
- Food Sweeteners (Nutritive)	3	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	11	0	0
- Baby (Infant and Junior) Food Products	4	0	0
SOLOMON ISLANDS			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
- Fishery/Fishery Products	18	0	0
- Chocolate and Cocoa Products	1	0	0
SOMALIA			
- Fruit & Fruit Products	1	0	0
SOUTH AFRICA			
- Whole Grains, Milled Grain Products and Starch	13	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	56	2	3.5%
- Cereal Preparations, Breakfast Foods	51	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	30	0	0
- Milk, Butter and Dried Milk Products	37	0	0
- Cheese and Cheese Products	1	0	0
- Ice Cream and Related Products	4	0	0
- Filled/Imitation Milk Products	1	0	0
- Egg and Egg Products	1	0	0
- Fishery/Fishery Products	1037	5	Less than 1%
- Meat, Meat Products and Poultry	4	0	0
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit and Fruit Products	693	2	Less than 1%
- Fruit and Fruit Products	781	1	Less than 1%
- Fruit and Fruit Products	19	0	0
- Nuts and Edible Seeds	127	0	0
- Vegetable and Vegetable Products	78	0	0
- Vegetable and Vegetable Products	67	0	0
- Vegetable Oils (Includes Olive Oil)	5	0	0
- Dressings and Condiments	86	0	0
- Spices, Flavors, and Salts	154	0	0
- Soft Drinks and Waters	92	3	3.2%
- Beverage Bases	9	0	0
- Coffee and Tea	98	0	0
- Alcoholic Beverages	1271	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	90	4	4.4%
- Chocolate and Cocoa Products	113	1	Less than 1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	7	0	0
- Food Sweeteners (Nutritive)	26	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	38	0	0
- Soups	4	0	0
- Prepared Salad Products	2	0	0
- Baby (Infant and Junior) Food Products	3	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
SPAIN			
- Whole Grains, Milled Grain Products and Starch	50	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	912	0	0
- Macaroni and Noodle Products	4	0	0
- Cereal Preparations, Breakfast Foods	4	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	15	0	0
- Milk, Butter and Dried Milk Products	42	0	0
- Cheese and Cheese Products	888	3	Less than 1%
- Ice Cream and Related Products	79	1	1.2%
- Egg and Egg Products	7	0	0
- Fishery/Fishery Products	2468	6	Less than 1%
- Meat, Meat Products and Poultry	14	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Vegetable Protein Products (Simulated Meats)	8	0	0
- Fruit and Fruit Products	4095	1	Less than 1%
- Fruit and Fruit Products	15310	11	Less than 1%
- Fruit and Fruit Products	54	0	0
- Nuts and Edible Seeds	68	0	0
- Vegetable and Vegetable Products	7709	21	Less than 1%
- Vegetable and Vegetable Products	556	9	1.6%
- Vegetable Oils (Includes Olive Oil)	2182	1	Less than 1%
- Dressings and Condiments	339	0	0
- Spices, Flavors, and Salts	2300	1	Less than 1%
- Soft Drinks and Waters	100	0	0
- Beverage Bases	22	0	0
- Coffee and Tea	89	0	0
- Alcoholic Beverages	7445	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1116	1	Less than 1%
- Chocolate and Cocoa Products	276	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	30	0	0
- Food Sweeteners (Nutritive)	27	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	126	0	0
- Soups	31	0	0
- Prepared Salad Products	11	0	0
- Baby (Infant and Junior) Food Products	3	0	0
- Dietary Conventional Foods and Meal Replacements	30	0	0
SRI LANKA			
- Whole Grains, Milled Grain Products and Starch	26	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	23	0	0
- Macaroni and Noodle Products	7	0	0
- Milk, Butter and Dried Milk Products	8	0	0
- Fishery/Fishery Products	233	0	0
- Fruit and Fruit Products	3	0	0
- Fruit and Fruit Products	46	3	6.5%
- Fruit and Fruit Products	1	0	0
- Nuts and Edible Seeds	74	0	0
- Vegetable and Vegetable Products	37	0	0
- Vegetable and Vegetable Products	6	0	0
- Vegetable Oils (Includes Olive Oil)	1	0	0
- Dressings and Condiments	50	1	2%
- Spices, Flavors, and Salts	337	0	0
- Beverage Bases	32	0	0
- Coffee and Tea	1376	0	0
- Alcoholic Beverages	2	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
- Chocolate and Cocoa Products	6	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	1	0	0
- Food Sweeteners (Nutritive)	2	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	6	0	0
- Soups	8	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
ST. VINCENT & THE GRENADI			
- Whole Grains, Milled Grain Products, and Starch	2	0	0
- Fishery/Fishery Products	40	0	0
- Fruit & Fruit Products	1	0	0
- Fruit & Fruit Products	1	0	0
- Vegetable and Vegetable Products	37	0	0
- Vegetable and Vegetable Products	10	0	0
- Spices, Flavors, and Salts	1	0	0
- Soft Drinks and Waters	2	0	0
- Alcoholic Beverages	2	0	0
SUDAN			
- Spices, Flavors, and Salts	1	0	0
- Coffee and Tea	2	0	0
SURINAM			
- Whole Grains, Milled Grain Products, and Starch	3	0	0
- Fishery/Fishery Products	470	6	1.2%
- Fruit & Fruit Products	1	0	0
- Vegetable and Vegetable Products	1	0	0
- Spices, Flavors, and Salts	1	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	3	0	0
SWAZILAND			
- Fishery/Fishery Products	1	0	0
- Fruit & Fruit Products	10	0	0
- Spices, Flavors, and Salts	21	0	0
- Beverage Bases	2	0	0
- Food Sweeteners	19	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties	2	0	0
SWEDEN			
- Whole Grains, Milled Grain Products and Starch	101	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	526	0	0
- Cereal Preparations, Breakfast Foods	9	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	8	0	0
- Milk, Butter and Dried Milk Products	31	0	0
- Cheese and Cheese Products	100	0	0
- Ice Cream and Related Products	1	0	0
- Fishery/Fishery Products	239	0	0
- Meat, Meat Products and Poultry	25	0	0
- Fruit and Fruit Products	406	0	0
- Fruit and Fruit Products	26	0	0
- Fruit and Fruit Products	4	0	0
- Nuts and Edible Seeds	24	0	0
- Vegetable and Vegetable Products	53	0	0
- Vegetable and Vegetable Products	120	0	0
- Vegetable Oils (Includes Olive Oil)	7	0	0
- Dressings and Condiments	51	0	0
- Spices, Flavors, and Salts	16	0	0
- Soft Drinks and Waters	62	0	0
- Beverage Bases	4	0	0
- Coffee and Tea	2136	0	0
- Alcoholic Beverages	35	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	405	0	0
- Chocolate and Cocoa Products	208	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	3	0	0
- Food Sweeteners (Nutritive)	20	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	20	0	0
- Soups	20	0	0
- Baby (Infant and Junior) Food Products	9	0	0
- Dietary Conventional Foods and Meal Replacements	15	0	0
SWITZERLAND			
- Whole Grains, Milled Grain Products and Starch	90	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	1135	0	0
- Macaroni and Noodle Products	25	0	0
- Cereal Preparations, Breakfast Foods	239	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Snack Food Items (Flour, Meal or Vegetable Base)	14	0	0
- Milk, Butter and Dried Milk Products	15	0	0
- Cheese and Cheese Products	1213	0	0
- Ice Cream and Related Products	7	0	0
- Filled/Imitation Milk Products	103	0	0
- Fishery/Fishery Products	60	0	0
- Meat, Meat Products and Poultry	1	0	0
- Vegetable Protein Products (Simulated Meats)	1	0	0
- Fruit and Fruit Products	1642	0	0
- Fruit and Fruit Products	739	0	0
- Fruit and Fruit Products	33	0	0
- Nuts and Edible Seeds	415	0	0
- Vegetable and Vegetable Products	47	0	0
- Vegetable and Vegetable Products	126	0	0
- Vegetable Oils (Includes Olive Oil)	14	0	0
- Dressings and Condiments	30	0	0
- Spices, Flavors, and Salts	613	0	0
- Soft Drinks and Waters	44	0	0
- Beverage Bases	36	0	0
- Coffee and Tea	297	4	1.3%
- Alcoholic Beverages	481	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	595	0	0
- Chocolate and Cocoa Products	3365	1	Less than 1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	112	0	0
- Food Sweeteners (Nutritive)	156	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	281	0	0
- Soups	764	0	0
- Prepared Salad Products	3	0	0
- Baby (Infant and Junior) Food Products	16	0	0
- Dietary Conventional Foods and Meal Replacements	10	0	0
SYRIAN ARAB REPUBLIC			
- Whole Grains, Milled Grain Products and Starch	2	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	3	3	100%
- Cereal Preparations, Breakfast Foods	2	0	0
- Milk, Butter and Dried Milk Products	2	0	0
- Cheese and Cheese Products	2	0	0
- Meat, Meat Products and Poultry	1	0	0
- Fruit and Fruit Products	16	0	0
- Fruit and Fruit Products	38	2	5.2%
- Fruit and Fruit Products	1	0	0
- Nuts and Edible Seeds	18	0	0
- Vegetable and Vegetable Products	48	20	41.6%
- Vegetable and Vegetable Products	7	0	0
- Vegetable Oils (Includes Olive Oil)	6	0	0
- Spices, Flavors, and Salts	177	0	0
- Coffee and Tea	2	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	11	0	0
- Chocolate and Cocoa Products	14	1	7.1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	3	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	1	100%
- Soups	1	0	0
TAIWAN, REPUBLIC OF CHINA			
- Whole Grains, Milled Grain Products and Starch	1257	1	Less than 1%
- Bakery Products, Doughs, Bakery Mixes and Icings	4180	6	Less than 1%
- Macaroni and Noodle Products	3737	3	Less than 1%
- Cereal Preparations, Breakfast Foods	109	1	Less than 1%
- Snack Food Items (Flour, Meal or Vegetable Base)	162	1	Less than 1%
- Milk, Butter and Dried Milk Products	24	0	0
- Cheese and Cheese Products	1	0	0
- Ice Cream and Related Products	23	0	0
- Filled/Imitation Milk Products	9	0	0
- Egg and Egg Products	119	0	0
- Fishery/Fishery Products	5294	16	Less than 1%
- Meat, Meat Products and Poultry	2	0	0
- Vegetable Protein Products (Simulated Meats)	1165	1	Less than 1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Fruit and Fruit Products	113	3	2.6%
- Fruit and Fruit Products	1046	10	Less than 1%
- Fruit and Fruit Products	49	1	2%
- Nuts and Edible Seeds	525	5	Less than 1%
- Vegetable and Vegetable Products	3427	18	Less than 1%
- Vegetable and Vegetable Products	2259	12	Less than 1%
- Vegetable Oils (Includes Olive Oil)	346	0	0
- Dressings and Condiments	334	1	Less than 1%
- Spices, Flavors, and Salts	821	4	Less than 1%
- Soft Drinks and Waters	769	2	Less than 1%
- Beverage Bases	569	1	Less than 1%
- Coffee and Tea	1424	2	Less than 1%
- Alcoholic Beverages	39	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1629	6	Less than 1%
- Chocolate and Cocoa Products	27	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	952	2	Less than 1%
- Food Sweeteners (Nutritive)	120	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3537	2	Less than 1%
- Soups	384	6	1.5%
- Prepared Salad Products	1	0	0
- Baby (Infant and Junior) Food Products	37	0	0
- Dietary Conventional Foods and Meal Replacements	16	0	0
TAJIKISTAN			
- Vegetable and Vegetable Products	1	1	100%
TANZANIA, UNITED REPUBLIC			
- Fishery/Fishery Products	77	2	2.5%
- Vegetable and Vegetable Products	48	0	0
- Vegetable and Vegetable Products	3	0	0
- Spices, Flavors, and Salts	5	0	0
- Coffee and Tea	120	0	0
- Alcoholic Beverages	1	0	0
THAILAND			
- Whole Grains, Milled Grain Products and Starch	10109	19	Less than 1%
- Bakery Products, Doughs, Bakery Mixes and Icings	923	4	Less than 1%
- Macaroni and Noodle Products	2275	13	Less than 1%
- Cereal Preparations, Breakfast Foods	28	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	83	0	0
- Milk, Butter and Dried Milk Products	27	1	3.7%
- Ice Cream and Related Products	24	0	0
- Filled/Imitation Milk Products	2	0	0
- Egg and Egg Products	227	0	0
- Fishery/Fishery Products	25323	12	Less than 1%
- Meat, Meat Products and Poultry	5	0	0
- Fruit and Fruit Products	250	0	0
- Fruit and Fruit Products	12919	1	Less than 1%
- Fruit and Fruit Products	238	16	6.7%
- Nuts and Edible Seeds	782	3	Less than 1%
- Vegetable and Vegetable Products	5936	3	Less than 1%
- Vegetable and Vegetable Products	1897	12	Less than 1%
- Vegetable Oils (Includes Olive Oil)	46	6	13%
- Dressings and Condiments	201	0	0
- Spices, Flavors, and Salts	1403	0	0
- Soft Drinks and Waters	368	12	3.2%
- Beverage Bases	2572	6	Less than 1%
- Coffee and Tea	334	17	5%
- Alcoholic Beverages	137	2	1.4%
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	418	0	0
- Chocolate and Cocoa Products	57	14	24.5%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	290	0	0
- Food Sweeteners (Nutritive)	164	1	Less than 1%
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	4181	0	0
- Soups	615	7	1.1%
- Prepared Salad Products	41	3	7.3%
- Baby (Infant and Junior) Food Products	173	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Dietary Conventional Foods and Meal Replacements	3	0	0
TOGO			
- Whole Grains, Milled Grain Products and Starch	2	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	2	0	0
- Fishery/Fishery Products	1	0	0
- Vegetable and Vegetable Products	3	0	0
- Vegetable Oil (includes Olive Oil)	2	0	0
- Spices, Flavors, and Salts	5	0	0
TOKELAU ISLANDS			
- Fishery/Fishery Products	1	0	0
- Meat, Meat Products, and Poultry	2	0	0
- Fruit & Fruit Products	1	0	0
- Fruit & Fruit Products	1	0	0
- Vegetable and Vegetable Products	1	0	0
- Spices, Flavors, and Salts	16	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
TONGA			
- Fishery/Fishery Products	749	0	0
- Fruit & Fruit Products	1	0	0
- Vegetable and Vegetable Products	1	0	0
- Vegetable and Vegetable Products	19	0	0
- Spices, Flavors, and Salts	20	0	0
- Coffee and Tea	1	0	0
TRINIDAD & TOBAGO			
- Whole Grains, Milled Grain Products and Starch	18	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	34	0	0
- Macaroni and Noodle Products	22	0	0
- Cereal Preparations, Breakfast Foods	68	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	60	0	0
- Milk, Butter and Dried Milk Products	40	0	0
- Cheese and Cheese Products	8	0	0
- Ice Cream and Related Products	1	0	0
- Fishery/Fishery Products	3788	12	Less than 1%
- Fruit and Fruit Products	28	0	0
- Fruit and Fruit Products	107	4	3.7%
- Fruit and Fruit Products	9	0	0
- Nuts and Edible Seeds	9	1	11.1%
- Vegetable and Vegetable Products	377	2	Less than 1%
- Vegetable and Vegetable Products	61	0	0
- Vegetable Oils (Includes Olive Oil)	17	1	5.8%
- Dressings and Condiments	96	1	1%
- Spices, Flavors, and Salts	244	1	Less than 1%
- Soft Drinks and Waters	190	7	3.6%
- Beverage Bases	26	0	0
- Coffee and Tea	13	0	0
- Alcoholic Beverages	87	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	320	1	Less than 1%
- Chocolate and Cocoa Products	6	0	0
- Food Sweeteners (Nutritive)	25	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	168	1	Less than 1%
- Baby (Infant and Junior) Food Products	25	0	0
TUNISIA			
- Whole Grains, Milled Grain Products and Starch	24	0	0
- Macaroni and Noodle Products	13	0	0
- Fishery/Fishery Products	32	0	0
- Fruit and Fruit Products	2	0	0
- Fruit and Fruit Products	26	2	7.6%
- Fruit and Fruit Products	1	0	0
- Vegetable and Vegetable Products	8	0	0
- Vegetable Oils (Includes Olive Oil)	43	0	0
- Dressings and Condiments	1	0	0
- Spices, Flavors, and Salts	8	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	7	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
TURKEY			
- Whole Grains, Milled Grain Products and Starch	83	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	219	1	Less than 1%
- Macaroni and Noodle Products	54	0	0
- Cereal Preparations, Breakfast Foods	1	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	6	0	0
- Cheese and Cheese Products	31	0	0
- Fishery/Fishery Products	99	4	4%
- Meat, Meat Products and Poultry	4	0	0
- Fruit and Fruit Products	267	10	3.7%
- Fruit and Fruit Products	1277	10	Less than 1%
- Fruit and Fruit Products	24	1	4.1%
- Nuts and Edible Seeds	403	3	Less than 1%
- Vegetable and Vegetable Products	1078	21	1.9%
- Vegetable and Vegetable Products	101	6	5.9%
- Vegetable Oils (Includes Olive Oil)	646	0	0
- Dressings and Condiments	14	0	0
- Spices, Flavors, and Salts	1102	1	Less than 1%
- Soft Drinks and Waters	58	0	0
- Beverage Bases	15	0	0
- Coffee and Tea	85	0	0
- Alcoholic Beverages	21	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	224	9	4%
- Chocolate and Cocoa Products	76	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	3	0	0
- Food Sweeteners (Nutritive)	13	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	109	0	0
- Soups	17	1	5.8%
- Prepared Salad Products	1	0	0
- Baby (Infant and Junior) Food Products	17	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
TURKS & CAICOS ISLAND			
- Fishery/Fishery Products	190	0	0
- Vegetable and Vegetable Products	1	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
UGANDA			
- Fishery/Fishery Products	178	0	0
- Spices, Flavors, and Salts	4	0	0
- Coffee and Tea	184	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
UKRAINE			
- Whole Grains, Milled Grain Products and Starch	18	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	26	0	0
- Macaroni and Noodle Products	2	0	0
- Cereal Preparations, Breakfast Foods	1	0	0
- Milk, Butter and Dried Milk Products	95	0	0
- Filled/Imitation Milk Products	2	0	0
- Fishery/Fishery Products	2	0	0
- Fruit and Fruit Products	3	0	0
- Fruit and Fruit Products	16	0	0
- Nuts and Edible Seeds	4	0	0
- Vegetable and Vegetable Products	14	2	14.2%
- Vegetable and Vegetable Products	2	0	0
- Vegetable Oils (Includes Olive Oil)	6	0	0
- Dressings and Condiments	4	0	0
- Spices, Flavors, and Salts	6	0	0
- Soft Drinks and Waters	18	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	5	0	0
- Alcoholic Beverages	15	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	30	0	0
- Chocolate and Cocoa Products	16	0	0
- Food Sweeteners (Nutritive)	1	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	1	100%
- Dietary Conventional Foods and Meal Replacements	20	0	0
UNITED ARAB EMIRATES			
- Whole Grains, Milled Grain Products and Starch	3	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	47	0	0
- Macaroni and Noodle Products	7	0	0
- Milk, Butter and Dried Milk Products	10	0	0
- Cheese and Cheese Products	4	0	0
- Fishery/Fishery Products	62	0	0
- Fruit and Fruit Products	15	0	0
- Fruit and Fruit Products	40	0	0
- Nuts and Edible Seeds	5	0	0
- Vegetable and Vegetable Products	17	2	11.7%
- Vegetable and Vegetable Products	4	0	0
- Vegetable Oils (Includes Olive Oil)	1	0	0
- Dressings and Condiments	2	0	0
- Spices, Flavors, and Salts	38	0	0
- Soft Drinks and Waters	21	0	0
- Beverage Bases	1	0	0
- Coffee and Tea	2	0	0
- Alcoholic Beverages	4	0	0
- Chocolate and Cocoa Products	4	0	0
- Food Sweeteners (Nutritive)	2	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
- Soups	2	0	0
UNITED KINGDOM			
- Whole Grains, Milled Grain Products and Starch	1366	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	3896	3	Less than 1%
- Macaroni and Noodle Products	40	0	0
- Cereal Preparations, Breakfast Foods	135	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	338	0	0
- Milk, Butter and Dried Milk Products	250	0	0
- Cheese and Cheese Products	4594	1	Less than 1%
- Ice Cream and Related Products	38	0	0
- Filled/Imitation Milk Products	3	0	0
- Egg and Egg Products	19	0	0
- Fishery/Fishery Products	3952	13	Less than 1%
- Meat, Meat Products and Poultry	233	0	0
- Vegetable Protein Products (Simulated Meats)	4	0	0
- Fruit and Fruit Products	2414	0	0
- Fruit and Fruit Products	846	1	Less than 1%
- Fruit and Fruit Products	111	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Nuts and Edible Seeds	103	1	Less than 1%
- Vegetable and Vegetable Products	729	15	2%
- Vegetable and Vegetable Products	318	5	1.5%
- Vegetable Oils (Includes Olive Oil)	322	2	Less than 1%
- Dressings and Condiments	1071	2	Less than 1%
- Spices, Flavors, and Salts	1374	2	Less than 1%
- Soft Drinks and Waters	813	0	0
- Beverage Bases	99	0	0
- Coffee and Tea	1926	0	0
- Alcoholic Beverages	15342	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2779	2	Less than 1%
- Chocolate and Cocoa Products	3171	1	Less than 1%
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	251	0	0
- Food Sweeteners (Nutritive)	407	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	902	3	Less than 1%
- Soups	339	2	Less than 1%
- Prepared Salad Products	7	0	0
- Baby (Infant and Junior) Food Products	35	1	2.8%
- Dietary Conventional Foods and Meal Replacements	25	2	8%
UNITED STATES			
- Whole Grains, Milled Grain Products and Starch	501	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	1657	0	0
- Macaroni and Noodle Products	2951	1	Less than 1%
- Cereal Preparations, Breakfast Foods	404	1	Less than 1%
- Snack Food Items (Flour, Meal or Vegetable Base)	144	0	0
- Milk, Butter and Dried Milk Products	825	2	Less than 1%
- Cheese and Cheese Products	540	0	0
- Ice Cream and Related Products	11	0	0
- Filled/Imitation Milk Products	10	0	0
- Egg and Egg Products	10	0	0
- Fishery/Fishery Products	3903	10	Less than 1%
- Meat, Meat Products and Poultry	233	0	0
- Vegetable Protein Products (Simulated Meats)	220	0	0
- Fruit and Fruit Products	1879	1	Less than 1%
- Fruit and Fruit Products	408	1	Less than 1%
- Fruit and Fruit Products	81	0	0
- Nuts and Edible Seeds	592	4	Less than 1%
- Vegetable and Vegetable Products	3787	5	Less than 1%
- Vegetable and Vegetable Products	1585	0	0
- Vegetable Oils (Includes Olive Oil)	311	0	0
- Dressings and Condiments	355	1	Less than 1%
- Spices, Flavors, and Salts	2419	0	0
- Soft Drinks and Waters	300	0	0
- Beverage Bases	366	0	0
- Coffee and Tea	1573	8	Less than 1%
- Alcoholic Beverages	546	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2251	1	Less than 1%
- Chocolate and Cocoa Products	792	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	197	1	Less than 1%
- Food Sweeteners (Nutritive)	329	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	870	2	Less than 1%
- Soups	183	2	1%
- Prepared Salad Products	42	0	0
- Baby (Infant and Junior) Food Products	111	3	2.7%
- Dietary Conventional Foods and Meal Replacements	503	2	Less than 1%
URAGUAY			
- Whole Grains, Milled Grain Products and Starch	3	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	8	0	0
- Cereal Preparations, Breakfast Foods	1	0	0
- Milk, Butter and Dried Milk Products	7	0	0
- Cheese and Cheese Products	75	0	0
- Fishery/Fishery Products	948	2	Less than 1%
- Meat, Meat Products and Poultry	19	0	0
- Fruit and Fruit Products	12	0	0
- Fruit and Fruit Products	2	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Nuts and Edible Seeds	20	0	0
- Vegetable and Vegetable Products	4	0	0
- Vegetable and Vegetable Products	3	0	0
- Spices, Flavors, and Salts	13	0	0
- Soft Drinks and Waters	16	0	0
- Beverage Bases	3	0	0
- Coffee and Tea	25	0	0
- Alcoholic Beverages	50	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	20	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	6	0	0
- Food Sweeteners (Nutritive)	10	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	3	0	0
- Soups	4	0	0
UZBEKISTAN			
- Fruit & Fruit Products	4	4	100%
- Nuts and Edible Seeds	1	0	0
- Alcoholic Beverages	1	0	0
VANUATU			
- Vegetable and Vegetable Products	1	0	0
- Vegetable and Vegetable Products	91	0	0
VATICAN CITY STATE			
- Fishery/Fishery Products	1	0	0
- Vegetable and Vegetable Products	2	0	0
VENEZUELA			
- Whole Grains, Milled Grain Products and Starch	236	0	0
- Bakery Products, Doughs, Bakery Mixes and Icings	147	0	0
- Macaroni and Noodle Products	74	0	0
- Cereal Preparations, Breakfast Foods	183	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	11	0	0
- Milk, Butter and Dried Milk Products	4	0	0
- Fishery/Fishery Products	3205	16	Less than 1%
- Fruit and Fruit Products – Product Class and Subclass Codes	63	0	0
- Fruit and Fruit Products – Product Class and Subclass Codes	1297	0	0
- Nuts and Edible Seeds	124	4	3.2%
- Vegetable and Vegetable Products	33	1	3%
- Vegetable and Vegetable Products	55	0	0
- Vegetable Oils (Includes Olive Oil)	17	0	0
- Spices, Flavors, and Salts	80	0	0
- Soft Drinks and Waters	26	0	0
- Beverage Bases	5	0	0
- Coffee and Tea	592	0	0
- Alcoholic Beverages	135	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	4	0	0
- Chocolate and Cocoa Products	50	0	0
- Food Sweeteners (Nutritive)	10	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	1	0	0
- Soups	53	0	0
- Dietary Conventional Foods and Meal Replacements	1	0	0
VIETNAM			
- Whole Grains, Milled Grain Products and Starch	120	7	5.8%
- Bakery Products, Doughs, Bakery Mixes and Icings	533	9	1.6%
- Macaroni and Noodle Products	465	14	3%
- Cereal Preparations, Breakfast Foods	16	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	41	0	0
- Milk, Butter and Dried Milk Products	12	0	0
- Ice Cream and Related Products	1	0	0
- Fishery/Fishery Products	3493	11	Less than 1%
- Meat, Meat Products and Poultry	1	0	0
- Fruit and Fruit Products	37	1	2.7%
- Fruit and Fruit Products	715	8	1.1%
- Fruit and Fruit Products	118	4	3.3%
- Nuts and Edible Seeds	328	15	4.5%
- Vegetable and Vegetable Products	181	12	6.6%
- Vegetable and Vegetable Products	354	11	3.1%

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
- Dressings and Condiments	8	0	0
- Spices, Flavors, and Salts	368	3	Less than 1%
- Soft Drinks and Waters	14	1	7.1%
- Beverage Bases	24	0	0
- Coffee and Tea	1245	0	0
- Alcoholic Beverages	28	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	258	12	4.6%
- Chocolate and Cocoa Products	1	0	0
- Gelatin, Rennet, Pudding Mixes and Pie Fillings	24	0	0
- Food Sweeteners (Nutritive)	26	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	109	2	1.8%
- Soups	46	0	0
VIRGIN ISLANDS OF THE U.			
- Bakery Products, Doughs, Bakery Mixes, and Icings	2	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	1	0	0
- Cheese and Cheese Products	1	0	0
- Fishery/Fishery Products	13	0	0
- Fruit & Fruit Products	2	0	0
- Fruit & Fruit Products	7	0	0
- Fruit & Fruit Products	1	0	0
- Dressings and Condiments	5	0	0
- Spices, Flavors, and Salts	4	0	0
- Coffee and Tea	4	0	0
- Alcoholic Beverages	3	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	1	0	0
WEST BANK			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
WESTERN SAHARA			
- Bakery Products, Doughs, Bakery Mixes, and Icings	1	0	0
WESTERN SAMOA			
- Fishery/Fishery Products	2578	2	Less than 1%
- Fruit & Fruit Products	4	0	0
- Fruit & Fruit Products	1	1	100%
- Vegetable and Vegetable Products	9	0	0
- Beverage Bases	1	0	0
- Chocolate and Cocoa Products	7	0	0
YEMEN			
- Bakery Products, Doughs, Bakery Mixes, and Icings	3	0	0
- Fishery/Fishery Products	5	0	0
- Vegetable and Vegetable Products	1	0	0
- Coffee and Tea	38	0	0
YEMEN, DEMOCRATIC (SOUTH)			
- Fishery/Fishery Products	1	0	0
- Coffee and Tea	2	0	0

COUNTRY CODE	TOTAL ENTRIES	ENTRIES REFUSED	REJECTION RATE %
YUGOSLAVIA			
- Whole Grains, Milled Grain Products, and Starch	2	0	0
- Bakery Products, Doughs, Bakery Mixes, and Icings	8	0	0
- Cereal Preparations, Breakfast Foods	3	0	0
- Snack Food Items (Flour, Meal or Vegetable Base)	2	0	0
- Milk, Butter and Dried Milk Products	2	0	0
- Vegetable Protein Products (Simulated Meats)	2	0	0
- Fruit & Fruit Products	3	0	0
- Fruit & Fruit Products	4	0	0
- Vegetable and Vegetable Products	2	0	0
- Vegetable and Vegetable Products	3	0	0
- Dressings and Condiments	2	0	0
- Spices, Flavors, and Salts	16	0	0
- Soft Drinks and Waters	2	0	0
- Coffee and Tea	10	0	0
- Alcoholic Beverages	8	0	0
- Candy Without Chocolate, Candy Specialties, and Chewing Gum	2	0	0
- Chocolate and Cocoa Products	2	0	0
- Gelatin, Rennet, Pudding Mixes, and Pie Fillings	10	0	0
- Multiple Food Dinners, Gravies, Sauces, and Specialties (Total Diet)	2	0	0
- Soups	16	0	0
ZAMBIA			
- Fruit & Nut Products	8	0	0
- Nuts and Edible Seeds	5	0	0
- Vegetable and Vegetable Products	1	0	0
- Beverage Bases	15	0	0
- Coffee and Tea	2	0	0
ZIMBABWE			
- Fruit & Nut Products	5	0	0
- Nuts and Edible Seeds	20	0	0
- Vegetable and Vegetable Products	4	0	0
- Dressings and Condiments	38	0	0
- Spices, Flavors, and Salts	1	0	0
- Beverage Bases	45	0	0
- Coffee and Tea	4	0	0

SEAFOOD EQUIVALENCY

Question. Seafood has been subject to mandatory process control systems, called HACCP, since December 1998. What percent of the domestic seafood industry is currently in compliance with the HACCP regulations? What percent of the imported seafood industry is currently in compliance with the HACCP regulation? How is FDA using the $8 million that this committee appropriated for fiscal year 1998 to improve inspection of the seafood industry?

Answer. I will be happy to provide this information for the record.

[The information follows:]

Domestic compliance.—As background, FDA's traditional regulatory database captures data on the classification of inspections, for purposes of regulatory follow-up. In this database, inspections are categorized as:

—NAI—no action indicated, where there are essentially no significant inspectional findings and no regulatory response needed;

—VAI—voluntary action indicated, where there are some significant inspectional findings, but they are not sufficient to warrant a regulatory response; or

—OAI—official action indicated, where inspection findings warrant a regulatory response (e.g., warning letter, seizure, injunction, prosecution). For regulatory purposes, FDA has traditionally considered firms that are classified as NAI or VAI as being in compliance.

Approximately 5 percent of the 3,334 seafood HACCP inspections conducted in 1999 were classified OAI for HACCP purposes, and these firms were sent Warning Letters by FDA. These inspections constitute those firms that exhibited significant violations and did not exhibit a willingness to make prompt and appropriate corrections.

For the seafood HACCP program, FDA has created a separate database, which is used for program evaluation and management purposes. The database includes data on a wide range of very specific features of processors' HACCP plans and implementation. A deficiency in any of these areas counts as noncompliance under this grading system, even though the firm may be doing well in all other aspects of its HACCP system. "Compliance," as defined by this database, is a rigorous standard. In 1999, 55 percent of inspected firms were "in compliance" by this standard. This exceeded FDA's GPRA goal by 5 percent.

It should be noted that a significant percentage of firms that were not in compliance by the latter standard did not receive warning letters. As noted above, warning

letters were reserved for firms that were not showing good faith progress toward full compliance. The overwhelming majority of firms are now either in full compliance or demonstrating good progress towards it. For that reason, we expect to see significant improvement this year.

Foreign compliance.—Over half of all seafood consumed in the United States is imported from a total of about 135 countries. A number of these countries have advanced regulatory systems for seafood while others do not. There are literally tens of thousands of foreign processors that export to the U.S. Their products are therefore subject to U.S. requirements. FDA's traditional strategy for examining imports has been physical examination of a small percentage of products at ports-of-entry. The examination is primarily directed toward determining whether the product at the port contains substances that would cause it to be adulterated under U.S. law. This examination would not directly reveal whether the products were produced under HACCP controls in the country of origin.

Consequently, FDA has developed three new strategies to augment the port-of-entry examination process. These strategies should eventually enable us to determine an overall compliance rate for foreign HACCP. The first strategy is a new requirement on U.S. importers that they take "affirmative steps" to ensure that seafood products they are importing have been processed in accordance with U.S. requirements. Affirmative steps may be basic, threshold indicators of compliance, such as obtaining copies of the foreign processors' HACCP plans and records. Importers are not expected to be surrogate regulatory agencies. Nonetheless, the "affirmative steps" requirement is novel and, as anticipated, will take some time to be fully understood and implemented by the entire importing community.

The second strategy involves a significant increase in foreign regulatory inspections by FDA inspectors, primarily directed toward developing countries that are major exporters of seafood. The findings from those inspections generally parallel those for domestic inspections. Most processors are implementing HACCP but have not perfected it yet. For that reason, education—both for the industry and the local regulatory agencies—is a major component of these inspection visits.

The third strategy involves equivalence determinations. The nature of equivalence is such that it is expected ultimately to involve countries with advanced regulatory systems.

Improving inspections.—To provide you with a response in the shortest possible time, we are submitting the following materials that FDA has used to brief congressional staff on the seafood HACCP program. Last year, 85 percent of establishments in FDA's domestic inventory were inspected, targeted toward firms with problems reported during the previous inspection.

Question. The U.S. and Canada are now discussing an equivalency agreement on seafood imports. Are the approved levels for food and color additives permitted in seafood identical for Canada and the U.S.? If not, please list the approved levels for Canada and the U.S. for those food and color additives in seafood where the levels are not identical?

Answer. There are literally thousands of additives permitted in food in each country. One aspect of an equivalence determination is to review additives for major differences in approved uses and to assess the significance of those differences. One feature of this evaluation is to screen the additives for those that actually are approved for, and used in, seafood products being traded between the two countries.

FDA and the Canadian Food Inspection Agency are in the process of conducting such a screen. Where significant differences in approved uses are found to exist in additives that are germane to seafood products being traded between the two countries, those additives will be publicly listed and assessed pursuant to U.S. obligations under the Uruguay Round Agreements Act. FDA's preliminary assessment in this process is that there are few differences.

Question. In the seafood equivalency negotiations with Canada, has the Canadian government asserted that there are differences between the low-acid canned seafood containers approved by the FDA and by the Canadian government? If so, please summarize what these differences are and indicate whether the FDA believes the Canadian requirements provide more safety to consumers that the FDA's requirements.

Answer. With regard to low acid canned food containers, FDA and the Canadian Food Inspection Agency are reviewing differences in the way the agencies interpret the significance of certain types of can defects. FDA's preliminary view is that the US and Canadian interpretations yield the same level of protection for consumers. Neither FDA or the Canadian Food Inspection Agency have come to any conclusions about whether the issue affects equivalence. The issue remains the subject of technical discussion between the two governments.

USE OF HUMAN ANTIBIOTICS IN ANIMALS

Question. Last year, the Committee directed the Secretary of Health and Human Services to implement the GAO's recommendation on the use of human antibiotics in animals. What is the status of this implementation?

Answer. FDA has taken several steps to determine the nature of the problem associated with antibiotic resistance and will develop appropriate regulatory responses as the information permits. FDA issued Guidance for Industry Number 78, which addresses how the agency intends to consider the potential human health impact of the microbial effects associated with all uses of all classes of antimicrobial new animal drugs intended for use in food-producing animals when approving such drugs. FDA developed A Proposed Framework for Evaluating and Assuring the Human Safety of the Microbial Effects of Antimicrobial New Animal Drugs Intended for Use in Food-Producing Animals to attempt to promote animal health while protecting the public health. It describes a proposed regulatory approach, for antimicrobial products used in food producing animals. The agency has conducted a model risk assessment, plans for a second assessment, and initiates research to fill data gaps. It also describes the policy direction the agency will take in developing the new regulations.

The Center for Veterinary Medicine, CVM, is aggressively developing risk assessment strategies to assist in evaluating the human health effects from antimicrobial use in animals. The Center contracted with a quantitative risk assessment expert to develop a quantitative risk assessment model. The risk assessment intends to determine the feasibility of estimating risk to human health from resistant foodborne pathogens associated with the use of antimicrobial products in food-producing animals. In early December the draft risk assessment model was discussed at a public meeting. Scientific experts provided the agency with their comments on the strengths, limitations, and data gaps associated with the model. The agency will consider these comments, as well as comments submitted to the public docket, in finalizing the draft risk assessment.

The agency has also initiated planning for a second risk assessment to look at the indirect transfer of resistance from animals to humans. The use of antimicrobial products in food animals not only leads to the development of resistance in foodborne pathogens, but also in all bacterial associated with the animal. This risk assessment will quantify the probability, uncertainty, and variability associated with several factors. The agency initiated a feasibility study for this specific assessment in the first quarter of 2000. After the feasibility study is complete, the agency should be able to report on the timeframe to complete a risk assessment on this issue, or, if sufficient data are not currently available, identify the additional data that need to be generated to support the risk assessment.

The National Antimicrobial Resistance Monitoring System—NARMS, which is a collaborative effort among the Food and Drug Administration, the United States Department of Agriculture, and the Centers for Disease Control and Prevention, is a post-marketing activity to monitor the emergence and spread of resistance in enteric bacteria and to help ensure the continued safety and effectiveness of veterinary antimicrobials. In order to determine risks to the public health from the agricultural use of existing antimicrobials, CVM established and continues to expand NARMS. In addition, the system may form the basis for a regulatory tool to monitor the safety of new antimicrobial products afer approval.

The Center has initiated its own intramural, extramural, and collaborative research efforts to investigate factors associated with development, dissemination, and persistence of bacterial antibiotic resistance in both the animal production environment and food supply. In late February, the agency sought input from experts via a public workshop. The appropriate design for pre-approval studies to evaluate the microbial effects of antimicrobial drugs intended for use in food-producing animals was discussed. The agency is considering the need to hold additional scientific workshops on risk management issues relating to the regulation of antimicrobials use in food-producing animals. Because the agency intends to solicit expert advice from the animal health industry, the animal production industry, and consumer groups, we are not able to develop a specific time frame for all activities associated with the antibiotic resistance issue. However, FDA does not intend to wait for all the answers before taking certain actions. As opportunities develop to implement changes, we will take the necessary steps.

NATIONAL CENTER FOR FOOD SAFETY AND TECHNOLOGY

Question. For fiscal year 2000, the National Center for Food Safety and Technology (NCFST) received a $3 million appropriation. This $3 million will continue the NCFST's progress in keeping our dinner tables safe. Will the Administration

continue to support food safety efforts by supporting another $3 million appropriation for the National Center for Food Safety and Technology in fiscal year 2001?

Answer. FDA is providing the National Center for Food Safety and Technology with an increase of $1 million in fiscal year 2000 in FSI funds to expand the collaborative research in food safety for a total of $3 million. This includes the previous FSI base funding of $2 million.

In fiscal year 2001 FDA expects to continue to fund NCSFT at $3 million. FDA is not requesting new money in its fiscal year 2001 budget for this purpose.

PRESIDENT'S EGG SAFETY PLAN

Question. CDC first identified internally contaminated eggs as a source of Salmonella enteritidis infection in the late 1980's. Why has it taken so long for FDA and USDA to develop an action plan to address this public health problem? What steps could be taken to reduce the government's reaction time to food safety problem in the future?

Answer. FDA and USDA have a history of cooperation on food safety issues. FDA and USDA have supported the development of egg quality assurance programs at the state level since the early 1990s. FDA has responsibility for foodborne, including eggs, illness outbreak tracebacks, whereby the agency identifies and limits the number of contaminated eggs that reach the consumer. In addition, FDA and USDA identified the proper handling, storage and cooking of eggs in FDA's retail Food Code to reduce the potential hazard of *Salmonella Enteritidis*, or SE, contamination. Although these interventions have helped to reduce the problem of SE in eggs, they have not been as effective as the agencies had hoped in addressing the problem.

While SE was recognized as a problem in internally contaminated eggs several years ago, more recent scientific data have facilitated FDA's ability to pursue other farm-to-table interventions to prevent or reduce internal SE contamination of eggs. In June 1998, USDA and FDA completed its SE in eggs risk assessment. The risk assessment modeled the various pathways that eggs can become contaminated with SE and analyzed the effectiveness of interventions at each potential pathway. Using data generated in the risk assessment, both agencies have developed proposed regulations requiring refrigeration and labeling of eggs throughout distribution and storage. The risk assessment also serves as the basis for the scope of the Egg Safety Action Plan, which comprehensively addresses egg safety from farm to table. The Egg Safety Action Plan includes plans for additional research to fill existing data gaps in our understanding of SE in the environment and develop new technologies and interventions to further reduce the hazard.

Although the development of the risk assessment on SE in eggs has been beneficial in guiding the recent egg safety efforts of the agencies, both FDA and USDA over the past ten years have made attempts at addressing SE in eggs but have had legislation and or appropriations transferred or removed from their respective programs. For example, FDA drafted a proposal requiring refrigeration of eggs in the early 1990s when authority for refrigeration during transport and storage was legislatively given to USDA in the 1991 Egg Products Inspection Act amendments. Special funding for a successful USDA-sponsored on-farm SE risk reduction pilot project was established by Congress in 1992 but then was eliminated from appropriations in 1995. Likewise, federal authority in responding to foodborne illness through food tracebacks of egg-related illnesses was transferred from USDA to FDA in October 1995. The changes of authorities and lack of funding have contributed to delay in providing a comprehensive program to improve public health .

With regard to future government response to new food safety problems, the Food Safety Initiative funding received by FDA over the past three years has provided a solid foundation in surveillance, research , risk assessment, science-based inspection models, and education that should significantly shorten the time needed for effective government response. This will continue to improve as FDA's scientific knowledge advances and our regulatory programs develop solid track records. The recent data published by CDC through FoodNet underscore the significant progress being made by our science-based regulatory programs.

Question. While I believe the President's Plan on Egg Safety is a very ambitious first step to eliminate disease due to SE-contaminated eggs, I am puzzled as to why FDA and FSIS have divided up responsibility for egg safety. Please explain why it is better to have two agencies responsible—FDA for the producers and FSIS for the shell egg packers and egg products processors—rather than for one agency to have responsibility for egg safety from the farm to the retail level?

Answer. The President's Council on Food Safety identified one responsible agency for each stage of the farm-to-table continuum to consolidate oversight responsibilities, based on existing statutory authority and to provide clear authority at each

stage of the continuum. The Council further recognized and identified responsibilities based on the expertise and technical strengths of each agency.

Question. The President's Plan on Egg Safety gives responsibility for egg safety to several agencies: FDA develops standards for the producer; FSIS develops standards for both shell egg packers and egg products processors; and FDA and CDC conduct surveillance and monitoring. What kinds of resources need to be in place in order to ensure that monitoring from the farm to the retail level are being equally enforced? Does FDA feel they can meet the goals of the Presidents Plan on Egg Safety?

Answer. The fiscal year 2001 FDA budget request includes $5.0 million to begin implementation of the Egg Safety Action Plan. The funding will provide FDA funding to initiate an accelerated research program; development of the nationwide, consistent egg safety standards and programs; hire staff to manage the egg safety program; hire staff to train and evaluate federal, state, and industry officials in implementation of the standards. FDA intends to propose nationwide consistent standards in fiscal year 2000, finalize these standards in fiscal year 2001, and implement the standards through state contracts in fiscal years 2002 and 2003. FDA anticipates that its fiscal year 2001 request for Egg Safety will provide sufficient resources to conduct monitoring of egg safety at both the farm and retail level. Fiscal year 2001 to 2003 funding and staffing will be critical to FDA's ability meet the 50 percent reduction goal for *Salmonella Enterditis* illness associated with eggs by 2005 and to meet the goals of the President's Plan on Egg Safety.

SARA LEE LISTERIA OUTBREAK

Question. USDA has been criticized recently in the Washington Post Magazine for taking too long to issue a recall notice in the Sara Lee outbreak, an outbreak where 100 people became ill and 21 died from a hazardous bacteria, Listeria, in ready-to-eat meat products. Consumer groups have criticized USDA for failing to publicize the recall and require the industry to test ready-to-eat meat products and plants for Listeria. FDA foods, like soft cheeses and smoked fish, can also contain deadly Listeria. What steps are you planning to take to control this hazard in FDA-regulated foods? Does it make sense to have two separate agencies regulating the same hazard in different foods?

Answer. FDA, with cooperation from USDA, is conducting a Risk Assessment for Listeria monocytogenes in ready-to-eat foods. We are assessing risk management options in light of the outcome of the risk assessment. Certain foods may need to be monitored more closely than others. We are also developing appropriate risk communication messages for the consumer, medical professional, and industry.

FDA and USDA each regulate different commodities and frequently the same hazard may occur in different commodities. Each of the commodities has intrinsic factors that may affect the types of hazards that may be found. Also, the same hazard may behave differently in different commodities. We do not see the organizational structure to be a barrier in this regard.

DIETARY SUPPLEMENTS

Question. As you know, the Dietary Supplement Health and Education Act (DSHEA) which passed in 1994 has significantly reduced FDA's ability to ensure the safety of these products. Over half the U.S. population now uses some type of dietary supplement ($12 billion per year in spending). Dietary supplements are not subject to premarket safety review or approval by FDA. These products do not currently have good manufacturing standards or any uniformity in content of the "active ingredient". FDA can only intervene after "serious adverse events" including death.

Answer. Yes, it is correct that, as a general matter, dietary supplements are not subject to premarket safety review or approval by FDA. FDA is currently developing good manufacturing practices regulations to address the issue of uniform composition of dietary supplement products.

Question. Does FDA believe that "production standards" or "good manufacturing standards" for dietary supplements should be instituted? If so does this require a legislative change or does FDA believe that they have current authority to require such standards?

Answer. FDA believes that production standards or good manufacturing standards for dietary supplements should be instituted. The purpose of these standards would be to establish the minimum current good manufacturing practices—CGMPs, that must be used in activities associated with the manufacture of a dietary supplement, including packaging, labeling, testing, quality control, releasing for distribution, and holding. CGMPs are intended to ensure that manufacturing practices will not result

in an adulterated dietary supplement, and thereby protects consumers from unsafe products. CGMPs are intended to assist manufacturers in producing unadulterated dietary supplements. CGMPs would allow consumers to have confidence that the dietary supplements they purchase have the identity, strength, purity, quality, or composition that they are represented to possess.

The Dietary Supplement Health and Education Act, also referred to as DSHEA, is Public Law 103–417, and was signed into law on October 25, 1994. DSHEA, among other things, amended the Federal Food, Drug, and Cosmetic Act by adding a section, to provide, in part, that the Secretary may by regulation prescribe good manufacturing practices for dietary supplements. DSHEA provides the Secretary the authority to issue regulations on dietary supplement CGMPs. FDA plans to issue a proposed regulation this year.

ORPHAN DRUGS

The FDA budget justification book states that the agency anticipates a significant increase in overall interest in the Orphan Product Research Grants program in fiscal year 2000 and fiscal year 2001.

Question. Has the agency, therefore, increased the level of funding for this vital program in their budget request?

Answer. The agency plans to maintain the level of funding for the Orphan Product Grants program at $11.5 million in fiscal year 2001. In addition to the grant funds, the agency spends over $2.3 million to administer the Orphan Products program. The agency makes a considerable effort to maintain spending in this area and must consider a proper balance amongst all competing priorities within the Human Drugs program, especially those programs with congressional mandates.

The Orphan Drug Act allows for the awarding of market exclusivity for a given orphan indication for a pioneer orphan drug. If an improvement in that orphan drug can be demonstrated, then a new orphan status with its concomitant market exclusivity may be issued for the improved orphan product. Under such a rationale, FDA judges the second "improved" drug to be dissimilar enough from the first version so as to grant new exclusivity to the "improved drug." Such was the case for a product that helps multiple sclerosis patients. Betaseron was first granted market exclusivity in 1993 and so its exclusivity will expire in 2000. FDA judged a modified version of this drug known as Avonex to be superior i.e. different from, Betaseron and granted Avonex exclusivity which will run until 2003. Under such a model, if a generic drug was developed that was identical to Betaseron, then it should be able to go to market in 2000 rather than 2003. Such a drug Rabif, which I believe is identical to Betaseron is seeking to come on the market in 2000. However, I understand that FDA has been considering a modification of this process which may not be in line with congressional intent with respect to the Orphan Drug exclusivity provisions of the Orphan Drug Act. This modification would deny multiple sclerosis patients access to a cheaper generic version of Betaseron until the exclusivity not of Betaseron but of the improved Avonex product expires in 2003.

Question. Would FDA agree that is in the interest of patients to have access to generic drugs in a timely fashion?

Answer. We fully agree that the availability of generic drugs in a timely fashion would be beneficial to patients.

Question. Would the FDA agree that if a drug is identical to the unimproved orphan product that it should be treated as such and should not be barred from the market until the improved product's exclusivity expires ?

Answer. FDA agrees that if a sponsor can establish that its drug is the same as a drug whose orphan exclusivity has expired, it may obtain approval notwithstanding orphan exclusivity that still protects a drug that is chemically the same, but clinically superior to the drug with expired exclusivity. The only mechanism currently available for establishing that two drugs from different sponsors can be expected to have the same safety and effectiveness is the generic drug approval process established under section 505(j) of the act for drugs approved under section 505 of the act. There are scientific and technical barriers to demonstrating that two biological products from different manufacturers can be expected to have the same safety and effectiveness. Moreover, there currently is no process for approving generic versions of biological products regulated under section 351 of the Public Health Service Act.

Question. Does the FDA believe that the original "unimproved" orphan product should in effect gain additional near exclusivity merely because a second "improved" product gains exclusivity later than the original product?

Answer. A product's period of orphan exclusivity is limited by statute to seven years. When there are two orphan products that are chemically the same, but are

not the same drug because they have different clinical profiles, a third product will be able to enter the market upon the expiration of the first applicant's exclusivity, if it establishes it is not the same as the drug that still has exclusivity. The third product may show that it is clinically superior to the product that still has exclusivity, or it may establish that it is the same as the drug whose orphan exclusivity has expired and thus is different from the product that still has exclusivity. By using the clinically superior criteria, the orphan drug program protects the drug development incentive, while permitting the introduction of better products to treat serious diseases. Drugs regulated under Section 505 of the Federal Food, Drug, and Cosmetic Act may be shown to be the same as the drug whose exclusivity has expired by meeting the standard for approval of a generic drug under Section 505(j).

REUSE OF SINGLE-USE MEDICAL DEVICES

Question. Last year, FDA officials promised my staff, that they would revise either the MEDWATCH form or the guidance document used by health processionals in reporting injuries, so that information on whether a device was reused and the identity of a reprocessor might be collected. This has not happened to date.

Question. When will the FDA be revising the MEDWATCH voluntary reporting form so that appropriate tracking of injuries from reused devices may take place ?

Answer. Two years ago, FDA modified its MedWatch voluntary report form so that health professionals could indicate whether a device in an adverse event was labeled for single use and whether it was being used for the first time or reused. The instructions on FDA's web site for FDA Form 3500—voluntary report form—address the reuse of single use devices or SUDs. In block B5 of the form, the health care professional is requested to report the facts and perceived contributions of reuse to the adverse event. FDA has received about 1,399 adverse event reports from MedWatch forms involving the reuse of single use devices. Almost half of these reports involved dialyzer equipment. In response, FDA has worked with the medical device community to issue safety alerts and developed guidances on how to do reuse properly.

The instructions for FDA Form 3500A—mandatory report form—which were written in 1995, do not explicitly mention reuse. The MedWatch staff has revised the instructions to address the reuse issue. The new instruction requests information about reuse in blocks F10, H6, and H8. Also, a new device problem code has been added specifically for reuse. The revised instructions are currently undergoing internal agency review prior to OMB clearance.

FDA believes that implementing Phase II of the MeDSuN system, as proposed in the fiscal year 2001 President's budget, would be the best way to improve reporting of reused devices. MeDSuN will recruit a statistical sample of hospitals and train them to report both adverse events and routine procedures. This will enable FDA and the health care community to put the reuse problems in context. At present, there are no plans to further revise the MedWatch voluntary report form because FDA believes that the voluntary form, with its recent changes, and the proposed revised instructions for the mandatory form, when approved, will address reporting reuse problems.

Question. When is FDA going to come out with final rules that require high risk, highly-invasive devices be shown to be both SAFE and EFFECTIVE for their intended use, not just when they are used for the first time but for every use ?

Answer. FDA has sufficient authority to address the issue of reuse of single use devices. New regulations are not necessary. On February 8, 2000, FDA posted two draft guidance documents on FDA web site. One is titled *Reprocessing and Reuse of Single-Use Devices: Review Prioritization Scheme.* The second is *Enforcement Priorities for Single-Use Devices Reprocessed by Third Parties and Hospitals*. The availability of these guidances was also announced in the Federal Register on February 11, 2000 in 65 FR 7027.

The review prioritization scheme guidance document sets forth factors FDA would consider in categorizing a reprocessed SUD as high, moderate, or low risk. The enforcement priority guidance document sets forth the agency's priorities for various requirements based on the risk categorization of a device.

The end of the 60-day public comment period for both guidances is April 11, 2000. The agency plans to review and consider all comments by May 11, 2000 and expects the guidances to be finalized in July 2000.

Upon implementation of the final guidances, anticipated to be January 2001, FDA would enforce premarket requirements for reprocessors of single use devices deemed high-risk. The agency believes that the requirement to submit premarket data will ensure the continued safety of these devices. Moreover, the agency has the authority

to take immediate action at any time that a device poses an immediate and significant risk to public health.

Question. If FDA believes or has research data that shows that some of these devices can not be reprocessed safely, shouldn't they move to prohibit the reprocessing of such devices?

Answer. To date, our research indicates that some single use devices are more difficult to clean than others. FDA does not have sufficient data associated with any particular models or brands of single use devices, or SUDs, to support removing those products from market. However, FDA has notified all stakeholders that reused SUDs are subject to all statutory controls, including premarket notification, and that FDA intends to phase in enforcement of all these controls for third party reprocessors and hospitals that reuse devices labeled for single use.

Question. When is the FDA going to start enforcing safety requirements for high-risk, highly invasive reprocessed medical devices?

Answer. FDA has proposed to start enforcing premarket requirements against third party and hospital reprocessors of devices categorized as High Risk—in FDA's draft guidance document A Reprocessing and Reuse of Single-Use Devices: Review Prioritization Scheme—within 6 months of issuance of the final enforcement guidance.

Question. How much money does the FDA need to do such enforcement?

Answer. To do such enforcement, FDA estimates that approximately $1 million will be needed in fiscal year 2001 and $2 million in fiscal year 2002. These estimates assume that hospitals will reprocess single use devices at a low or modest level.

Question. Of the $7.7 million in the Administration's budget for new premarket device initiatives, how much is for the development of safety standards for high risk reused devices?

Answer. I would be happy to provide that information for the record:

[The information follows:]

FDA's fiscal year 2001 Budget request includes an increase of $2.8 million for medical device reuse. FDA believes the requested funds are sufficient to carry out its regulatory responsibilities of this initiative. The requested funds will ensure the safety and efficacy of reprocessed devices by:

—increasing product review activities; and

—developing standards for high-risk reuse applications to ensure that if a single-use device is going to be reused, it is done safely and remains safe and effective for its intended use.

These activities will be accomplished through:

Hospital outreach.—FDA plans to conduct a variety of outreach activities like mailings, speaking at conferences, posting notices on the Web to aid hospitals in coming into compliance with the Federal Food, Drug, and Cosmetic Act.

Hospital compliance with reprocessing guidelines.—FDA is considering pilot testing a program where some third party or professional standards organization could include questions about reuse in surveys of hospital standards and possibly in audits of hospital practice.

Question. Is this sufficient?

Answer. Based on the expected volume of premarket submissions, this amount will be sufficient for reprocessing single use devices.

Question. Will the new rules apply to all reprocessors, or just third-party reprocessors?

Answer. There are no new rules, but FDA intends to explore existing requirements for third party reprocessors and hospitals.

Question. Would the FDA not agree that where a device is reprocessed is irrelevant to the consumer and therefore, the same standards and safeguards should apply whether the device is reprocessed by a third-party or a hospital?

Answer. FDA agrees that appropriate safeguards need to be in place for reprocessing operations. FDA's proposed guidance documents define the agency's intent to ensure that such safeguards are in place in both third-party reprocessing firms and in hospitals.

Question. What is FDA doing to make sure that hospitals fully understand the risks of reprocessing and learn about the research going on at FDA.

Answer. FDA has undertaken various efforts to make sure that hospitals fully understand the risks of reprocessing and to make them aware of the research going on at FDA. We have launched a major outreach program to help both hospitals and consumers become aware of the agency's proposed strategy to address the issue of reuse of single use devices—SUDs—and to solicit their input. Some examples outreach efforts included an FDA sponsored satellite teleconference on November 10, 1999 that was broadcasted nationally to explain the agency's proposed reuse strat-

egy and an FDA hosted public meeting that was held on December 14, 1999, to solicit public comment on the agency's proposed strategy. FDA scientists have held meetings as well to discuss their research. In addition, the agency created a web site to disseminate FDA information on reuse of SUDs and established an electronic mailbox whereby consumers and interested parties may submit questions to FDA concerning reuse of SUDs. FDA has also held several conference calls with the Joint Commission on Accreditation of Healthcare Organizations—JCAHO—to discuss the development of a joint program to audit hospital reprocessors to ensure compliance to FDA regulations and to educate these facilities about our policies and relevant research.

Question. What is FDA doing to make sure that hospitals fully understand that these reprocessed devices are not FDA approved and have not been demonstrated to be "safe and effective" as FDA defines such terms ?

Answer. FDA has launched a major outreach program to help hospitals and consumers become aware of the agency's requirements and proposed strategy to address the issue of reuse of SUDs and to solicit their input. In addition, FDA has held several conference calls with the Joint Commission on Accreditation of Healthcare Organizations—JCAHO to discuss the development of a joint program to audit hospital reprocessors to ensure compliance to FDA regulations and to educate these facilities about our policies and relevant research.

FDA has contacted the American Hospital Association (AHA) to seek their assistance in disseminating FDA information. We also have requested that they serve as an intermediary between FDA and hospitals on a FDA-assisted educational program geared specifically to hospitals. We envision that the educational program will provide hospitals with information that may help them decide as to whether they should continue to reprocess SUDs in-house or to contract this service with commercial third party reprocessors.

AHA surveyed its associated member organizations including the Association for Healthcare Resources and Materials Management and the American Society of Health Risk Management, as to what type of information they desired from the agency. The results of the survey indicated that articles, summaries of studies, and up-to-date web site information would be helpful and that the information be sent via electronic mail.

I would be happy to provide for the record some examples of our outreach efforts:

[The information follows:]

—Sponsored a satellite teleconference on November 10, 1999 that was broadcasted nationally to explain FDA's proposed reuse strategy;
—Convened a public meeting on December 14, 1999, to solicit public comment on the agency's proposed strategy;
—Created a web site to disseminate FDA information on reuse of SUDs;
—Created an electronic mailbox whereby consumers and interested parties may submit questions concerning reuse of SUDs to FDA;
—Published a detailed article on the subject of reuse of SUDs in the User Facility Reporting Bulletin; and
—Compiled an electronic mailing list of the participants that attended the public meeting for the purpose of following up on inquiries or for notifying them of the availability of the risk prioritization scheme and enforcement priorities draft guidances.
—Conducted meetings where FDA device scientists discussed their research.

GENE THERAPY

The area of gene therapy clinical trials has come under close scrutiny lately. Problems have been found both with research protocols, lack of reporting and the public's ability to know when research protocols result in adverse patient outcomes. In 1994, I inserted report language in the Agriculture Appropriations bill that directed FDA to create a tracking data bank for patients involved in clinical trials. The language stated: "The Food and Drug Administration is one of the lead agencies involved in gene therapy biomedical technologies. Many gene therapy protocols are being approved by various government and institutional committees, yet there is no mechanism to track gene therapy patients throughout their lives to assess long-term effects. Currently, there are only a few hundred individuals that are under protocols for gene therapy. Now is the time to establish a tracking program. Accordingly, within the funds available, the Food and Drug Administration should create a gene therapy registry of patients."

According to inquires by my office to FDA, I am told that in response to this Congressional mandate the agency launched the development a prototype for such a system, the Gene Therapy Information Network (GTIN). However, FDA did not follow

the 1994 report language because in stead of tracking patients, FDA set up a pilot system to track research protocols. FDA limited the tracking to the life of the clinical trials under FDA supervision prior to product approval. So the long-term effects on individual patients were not studied and in fact no tracking of individual patients took place. The computer software generated for this initiative was eventually used for another purpose.

Question. Why did FDA not comply with the provision to set up a patient tracking data base?

Answer. FDA supports the gene therapy patient tracking system concept. FDA has begun to formulate a request for proposal (RFP) for the gene therapy patient tracking system that will incorporate automated methods to receive, track, and oversee adverse event information. Between December 1994 and 1996 FDA developed a pilot gene therapy patient tracking system, known as Gene Therapy Information Network (GTIN). The pilot was a project under FDA's Submission Management and Review Tracking (SMART) initiative. The GTIN was strictly a patient tracking system, did not contain or tie into adverse event reporting and was not expanded beyond the pilot phase. Some of the GTIN concepts were used in developing the National Xenotransplantation Database (NXD). FDA believes to effectively enhance patient protection, the gene therapy patient tracking system will need to tie into FDA's current adverse event reporting system and the short term and long-term effects for the patient population.

Some of the components needed for a gene therapy patient tracking system are in various stages of analysis. FDA is looking at the many factors which will affect the cost of such a system. Among those factors are: the development time frame; the size of the system; the tracking requirements and the staffing needs. While this analysis is not complete and the development cost and time has not yet been determined, we are certain there will be significant costs for development, startup, and maintenance phases of the project. Much of the system costs will be in creating and maintaining an infrastructure to assure proper maintenance of the database code and structure, resources to staff the function of the database including data entry personnel, medical and scientific reviewers to properly evaluate adverse events, support for coordination with the NIH OBA staff and RAC, and other infrastructure issues.

Question. Does FDA agree that in light of recent developments, this data base now actually seems like a pretty good idea and would have detected problems much earlier than happened without such a tracking mechanism?

Answer. FDA manages adverse event data in many product fields without a special product-specific database. The desire for such a database for gene therapy arose largely from the interest in lifelong monitoring of patients including monitoring of their off-spring for potential effects of the gene therapy. Such monitoring, while potentially appropriate given theoretical concerns regarding gene therapy, is not easily conducted under normal clinical trial paradigms. The recent University of Pennsylvania incident involved short term toxicities more typical of drug development.

For a class of treatments which is novel and rapidly expanding, a database potentially could facilitate rapid communication and integration of information. However, of note, gene therapy is very diverse, involving many essentially unrelated classes of treatment. There have only been a very limited number of protocols which have used adenoviral vectors into a blood vessel such as was done at the University of Pennsylvania. The limited amount of data could be well communicated within FDA through normal channels such as our Adenovirus gene therapy working group. Furthermore, there was not evidence that clinically significant disseminated intravascular coagulation or acute respiratory distress syndrome had occurred prior to the death at the University of Pennsylvania. Thus, the existence of the gene therapy information network would not have been expected to provide information which would have impacted the case.

Question. Given that FDA is the agency that oversees all clinical trials rather than just federally sponsored clinical trials, would the FDA agree that such a tracking mechanism is best housed at FDA?

Answer. We agree that FDA is the appropriate Agency to develop and maintain a gene therapy tracking registry. Cell and gene therapy products constitute a new and emerging scientific area that challenges existing regulatory systems. FDA would support, given adequate resources, the establishment of a functional gene therapy tracking registry.

Question. How much money would the FDA need to comply with the 1994 report language?

Answer. FDA will continue to work with the Committee to develop the costs of a gene tracking system as described.

Question. Under current FDA requirements for research protocols, how would a patient get information on risks associated with a research study independent of the researchers actually telling the patient the full risks ?

Answer. Under FDA's regulations pertaining to Institutional Review Boards (21 CFR Part 56), the IRB is responsible for requiring that information given to subjects as part of informed consent is in accordance with section 50.25 (21 CFR 56.109(b)). Further, the IRB has the authority to observe or have a third party observe the consent process and the research (21 CFR 56.109(e)). Thus, the information on risks would be available to the patient through the consent process and document, from the individual identified in the consent form as the individual to contact for answers to questions, and from the responsible IRB. FDA's informed consent regulations (21 CFR Part 50) describe the specific information that is to be provided to subjects in obtaining the subject's informed consent and how consent is to be documented. These regulation require "A description of any reasonably foreseeable risks or discomforts to the subject" (21 CFR 50.25(a)(2)). They also require, when appropriate, "A statement that significant new findings developed during the course of the research which may relate to the subject's willingness to continue participation will be provided to the subject" (21 CFR 50.25(b)(5)). Further, they are required to contain "An explanation of whom to contact for answers to pertinent questions about the research . . ." (21 CFR 50.25(a)(7)).

Question. How would a patient know of the financial interests of a researcher?

Answer. FDA's informed consent regulations which specify the minimum information that is required to be provided to research subjects, do not require that the patient be apprised regarding the investigator's financial interests. In accordance with 21 CFR 56.109(b), the IRB may require that information, in addition to that specifically mentioned in section 50.25, be given to the subjects when in the IRB's judgment the information would meaningfully add to the protection of the rights and welfare of subjects. Thus, when an IRB determines that such information would be meaningful in protecting the rights and welfare of subjects, the IRB has the authority to require that the subjects be made known of financial interests of a researcher.

Question. Does the FDA believe that full disclosure of financial interest should be required for researchers?

Answer. From the juxtaposition of this question with the previous question, FDA assumes that the question is referring to full disclosure to the subject, not to FDA (which is covered, in part by 21 CFR Part 54). The agency believes that this is a complex question for which a consensus has not yet emerged. Certainly, it is critical for a research subject to understand that the motivation of a researcher is different from the motivation of the individual's treating physician, particularly when these individuals are the same. FDA also recognizes that there are interests, beyond those that are financial, that may impact on a researcher's judgment and actions. Therefore, FDA is collaborating with NIH and the Office of the Secretary in planning a public consultation this summer with a view to developing better and more specific guidance for investigators, sponsors, IRBs and research subjects regarding the disclosure of financial interests.

Question. What is FDA doing to promote better public disclosure of adverse events and research risks to those enrolled in clinical trials?

Answer. FDA has formed a working group to determine its role in reviewing the adequacy of informed consent documents. Currently, the agency relies, in large part, on the work of the IRB. Sometimes, the agency reviews model consent documents provided to it as part of an application; in other instances, either the model consent form is not submitted or it is not reviewed. The agency is evaluating its review process in this regard.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

GENERIC DRUGS

Generic drug application median approval times have improved from twenty-seven months in 1995 to 17.3 months in 1999. However, generic drug applications are statutorily required to be completed within six months.

Question. What efforts are being made at the Food and Drug Administration to decrease processing time for generic drug applications?

Answer. FDA is required to take final action on generic drug applications within 180 days. The agency is making every attempt to complete all final action within 180 days. Either an approval or disapproval is considered by the agency to be a final action. The Federal Food, Drug and Cosmetic Act states in Section 505(b)(4)(A), "Within one hundred and eighty days of the initial receipt of an application under

(2) . . . the Secretary shall approve or disapprove the application". The agency makes every attempt to meet this requirement; however, for a number of reasons it is not always possible to do so. After receiving a disapproval action, manufacturers frequently resubmit applications that address the deficiencies indicated in the disapproval action. Approval times are substantially longer than review times because many reflect multiple review cycles.

The review time for generic drug applications can be decreased by improving our information technology infrastructure to enable us to increase the number of electronic submissions and reviews. We also believe that increasing the generic drug science base will improve our processing time. Funding is needed for research to support the development of scientifically rigorous bioequivalence testing methodologies for nonsystemically absorbed drug products. The stronger scientific support of these approvals, the more likely it will be that we can successfully meet innovator challenges.

Question. What benefits do generic drugs provide to consumers?

Answer. Approved generic drug products provide a safe, effective, low cost alternative to the American public.

Question. What are the downsides to generic drugs?

Answer. We do not believe there are any downsides to generic drugs. A generic drug product is comparable to an innovator drug product in dosage form, strength, route of administration, quality, performance characteristics and intended use.

NEUTRACEUTICALS

In recent years, the marketplace has seen a sharp increase in the number of herbals and other natural products that are purported to have a beneficial impact on health and nutrition, giving rise to an entire industry known as "neutraceuticals." Over 60 million U.S. adults, or approximately 1 in 2, take some form of dietary supplement.

Question. With the number of Americans using neutraceuticals rising, what action is the Food and Drug Administration taking to evaluate potency and chemical composition of neutraceutical products?

Answer. Substances referred to as "neutraceuticals" are not specifically recognized in statutes or in regulations. All products regulated as foods must meet applicable safety and labeling requirements. In many cases, these products may be marketed without premarket review or approval by FDA. As such, it is the manufacturer's responsibility to ensure that marketed products are safe for their intended use and are labeled in a truthful and not misleading manner. Consistent with all foods, and as warranted by public health concerns and enforcement priorities, FDA will evaluate the potency and/or chemical composition of specific products on a case-by-case basis.

Question. What technologies are being employed by the Food and Drug Administration to evaluate the composition of neutraceuticals?

Answer. Evaluation of the composition of all food products, including what some call neutraceuticals, is dependent on identifying and validating methods that are appropriate for the particular substance of interest, for the matrix in which the substance is found, and for the nature of the question being asked. Thus, the type of technology used is decided on a case-by-case basis. For example there are a variety of chromatography techniques and mass spectrometry that might be helpful.

Question. What new technologies are being developed to evaluate the safety of neutraceuticals?

Answer. The types of new technologies needed to evaluate the safety of foods that may be referred to as "neutraceuticals" are similar to the types of new technologies needed for many food ingredients and products. In evaluating foods, it is more a matter of adapting existing techniques and technologies to the specific types of products under evaluation, as would be the case with electron spin analysis.

SUBCOMMITTEE RECESS

Senator COCHRAN. The subcommittee will stand in recess.

[Whereupon, at 12:01 p.m., Tuesday, March 7, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

MATERIAL SUBMITTED BY AGENCIES NOT APPEARING FOR FORMAL HEARINGS

[CLERK'S NOTE.—The following agencies of the Department of Agriculture did not appear before the subcommittee this year. Chairman Cochran requested these agencies to submit testimony in support of their fiscal year 2001 budget request. Those statements follow:]

DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE

PREPARED STATEMENT OF KATHLEEN MERRIGAN, ADMINISTRATORE

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to represent the Agricultural Marketing service in presenting our fiscal year 2001 budget proposals.

MISSION

AMS' mission is to facilitate the marketing of agricultural products in the domestic and international marketplace, ensure fair trading practices, and promote a competitive and efficient marketplace so that producers, traders, and consumers all benefit. We accomplish this mission through a variety of activities funded from appropriations and from fees charged for services. Since most of our user-funded services are voluntary, we must be responsive to customer needs while remaining conscious of the cost. Through our services such as market reporting and grading, we maintain close contact with our customers, who help to keep us informed about their concerns. We also recognize and support USDA-wide efforts to assist the agricultural industry.

CHANGES IN AGRICULTURAL MARKETING

American agriculture is confronting rapid changes in industry structure, decreasing government price supports, new trade agreements and market outlets, evolving consumer expectations, and new production methods. Industry concentration in certain agricultural industries threatens to inhibit competition. While global trade agreements open new markets, they often set new market requirements and restrictions such as the hormone testing of beef required by the European Union, and new questions on the labeling of genetically engineered food. Furthermore, since price supports are no longer available for producers to "fall-back" on, agricultural producers, particularly smaller producers, must increasingly depend on marketing to maintain their profitability. Small and medium-sized farmers have the fewest resources to compete in this evolving marketplace. USDA policy recognizes the importance of small farms to the nation's economy, resources, and social fabric. In fact, small farms lead the development of organic production systems in the U.S. We pro-

pose to make available the information, tools, and expertise all agricultural producers need to market their products. Furthermore, AMS' international marketing efforts assist all sectors of the agricultural industry to maintain their foreign sales, which are critical to our nation's farm economy. Our budget proposals reflect, in priority order, AMS' response to the current needs of our customers.

MANDATORY MARKET NEWS

Concern over the potential harmful effects of industry concentration on competition resulted in the Livestock Mandatory Price Reporting Act of 1999. Consolidation in the red meat industry has resulted in the growth of private marketing agreements and declining participation in public markets. Since voluntary price reports do not reflect transactions from marketing agreements, it is difficult for producers to determine prevailing market prices or to evaluate contract offers from packers. The lack of price information also makes it difficult to administer programs that address economic stress in the livestock industries. Mandatory price reporting will increase the transparency of market price signals for producers and others in the marketing chain. These mandatory reports will include 90 percent of the beef, 96 percent of the hogs, 84 percent of the lambs slaughtered and 80 percent of the lambs imported. Congress authorized the Secretary to initiate mandatory reporting by the industry in the fiscal year 2000 thousand budget and provided start-up funding of $4.7 million from CCC funds allotted to AMS in fiscal year 2000. Since these funds will not be available to AMS in fiscal year 2001, we are requesting an increase of $5.9 million to finance the annual cost of the mandatory reporting program. As we implement mandatory reporting, Market News reporters will expand their contacts throughout the industry—with producers, processors, wholesalers, retailers, importers, and exporters of livestock, meat, and related products. At the same time, the agency has been encouraged to continue all of its voluntary reporting that falls outside the coverage of the mandated program. Because of the mandatory nature of the new program, an extensive monitoring and review system will ensure that the information is accurate and timely. During fiscal year 2000, AMS must hire additional reporters and support staff to analyze and edit the dramatically expanded volume of data to be collected, and compliance personnel to audit packer records to ensure that packers are accurately reporting the required information. We will also begin development of a computer system to manage the data, and establish outreach programs to educate producers about the new information. The fiscal year 2001 request reflects a full year of program activity at fully staffed levels, and continuing development and maintenance of the computer system. We expect to publish the proposed rule for mandatory reporting in the near future, and hope to have the program implemented before the end of this summer.

ORGANIC CERTIFICATION

A segment of the agricultural industry that is continuing to grow is organic products. American consumers are embracing organic foods at a rate of 20 percent a year. Congress determined that there should be a nationwide minimum standard and a system to certify that products meet that standard. AMS' organic certification program, now in the final stages of development, will assist producers by facilitating interstate commerce of organically produced food, and assure consumers that organically produced products meet a consistent standard.

AMS is proposing budget increases that are designed to better serve consumers and our customers in the organic industry. These increases are for organic certification, market news, and marketing agreements and orders.

We are requesting a net increase of $703 thousand for the organic certification program, of which $639 thousand is needed only for one year. These funds will allow us to "jump-start" the certification program and provide outreach to new customers. As we begin implementing the program, we will educate producers, consumers, processors, certifiers and traders about the program while accrediting at least 49 certifying agents and monitoring their activities. We will monitor State programs' compliance with national regulations and develop a system to prevent fraudulent labeling. In addition, we will implement an international program component to develop standards and accredit international certifying agents, and will participate in the development of international agreements for organic products and production. The additional funding requested will enable us to begin full operation of the certification program.

ORGANIC MARKET NEWS

AMS is requesting $614 thousand to expand market reporting on organically-grown fruits and vegetables so that producers can find the best markets for their

products and maximize their returns. Producers of organically-grown fruits and vegetables need timely, reliable, consistent, and unbiased marketing information on factors such as prices, supply, demand, and trends. Such information is scarce, especially for smaller producers with fewer resources, which places the larger participants in the market at an advantage. Efficient markets can help consumers by keeping prices reasonable.

MARKETING ORDERS AND ORGANIC PRODUCTION

The growing market for organic products is becoming an issue facing industry fruit and vegetable marketing agreements and orders committees. Virtually all of the 36 active fruit and vegetable marketing agreement and order programs could soon include some organically produced commodities. We are requesting $1 million of Section 32 Administrative funding to develop our expertise and provide research on the economic impact of marketing order programs on the organic sector. Marketing agreements and orders are designed to help stabilize market conditions for fruit and vegetable products for the benefit of producers and consumers. Marketing order programs assist farmers by allowing them to collectively work to solve marketing problems. AMS oversees the activities of the industry committees. AMS and the marketing order committees need additional data on organic production, marketing and distribution channels, as well as a projection of future organic fruit and vegetable production in order to resolve the issues raised. Without supporting data, it is difficult for AMS to make informed decisions on the interrelationship between organic and conventionally grown commodities.

SMALL FARMERS AND FSMIP

To assist small farmers on a local scale, AMS is requesting an additional $300 thousand in "Payments to States" matching grants funding. These funds will be made available to the States for local and regional product development and marketing initiatives that will assist small farmers to identify and develop marketing opportunities. The new projects would focus on: marketing opportunities emphasizing local or direct marketing; export-oriented market research and technical assistance targeting small, limited resource producers and marketing organizations; and encouraging sustainable agricultural production and marketing. By providing matching funds, we are able to compound the benefits received by small farmers. In conjunction with these new grants funds, we are requesting $31 thousand in appropriated funds to administer the additional grants and conduct outreach efforts. We will assist cooperators to develop their submissions, monitor the projects in progress, and ensure that the results are made widely available to potential beneficiaries.

FOREIGN MARKET NEWS

Our request for $453 thousand to expand agricultural market reporting on foreign markets will assist all agricultural producers and traders interested in international trading, but particularly the small and medium-sized farmer with limited resources who is interested in export markets. Rapid changes in international markets are largely due to shifts in global partnerships and trade agreements, production methods, and customer preferences. The U.S. agriculture industry must maintain its market share and expand sales in international markets in order to maintain its profitability. Expanded market data will help U.S. commercial interests gain access to foreign markets by supplying a greater quantity of data on more foreign markets. Farming and ranching operations of all sizes are increasingly dependent on market expansion and exports for their growth in income. Overproduction of many commodities makes it particularly necessary to increase exports to maintain farm revenues. Trade agreements can provide improved access to foreign markets; however, traders need information to determine the most favorable markets. AMS is the only publicly available source for centralized, consistent, and timely information on international prices and trade volume. The dairy, meat, poultry, and fruit and vegetable industries have asked AMS to expand its international market coverage so that they can take advantage of business opportunities available around the world. Foreign market information is especially important to small and medium sized producers who would otherwise have no access to the data.

PDP—WATER TESTING PROGRAM

Foreign buyers and U.S. consumers are concerned about pesticide residue levels in food. We are asking for $1.1 million to plan and implement a new water testing program within the Pesticide Data Program, or PDP. AMS, under the provisions of

the Food Quality Protection Act, or FQPA, samples, tests, and compiles pesticide residue levels on fresh and processed foods. EPA uses AMS pesticide data findings to develop consumption risk data and to determine whether pesticides should be reregistered for continued use. The FQPA requires EPA to consider all routes of pesticide residue exposure, including drinking water. EPA's current reliance on models may significantly overstate the residue levels in drinking water and threatens the continued availability of several agricultural pesticides. EPA continues to require the type of data being collected on food commodities under the current program. Due to the complexity of testing water, AMS cannot redirect current PDP funds to begin a water testing program without seriously compromising the statistical reliability of the program's findings on other commodities. Pesticide residue analysis provides the data needed by EPA for informed decisions on the safety of agricultural pesticides, and reassures foreign and domestic buyers that the pesticide residues on U.S. foods meet safety standards.

MICROBIOLOGY DATA PROGRAM

In the area of food safety, we are requesting $6.2 million to initiate a microbiological data program as part of the President's Food Safety Initiative. This program responds to concerns generated by the sporadic cases of microbiological contamination resulting from food-borne disease outbreaks in recent years. The requested funds will allow AMS to build on the framework of the Pesticide Data Program to design a scientifically-sound program to collect data related to microbiological contamination that causes food-borne outbreaks. The program will collect data pertaining food-borne pathogens and spoilage microflora on domestic and imported fruits and vegetables that can be used to identify and avoid potentially dangerous situations that can cause loss of life. Under this program, AMS will perform almost 30 thousand analyses a year on a maximum of 11 commodities in 10 participating states that represent approximately 50 percent of the population. Samples will be collected at terminal markets and chain store distribution centers, from commodities selected based on per capita consumption from those that are usually eaten raw. There is no other statistically valid Federal or State program that can give a complete microbiological picture of fruits and vegetables nationwide. By using the existing Pesticide Data Program infrastructure for sampling, participating State laboratories, and data reporting, AMS is able to minimize costs for this program.

COMMODITY PURCHASE SERVICES

Our two final budget increases will allow AMS to improve service to our customers and enhance the overall efficiency of the Commodity Purchase Services program. We are requesting $795 thousand of Section 32 Administrative funding to customize our Economic Database Information Network, or EDIN, for use in purchase decisions, and $225 thousand to develop a Management Information System for the Food Quality Assurance Program and initiate an outreach effort toward new customers.

Increased funding will allow us to expand the EDIN database so that it can be used to administer surplus commodity and Federal feeding program food purchases. The database was begun in fiscal year 2000 to house information on fruits and vegetables for decision-making by industry marketing order committees and for government regulatory impact analyses. Commodity purchase decisions also depend on access to comprehensive, readily accessible information. For many of the commodities involved, information must be drawn from a variety of sources and constantly updated. The database will provide an interactive repository of commodity data that supports several hundred million dollars of annual government purchases for federal feeding program outlets. We will add meat and fish, poultry, and specialty commodities, current and historical data sets on commodity prices, shipments, production, inventories, and other information that will support decision-making. The database will streamline purchase activities by eliminating duplication and improving the scope and timeliness of data for more comprehensive analyses on commodity purchases. AMS will make the database information available via a Web page and CD–ROMs, to the public—including farmers, processors, wholesalers, brokers, retailers, and researchers—and to other government agencies.

Additional funding will also be used to develop a publicly-accessible information system for the Food Quality Assurance Program and support a heightened outreach effort for current and potential users of this information. The Food Quality Assurance Program develops government-wide food purchase specifications, including Commercial Item Descriptions, or CIDs, Institutional Meat Purchase Specifications, and other product descriptions. These purchase specifications allow for product standardization and increased competition within the market, and ultimately, a

more uniform product and lower price for the buyer. Purchase specifications find widespread use by many private sector institutional buyers. Public sector purchasers such as schools are also finding these specifications to be of tremendous value. Current and potential customers have requested that AMS expand the product variety and customer base for CIDs. To better facilitate their use by all interested parties, we will develop a centralized database that will contain information on all CIDs and other product specifications, quality assurance results, and inspection plant surveys to verify quality and safety. The database will allow AMS to expand the range of CIDs on products not covered by U.S. grade standards and provide electronic access to the various product specifications maintained and developed by the Food Quality Assurance Program. This increase will allow us to better serve our current customers such as Federal and State food purchasers, and expand the program to include school districts that buy food for their child feeding programs. Through substantial outreach, we will assist other potential public sector users, including local schools and state governments, in the application of these specifications to their purchases of food products.

BUDGET REQUEST SUMMARY

That concludes our list of budget increases proposed for fiscal year 2001. By fund, our increase requests total $15 million for "Marketing Services," $300 thousand for FSMIP grants under "Payments to States," and $2 million in "Section 32 Administrative funds."

I hope you agree with me that these requests will allow AMS to move forward in assisting the agricultural industry by facilitating domestic and international marketing, particularly for the small and medium-sized farmer.

Thank you for this opportunity to present our budget proposals.

AGRICULTURAL RESEARCH SERVICE

PREPARED STATEMENT OF DR. FLOYD P. HORN, ADMINISTRATOR

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to present the Agricultural Research Service's budget recommendations for fiscal year 2001. Before I begin to outline the Agency's program and financing recommendations, I would like to take a moment to reflect on the truly amazing transformation that has taken place in American agriculture.

A hundred years ago, nearly 40 percent of employed people worked on farms. Today, less than 2 percent work on farms. In the span of a century, the number of farms has fallen by two-thirds, while the average farm size has more than tripled. This reflects increased off-farm employment opportunities and growing productivity in agriculture.

Farm production has become more concentrated. In 1900, 17 percent of U.S. farms produced 50 percent of farm sales. In 1997, only 2 percent of farms produced half of all agricultural sales.

There has also been a dramatic increase in crop yields over the past 100 years. From 1900 to 1999, wheat yields have multiplied from 12.2 bushels per acre to 42.7 bushels per acre; corn, from 28.1 bushels per acre to 134.5 bushels per acre; soybeans, from 10.9 bushels per acre to 36.7 bushels per acre; cotton, from 203 pounds per acre to 592 pounds per acre; peanuts, 661 pounds per acre to 2,660 pounds per acre; and potatoes, from 52 hundred weight per acre to 348 hundred weight per acre.

Similarly, with higher crop productivity, animal production has jumped substantially. Chicken production has expanded more than 10-fold. Hog production has increased 3-fold. With significantly higher output per cow, milk production has also risen sharply.

Without question, many of the advances we have seen which have literally transformed American agriculture are the direct result of new technologies and practices which have been developed through agricultural research. It is agricultural research that has made possible the huge increases in agricultural productivity that we have seen.

Agricultural research is constantly adjusting to address new challenges of a dynamic world. At the beginning of the twentieth century, the emphasis of agricultural research was primarily on the production of crops and animals and their protection from diseases and pests. The role of research has expanded beyond agricultural production efficiencies to include food safety, human nutrition, emerging diseases and exotic pests, new products and agricultural uses, sustainable agricultural practices, and natural resources conservation. Today, agricultural research embraces a variety

of new approaches and technologies, from integrated pest management to remote sensing technologies and biotechnologies, and tools, from precision agriculture to bioinformatic tools and genetic sequencing. The new technologies and tools are being used to improve the nutritional value and safety of the food supply, convert agricultural materials to biofuels, manipulate the properties of plant and animal genes, etc.

MAJOR ARS ACCOMPLISHMENTS

During the past 10 years, ARS accomplishments have significantly benefitted American agriculture. Examples (organized under four broad goals) include:

An agricultural system that is highly competitive in the global economy

—Pioneering the concept of using gene markers to assist in selecting plants and animals for improving yield, imparting disease resistance, enhancing nutritional value, and making food products safer for the consumer.
—Publishing the first genetic linkage maps in the world for swine and cattle which were key contributors in the first genetic map for poultry.
—Organizing a multi-State areawide integrated pest management project to control the codling moth, the key pest affecting commercial apple and pear production in the Pacific Northwest. This initiative was so successful that pesticide usage was reduced 75 percent and products from the area were able to be exported to nations where they had been previously restricted. This strategy is now being followed for other important crop pests.
—Discovering and patenting a new method to immunize poultry from a number of diseases by injecting vaccines into the egg. Today, this technology protects 85 percent of North American broilers.
—Developing and releasing a new cotton variety with high fiber strength, which has enabled the industry to introduce new processes for wrinkle-resistant cotton slacks, and open a multi-billion dollar market.

A safe and secure food and fiber system

—Cloning a plant gene conferring resistance to disease causing viruses. The ability to breed agriculturally important plants that are resistant to virus borne diseases is critical to preserving a secure food production system.
—Developing the first practical live animal test for scrapie in sheep, a disease similar to "Mad Cow" disease that has plagued Europe. This technology will allow producers to develop disease free flocks. APHIS is using the third eyelid test in their planning for a scrapie eradication program in sheep.
—Developing a five minute test to identify bacterial contamination on meat. A second rapid detection test for E. coli is being used by commercial laboratories that screen ground meat for fast food restaurants and other retail food outlets.
—Developing a product called Preempt (TM) that can be sprayed over newly hatched chicks to reduce the potential for salmonella contamination. This technology, known as "competitive exclusion," will significantly decrease the potential for human illness from salmonella.

A healthy and well nourished population

—Demonstrating that the nutritional status of a host can influence the pathogenesis of a known human viral pathogen.
—Producing the only reliable human studies on the effects of transfatty acids in the diet and their adverse impact on the risk factors for heart disease.
—Demonstrating how supplementing the diets of postmenopausal women with additional calcium and vitamin D lowers the rate of bone loss, slowing the development of osteoarthritis.
—Identifying how the brain function of children with certain nutritional deficits differs from those with good nutritional status.
—Maintaining the Nutrient Database which is the primary source of data on nutrients in food used in managing Federal nutrition programs and widely used throughout the food industry.
—Developing a series of high fiber, low calorie products (OATRIM, Z-TRIM and NU-TRIM) that can be used as fat substitutes in prepared foods.

An agricultural system that protects natural resources and the environment

—Developing conservation tillage systems and crop residue management practices that have increased profitability and improved soil quality on hundreds of thousands of acres in the United States.
—Developing methods to remediate toxic element contaminated sites using specially designed biosolids compost. This approach has greatly reduced the remediation cost at some toxic metal contaminated "Superfund" sites.

—Developing an indexing tool for mapping the vulnerability of landscapes and locating areas with the greatest potential for contributing to water contamination by phosphorus. This index provides Federal and State agencies with the tools to manage watersheds to reduce water pollution.
—Developing the Riparian Ecosystem Management Model to provide landowners and environmental agencies with guidelines to design and manage forest buffers.
—Altering the nutritional or other end-use quality of certain grains to reduce their phytic acid, phosphorus, and mineral content. This research is focused on animal feeds and is designed to increase the absorption rates of nutrients by the animal while reducing the amount of phosphorus entering the environment.
—Screening thousands of American Elm trees to identify resistance to Dutch Elm disease. As a result, two new resistant varieties were developed and released to wholesale nurseries for propagation and sale to the public.

FISCAL YEAR 2001 BUDGET

ARS' fiscal year 2001 budget recommends a funding level of $894,258,000 which represents an increase of $63,874,000 above the Agency's fiscal year 2000 level. This budget includes $97,815,000 in national high priority research initiatives, and $8,500,000 to finance pay costs. To help fund these high priority initiatives, the proposed budget also includes a reduction of $42,441,000 of both lower priority ongoing research and earmarked research projects added to the Agency's fiscal year 2000 appropriation.

NEW AND EXPANDED RESEARCH INITIATIVES

ARS' fiscal year 2001 research initiatives are directed at maximizing productivity and product quality while preserving natural resources and environmental quality. The initiatives are also directed to the concerns of every American—for a safe, healthy, nutritious food supply. The specific research initiatives are detailed below.

An agricultural system that is highly competitive in the global economy

One of ARS' principal goals is to conduct research which results in strengthening U.S. agriculture at home and abroad. This is accomplished by developing new techniques and strategies to prevent or control insects and diseases which reduce economic losses and increase product longevity and market quality. Research is conducted which demonstrates new postharvest technologies that add value, improve quality, and overcome technical barriers to trade. ARS also carries out research which results in the development of new products and new uses for agricultural products. Under this goal, ARS is recommending in its fiscal year 2001 budget new and expanded research initiatives in biobased products and new uses.

Biobased products and new uses (to expand markets, improve farm income, and reduce dependence on nonrenewable fossil fuels)

Biobased feedstocks and products are commercial and industrial products, other than food and feed, that utilize biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials in their production and manufacture. On August 12, 1999 the President signed an Executive Order 13101 to accelerate the development and commercialization of biofuels and biobased products. Legislation to enhance this program area was also introduced by the Congress. Biobased products research is a high priority for several reasons. First, there is a need for new products and uses to expand markets for farm and forest products and improve farm income. Second, there is an increasing concern regarding the long term adverse environmental impacts from the continuing use of nonrenewable fossil resources. Third, our Nation is growing increasingly dependent on imported sources of energy and industrial feedstocks.

ARS is requesting an increase of $14,000,000 to develop biobased materials from agricultural commodities and byproducts; improve conversion of agricultural materials to biofuels; expand development of novel crops for value added products; improve biomass for energy; and increase our knowledge of fundamental biomaterials science. The proposed research will bring to commercialization an increased number of biobased feedstocks and products that can successfully compete in the marketplace with fossil fuel-based feedstocks and products. Success will increase the use of environmentally preferable feedstocks and products while reducing the use of those that add global warming gases to the atmosphere. Success will add new profit potential to old crops and create profitable new crops. Moreover, adoption of biobased feedstocks and new products will bring growth in processing and manufacturing businesses near to where the crops are grown, providing new off-farm jobs and income growth for rural America.

A safe and secure food and fiber system

One of the Agency's principal goals is to perform research which will ensure that U.S. farmers and food processors have the technologies and resources necessary to produce a safe and secure food system. Under this goal, ARS is recommending in its fiscal year 2001 budget new and expanded research initiatives in emerging and exotic diseases, invasive species, agricultural genome and genetics, and food safety.

Emerging and Exotic Diseases, and Pests (to reduce agricultural losses, protect the Nation from bioterrorism, and help ensure food safety)

Emerging and reemerging infectious diseases and pests during the past several years have become and remain a major public and animal health concern. The globalization of trade, increased international travel, climate change, intensive agriculture, and changing agricultural demographics have created new opportunities for reemergence and spread of infectious diseases and pests. Exotic (non-native) pathogens or pests once introduced into the U.S. can explode into an epidemic due to the absence of natural control agents and the lack of resistance of host animals. For emerging diseases to be detected and effectively controlled, the biology of the pathogens, pests, and parasites must be researched and strategies developed to limit their establishment and spread.

ARS is requesting a total increase of $4,358,000, which includes an increase of $3,750,000 for preventing and controlling emerging exotic and domestic infectious diseases of livestock and aquaculture, controlling livestock pests, and developing vaccines for brucellosis in wildlife, and an increase of $608,000 to prevent and control emerging and exotic plant diseases. The proposed animal and plant disease research will lead to better diagnostic tests and improved control technologies and practices resulting in reduced production losses. It will also help ensure that the U.S. food supply remains the safest, healthiest, and least costly in the world.

United States agriculture is also extremely vulnerable to a deliberate introduction of highly infectious diseases and pests, particularly foreign diseases not endemic to the U.S. A recent GAO report cites that certain countries are engaged in developing biological warfare agents directed at animal and plant agriculture. Disease pathogens that could be used include highly infectious viruses, bacteria, nematodes, fungi, and insects that attack major commodities, such as cattle, swine, poultry, cereals, vegetables, and fruits. The malicious introduction of these pathogens would affect consumer confidence in the safety of their food and could have profound impacts on the U.S. economy. The potential impact of an outbreak of foot and mouth disease in cattle and swine in the U.S. was vividly demonstrated in 1997 in Taiwan where eight million pigs had to be destroyed causing $5 billion in economic losses, environmental consequences, and a total shutdown of their swine exports.

To protect U.S. agriculture from its vulnerability to acts of bioterrorism, ARS is requesting an increase of $10,000,000. Terrorist acts against U.S. agriculture have the potential to cost tens of billions of dollars and many lives. It is therefore necessary to take preventive action now. Research will focus on developing a forensic capability to rapidly identify highly infectious pathogens that have been turned into biological weapons. Also, new tools will be developed which will facilitate the epidemiological mapping of disease outbreaks and tracking of disease agents to their geographic origin. This new generation of technology will also substantially augment our traditional mission and capacity to deal with animal diseases that naturally or accidentally enter the U.S. and threaten the livestock industry.

Invasive Species (to detect and eradicate new invading weed and pest species)

Invasive weeds and other pest species cost the Nation over $122 billion a year. At last count, there were more than 30,000 invasive species in the U.S.—they impact production agriculture, organic farming, the environment, and other plant and animal species. For example, weeds such as purple loosestrife, leafy spurge, salt cedar, Brazilian Pepper, yellow starthistle, water hyacinth, downy brome, and melaleuca infest at least 100 million acres in the U.S. Arthropod pests, such as the silverleaf whitefly, Asian longhorned beetle, and Russian aphid destroy 13 percent of crop production each year. About one half of the endangered plants in the Nation are at risk because of invasive species. In 1999, the President signed an Executive Order on Invasive Species directing agencies to increase their efforts to detect and eradicate incipient populations and prevent invasive species from entering the U.S. Many Members of this Subcommittee are aware of these problems in your own States and districts.

In addressing the growing invasive species problem, ARS is requesting an increase of $4,300,000. Research will be directed toward developing pathogens for biological control of invasive weeds and insects. In addition, integrated management systems will be developed for weeds such as purple loosestrife. Also, new biological

information, and the systematics of key groups of invasive weeds and insects will be developed. The proposed research will aid APHIS and other regulatory agencies, and State land managers in managing established invasive species, and detecting and eradicating new invading species.

Agricultural Genome (to enhance the quality and safety of the food supply, and strengthen U.S. agricultural competitiveness in world markets)

The U.S. agricultural system faces formidable challenges, from new pests and diseases, water and soil pollution and degradation, climate events, and less land available for farming. These challenges can only be met by harnessing the inherent potential of genetic resources. More rapid and efficient methods are necessary to identify and manipulate the useful properties of genes and genomes. New methods termed "genomics," rely on more detailed, accurate, and comprehensive knowledge of genetic organization and function. This will enable scientists to examine the genetic potential of plants, animals, and beneficial organisms.

ARS is proposing an increase of $5,350,000 to develop bioinformatic tools, biological databases, and information management technology for plants. The research includes manipulating the function of important genes in crops, and developing new genomic approaches for improving economically important traits in livestock and poultry. In addition, marker genes of pathogenic microorganisms will be characterized to develop disease prevention in plants and animals. The proposed research will provide the means for maintaining and enhancing the quality and safety of the U.S. food supply. It will also strengthen the Nation's agricultural competitiveness in world markets by ensuring continued improvement of plants and animals.

Agricultural Genetic Resources (to protect the Nation's agriculture from genetic vulnerability, and strengthen U.S. agricultural competitiveness)

The United States needs a comprehensive program to maintain: crop germplasm; genetic diversity within animal species which provide abundant high quality food and fiber; and microbial germplasm, including pathogens and microorganisms, which may be useful in bioconversion, bioremediation, or biocontrol. Genetic diversity is critical for further improvement of production efficiency and for the protection of valuable germplasm from catastrophic events including climate change and disease epidemics.

ARS is requesting an increase of $6,600,000 to provide a program which will secure and maintain critical plant, animal, and microbial germplasm. Specifically, ARS will identify threatened germplasm and incorporate it into USDA/ARS gene banks. The germplasm will be preserved, documented, characterized, evaluated, and enhanced. The proposed germplasm program will protect U.S. agriculture from genetic vulnerability, and strengthen U.S. competitiveness in agricultural, pharmaceutical, and industrial markets by ensuring continued genetic improvement through an optimal pool of genetic resources.

Food Safety (to control pathogens and reduce food-related illnesses/deaths)

Food safety is a National Presidential priority. The Department is committed to providing consumers with the safest, highest quality food possible. It recognizes that food safety problems must be addressed and solved from the "farm-to-the-table." ARS' research begins at the preharvest stage of crop and animal production. It is there, during the production and transportation of animals to slaughter, that exposure and infection to pathogens takes place. This is a major source of contamination in meat-based foods. During production pathogens also contaminate harvested fruits and vegetables. Similarly, toxic metals from soils and allergens contaminate various commodities.

ARS is requesting a total increase of $5,720,000. Within that total is a proposed increase of $2,860,000 for preharvest food safety research to develop methods for controlling pathogens during preslaughter and transportation, and develop technologies to extend the useful life of antibiotics. Toxins, heavy metals, and allergens which contaminate food products will also be researched. In addition, management and animal health practices will be developed to reduce Salmonella enteritidis on and in shell eggs.

Postharvest operations—slaughter and processing—are also key links in the food safety chain. Postharvest operations can provide an opportunity for removing or inactivating pathogens previously acquired during production. Pathogens can rapidly develop resistance to antimicrobials and traditional control measures.

ARS is also requesting an increase of $2,860,000 for postharvest food safety research. The proposed research will develop methods to: control pathogens in meat, poultry, and fruits and vegetables; detect pathogens and residues during processing and storage; and improve egg sanitation technologies and storage conditions to reduce contamination. Also, an Internet-based food safety research information system

will be developed as part of the Food Safety Research Information Office established at the National Agricultural Library. The proposed pre- and postharvest food safety research will result in fewer pathogens in the production and processing environment thereby reducing consumer food-related illnesses and deaths.

Food Quality Protection Act (to reduce the use of pesticides which are harmful to humans)

The Food Quality Protection Act (FQPA) requires a change in the standard for evaluating pesticides from an acceptable risk/benefit to a reasonable expectation of no harm. This change in the evaluation standard is likely to affect the permissible uses in agriculture of many pesticides that can have toxic effects on humans.

USDA policy already places high priority on the funding, development, and testing of replacement technology for currently used pesticides at risk of being taken off the market due to the new FQPA tolerance standards. The Department is committed to implementation of IPM practices on at least 75 percent of the Nation's crop acreage. In addition, USDA supports efforts to develop areawide pest management programs using biointensive IPM approaches, IR–4 minor use pesticide programs, biological control agents, methyl bromide alternatives, and other IPM component technology.

In implementing FQPA, ARS is requesting an increase of $4,537,000. Research would be directed at expanding areawide IPM programs demonstrating alternatives to at-risk pesticides. IPM systems will be developed for fruits and vegetables treated with organophosphates and carbamates, and for pests under large scale control/eradication programs. In addition, methyl bromide alternatives will be developed and registered. The proposed research will develop new technologies and practices as substitutes for "hard" pesticides (e.g., organophosphate and carbamate pesticides) and provide new, target specific biointensive approaches to control crop and other agricultural pests. The research will also contribute to fulfilling the Department's commitment to implement IPM practices or methods on 75 percent of the Nation's crop acreage. Within the amount requested, ARS is also requesting an increase of $1,500,000 to increase its support of the Department's Office of Pest Management Policy. Established in 1997, this office provides a coordinated and rapid response to FQPA data analysis needs, interacts with grower groups, and coordinates USDA programs with EPA.

A healthy and well nourished population

A healthy diet is critical to an individual's growth and development, susceptibility to diseases, and their quality of life. Poor nutrition underlies many chronic conditions, such as obesity, cardiovascular disease, cancer, osteoporosis, and diabetes. Research is only now beginning to reveal how nutrients and genes interact to cause various diseases. Under this goal, ARS is recommending in its fiscal year 2001 budget the largest increase for any one program area to support the President's Human Nutrition Research Initiative.

Human Nutrition (to reduce nutritionally-related diseases, and produce a more healthy, productive population)

The goal of the President's Human Nutrition Research Initiative is to improve the overall health of the American people by reducing health care costs and enhancing the quality of life by further defining the relationship between diet and health; improving the scientific basis of more effective food assistance programs; generating a more nutritious food supply; improving resistance to infection and immune disorders; promoting changes in diet by understanding the factors that affect food choices; and extending dietary guidance to nutritionally vulnerable groups by determining how food consumption at points in the life cycle affects risk of disease. In the first phase of the initiative, emphasis was placed on the dietary requirements of children. In the second phase, cutting edge research approaches such as molecular biology were applied to human nutrition to identify the role of nutrients in promoting health.

In this phase of the Initiative, ARS is requesting an increase of $17,250,000. Emphasis will be on the identification and measurement of the active components of a healthy diet; determination of the factors that maintain healthy body weight; role of nutrition in bone growth and maintenance; importance of diet in maintaining optimal neurological function throughout life; effects of diet on the immune function; role of nutrition throughout the life cycle; and development of nutritional biomarkers. In addition, the National Nutrient Databank (the database of foods consumed in the U.S. and the foundation for food composition tables) will be updated. The proposed research will lead to a reduction in the number of nutritionally-related diseases, and to a more healthy and productive population. This in turn will lead to

a decrease in the staggering costs (estimated in excess of $200 billion per year) associated with the treatment of nutritionally-related diseases.

An agricultural system that protects natural resources and the environment

Agricultural growth and enhanced productivity must be balanced with maintaining and preserving the Nation's natural resources. One of ARS' goals is to provide a better understanding of the complex interactions between agricultural production and the soil, water, and air. Under this goal, ARS is recommending in its fiscal year 2001 budget new and expanded research initiatives in global climate change, climate change technology, air quality, and integrated science for ecological challenges.

Global Climate Change (to reduce the harmful effects of global climate change on U.S. agriculture)

Agriculture is vulnerable to changes in climate. Rising temperatures and changing amounts and patterns of precipitation can reduce crop yields. A changing climate can also alter the competitive relationships between weeds and crops, and the frequency of insect infestations and the severity of weed infestations which challenges our ability to control pests. Strategies and technologies need to be developed so that we better understand the effects of climate change thereby mitigating their impacts on agriculture.

ARS is requesting an increase of $7,900,000 for research on the effects of climate change on food availability; the impacts of atmospheric and climate change on the Alaskan agro-ecosystem; and the carbon cycle research initiative. In the carbon cycle initiative, ARS will collaborate with other Federal agencies in determining how farmers and ranchers can store carbon in agricultural soils to improve air quality. Rates of emissions of greenhouse gases associated with crop, livestock, and forage production systems will also be documented, and technologies to reduce them will be developed.

ARS will also conduct U.S. global change research program national assessment activities. Assessments assemble and synthesize scientific results, help increase interaction among scientists and the public, and aid in identifying gaps in knowledge. The national assessments and the other proposed global climate change initiatives will help mitigate the effects of global climate change. Accurate measurements of greenhouse gas emissions or rates of storage in agricultural soils will reduce climate change and assist in the prediction of future greenhouse gas concentrations.

Climate Change Technology (to expand biomass for energy, and predict/adapt to global change impacts)

By making changes in production and land use practices, agriculture can reduce greenhouse gas emissions. Practices such as, biomass conversion to fuels, improved animal management and waste utilization, conservation tillage, and other management practices (e.g., cover crops, buffers, etc.) will enhance long-term storage of carbon in soils. These practices will also increase energy efficiency, and improve soil tilth, fertility, and water holding capacity.

ARS is requesting an increase of $7,000,000 to develop new technologies both for predicting and adapting to global change impacts, and for improving and expanding biomass for energy. The proposed research will provide farmers and ranchers with the means to adapt agricultural production methods in response to climate change. Expanding biomass for energy will contribute to sustainability, environmental quality, and efficiency of crop and livestock production, and forestall potential climate change.

Air Quality (to improve air quality)

With the adoption of the EPA's National Ambient Air Quality Standards, the role of agriculture in polluting air came under greater scrutiny. Concerns about the regulation of agricultural air quality prompted the establishment of the Agricultural Air Quality Task Force. The Task Force has identified the emission of particulates (which penetrate human lungs and cause various aliments) as its number one priority.

ARS is requesting an increase of $2,000,000 to develop new knowledge on particulate matter and precursors. New knowledge will also be developed on the emission and control of animal manure odors. In addition, research will be conducted on protecting agricultural crops from the effects of tropospheric ozone. The proposed research will make it possible to develop technologies to control or mitigate dust and odor emissions. Also, practices will be established to protect crops from ozone damage.

Integrated Science for Ecological Challenges (to protect the Nation's soil and water resources)

Changes in land and resource use, the introduction of invasive species, the input of pollutants and excessive nutrients, extreme natural events, and changes in atmospheric and climate conditions—these stresses and their cumulative effect on the Nation's ecological systems is poorly understood and raises numerous questions. The Federal agencies in the National Science and Technology Council, Committee on Environment and Natural Resources propose to begin addressing these major ecological questions under a broad coordinated effort entitled, "Integrated Sciences for Ecological Challenges."

ARS is requesting an increase of $6,800,000 under this initiative to protect the Nation's natural resources, by improving livestock manure management systems to protect evironmental quality; controlling eutrophication, harmful algal blooms, and hypoxia in waterways; restoring riparian zones and coastal habitats; developing practices for managing agricultural production while protecting soil and water resources; and conducting integrated ecosystem risk assessments. The overall goal of the proposed research is to protect the Nation's natural resources.

Enhancing information systems

The National Agricultural Library (NAL) is the largest agricultural library in the world. Its print and electronic collections support the information needs of farmers, agricultural producers, researchers, policymakers, educators, and others. Under this goal, ARS is recommending in its fiscal year 2001 budget enhanced support of its research and information programs.

Enhanced Support of Research and Information Programs (to preserve and increase access to agricultural research information)

The number and variety of electronic information resources in agriculture continues to increase. At the same time, NAL must improve access to printed agricultural literature currently maintained in its collection. NAL also must initiate a digital archiving program to ensure that the Department's digital publications are accessible in the future.

ARS is requesting an increase of $2,000,000 for increasing access to research information; updating and improving NAL's information delivery system; and preserving USDA digital publications. The proposed funding increase will ensure that NAL will be able to meet the growing needs of the agricultural community for rapid delivery of print and electronic information.

PAY COSTS

The Agency is requesting $8,500,000 to cover part of the anticipated fiscal year 2001 pay raise. These funds are essential to the ongoing research effort of the Agency. The absorption of these costs over the last several years has eroded resources which has hindered the Agency's ability to hire new scientists, and procure equipment, materials, etc., which are critically needed to carry out ARS' research programs.

PROJECT TERMINATIONS

ARS is recommending no new funding for earmarked projects funded in fiscal year 2000, as well as lower priority projects. Resources that would have gone to these activities would be able to be allocated to high priority initiatives of national importance. None of the reductions in lower priority projects will be taken from the Administration's priority initiative areas.

BUILDINGS AND FACILITIES

Many of ARS' laboratories are inefficient and outdated. Major systems (i.e., water, heating, air-conditioning, electrical) in many of the laboratories have long passed their useful life expectancy and fail to meet building code requirements. The modernization or replacement of these laboratories which began several years ago remains a high priority.

In fiscal year 2001, the Agency recommends under its Buildings and Facilities account $39,300,000 for the following modernization projects:

National Animal Disease Center, Ames, Iowa

The Center serves as USDA's primary animal health research facility. Its research is widely recognized as preventing and controlling animal diseases, and protecting the food supply. Scientists at the Center have developed vaccines for porcine

parvovirus, bovine viral diarrhea virus, and brucellosis, and have developed diagnostic tools for hog cholera, bovine tuberculosis, and scrapie.

In fiscal year 2001, $9,000,000 is requested to plan and modernize facilities for ARS and APHIS. Specifically, ARS is requesting $8,000,000 to complete planning and design for new Biosafety Level 2 and 3 Animal Isolation Facilities, and $1,000,000 for utility distribution system improvements to support the new facilities. These facilities will be located on the NADC grounds and will be used by both ARS and APHIS scientists.

Beltsville Agricultural Research Center, Beltsville, Maryland

The largest agricultural center in the world, it is renowned for its prominent scientists, quality of research, and contributions to agriculture. Its research programs encompass natural resources and environmental sciences, plant sciences, livestock and poultry sciences, and human nutrition. In fiscal year 2000, ARS received an appropriation of $13,000,000, primarily for modernization of the Beltsville Human Nutrition Research Center. In fiscal year 2001, the Agency is requesting an increase of $13,300,000 to complete construction of the Beltsville Human Nutrition Research Center and for the modernization of the Building 307.

Western Regional Research Center, Albany, California

The Center conducts research principally on food safety and new agricultural uses. Research, however, is hampered by facilities which were built before World War II. In fiscal year 2000, ARS received $2,600,000 for the design of a new Research and Development Facility. In fiscal year 2001, the Agency is requesting $4,900,000 for the first phase of construction of the Research and Development Facility.

Plum Island Animal Disease Center, Greenport, New York

The Center conducts state-of-the-art research and diagnostic work on foreign diseases that are an ongoing threat to U.S. livestock. Located on an island off Long Island, the Center is the only site authorized by Congress to carry out such research. In fiscal year 2001, ARS is requesting $7,000,000 for continuation of the modernization of existing facilities at the Center. No new construction is being proposed.

National Agricultural Library, Beltsville, Maryland

NAL is the largest agricultural library in the world and serves as a national resource for access to information on agriculture and related sciences. Built in 1968, many of the systems in the building are unreliable and require replacement. A 1991 facility condition study identified numerous mechanical, electrical, and architectural deficiencies. In fiscal year 2001, ARS is requesting $1,770,000 to continue modernization projects currently underway.

U.S. National Arboretum, Washington, D.C.

The Arboretum was created by an Act of Congress in 1927 as a center for research and education on plant sciences. Since 1959, the Arboretum has been open to the public. Each year, thousands of residents and tourists who visit Washington, D.C. visit the Arboretum. A 1990 facility condition study of the Administration Building (which includes offices, laboratories, an auditorium, and an herbarium) found numerous building and system deficiencies. In fiscal year 2001, ARS is requesting $530,000 in design funds for the modernization of the Administration Building, and $2,800,000 for replacement of the irrigation distribution system leading into the collections and research plots, and for installation of an automated control system.

SUMMARY

In the span of a century, the face of American agriculture has changed dramatically—horses and mules have given way to power farm machinery, precision agriculture, remote sensing technologies, and bioinformatics. What has been achieved through agricultural research is truly remarkable.

As we begin a new century, we look ahead to the new opportunities and challenges that lie ahead. For the discoveries and advances that have not been made, ARS is hard at work. ARS is committed to solving the agricultural problems that affect both producers and consumers, and to improving the life of each and every American.

I will be pleased to respond to any questions that you may have regarding ARS' budget request.

ECONOMIC RESEARCH SERVICE

PREPARED STATEMENT OF SUSAN E. OFFUTT, ADMINISTRATOR

Mr. Chairman and members of the Committee, I am pleased to have the opportunity to present the proposed fiscal year 2001 budget for the Economic Research Service (ERS).

MISSION

The Economic Research Service provides economic and other social science research and analysis on efficiency, efficacy, and equity issues related to agriculture, food, natural resources, and rural development to improve public and private decision making.

BUDGET

The agency's request for 2001 is $55.4 million, a net decrease of $10 million from the 2000 appropriation. The net decrease consists of four parts: a $1 million increase for an initiative on structural changes and concentration in food and agriculture; a $.5 million increase to support a global research and outreach initiative; a $.7 million increase for a study on carbon sequestration; and a $12.2 million decrease for evaluations of food stamp, child nutrition, and WIC programs. Funding for these evaluation studies in 2001 is included in the Food and Nutrition Service (FNS) budget.

ERS CONTRIBUTIONS TO MISSION AREA GOALS

ERS shares five general goals with its fellow agencies in the Research, Education, and Economics (REE) mission area: (1) a highly competitive agricultural production system, (2) a safe and secure food supply, (3) a healthy and well nourished population, (4) harmony between agriculture and the environment, and (5) enhanced economic opportunity and quality of life for all Americans. These goals are fully consistent with the U.S. Department of Agriculture mission.

Goal I: The agricultural production system is highly competitive in the global economy

ERS helps the U.S. food and agriculture sector effectively adapt to changing market structure and post-WTO and post-NAFTA trade conditions by analyzing the linkage between domestic and global food and commodity markets and the implications of alternative domestic and international policies on competitiveness. ERS economists analyze factors that drive change in the structure and performance of domestic and global food and agriculture markets; provide economic assessments of structural change and competition in the food industry; analyze how global environmental change, international environmental treaties and agreements, and foreign trade restrictions affect U.S. agricultural production, exports, and imports; and provide economic analyses that determine how fundamental commodity market relationships are adjusting to changing trade, domestic policy, and structural conditions.

ERS will continue to work closely with the World Agricultural Outlook Board and other USDA agencies to provide short- and long-term projections of U.S. and world agricultural production, consumption, and trade. Cooperative efforts will seek to understand how commodity price and farm income variability affect market performance and interact with Federal policies and programs. ERS has sustained the frequency of reporting on commodities' outlooks, while strengthening the analysis that leads to a better understanding of reported observations and reporting needs in a sector that is witnessing profound structural change. In addition, ERS will continue to work closely with the Foreign Agricultural Service and the Office of the U.S. Trade Representative to assure that agricultural negotiations under the auspices of the World Trade Organization are successful and advantageous for U.S. agriculture. Research will target issues that prevented the Administration from fully meeting its goals for the Seattle-round of WTO trade negotiations—namely, the interrelationships involved among biotechnology, intellectual property rights, environmental concerns, and agricultural trade. ERS' December 1998 publication of Agriculture in the WTO demonstrated the Agency's ability to provide critical information on the benefits of earlier trade rounds and the potential gains from further liberalization of key markets. ERS experts will provide critical technical expertise in taking a more in-depth look at China's evolving role in world agricultural markets, including its potential membership in the WTO. ERS will conduct research designed to significantly improve the understanding among decision makers of the changing structure of the food marketing chain (for example, the implications for producers of the increasing

replacement of open markets by contractual arrangements and vertical integration). ERS will also continue to analyze the use and effectiveness of alternative marketing strategies and risk management tools in mitigating farm income risk. ERS' 1999 publication of Managing Risk in Farming: Concepts, Research, and Analysis demonstrates the broad and deep knowledge that ERS brings to addressing the risk concerns of the sector.

ERS analyses can help guide and evaluate resource allocation and management of public sector agricultural research—a key to maintaining increases in productivity that underlie a strong competitive position for U.S. farmers. ERS economists track and seek to understand the determinants of public and private spending on agricultural R&D; evaluate the returns from those expenditures; and consider the most effective roles for public and private sector research entities.

Structural change, coordination and concentration in food and agriculture

The request for an increase of $1,056,000 in fiscal year 2001 is intended to greatly enhance research and the dissemination of information related to structural changes within the food and fiber system. These changes within the market structure can have far reaching impacts on farmers, consumers, rural communities, and U.S. competitiveness in international agricultural markets. Through this initiative, ERS will shed light on the appropriate role of agricultural policy in this new structural environment while looking at new ways to examine markets and conduct aggressive data collection programs. ERS will also examine opportunities for small farmers and rural communities to remain viable in the changing market structure.

Global Research and Outreach Initiative

The request for an increase of $500,000 is part of an REE mission area interagency initiative to focus research and outreach programs on international issues of vital interest to the U.S. food and agriculture sector and on alleviation of the causes of global food insecurity. ERS will develop programs which are designed to strengthen research and outreach capacity in developing countries. Through collaborative activities with institutions in selected developing and former Soviet Block countries, ERS will be able to access information needed to support substantive research on challenges to developing a better understanding of the global agricultural market within which the U.S. food and agriculture sector functions. In the process, institutional and professional relationships will develop that facilitate long term exchanges and continued access to needed information and data.

Goal 2: The food production system is safe and secure

ERS focuses on improving the efficiency and effectiveness of public policies and programs designed to protect consumers from unsafe food by analyzing the benefits of safer food and the costs of food safety policies; efficient and cost-effective approaches to promote food safety; and how agricultural production and processing practices affect food safety, resource quality, and farm workers' safety. This research helps government officials design more efficient and cost-effective approaches to promote food safety. For example, ERS works closely with various USDA agencies and the Centers for Disease Control and Prevention (CDC) on pathogen reduction efforts, including Hazard Analysis and Critical Control Points (HACCP). The ERS research program provides detailed and up-to-date appraisals of the benefits of safer food, such as reducing medical costs and costs associated with productivity losses from foodborne illnesses caused by microbial pathogens. Specifically, in 1999 ERS used data provided by the CDC's "FoodNet" active surveillance system to update estimates of the costs of foodborne disease caused by four major microbial pathogens (estimated at $9.2 to $10.2 billion annually), and collaborated with CDC staff to refine and update the methodology for measuring the cost of foodborne disease. In fiscal year 1999, ERS established a new extramural research program to measure the benefits of safer food. ERS established a competitive selection process to award funding for cooperative agreements in food safety research. ERS awarded grants to Harvard University and the University of Wyoming to begin a multi-year effort to apply state of the art economic analysis to develop national estimates of the benefits of improving the safety of the Nation's food supply. In addition, ERS has undertaken new research on the costs of coming into compliance with various food safety policies, including assessment of the distribution of costs across the food industry and across different consumer demographic groups.

Understanding how food prices are determined is increasingly important in responding to domestic and international market events and opportunities that promote the security of the U.S. food supply. As the farm share of the food dollar declines, accurate retail price forecasts depend more heavily on understanding the marketing system beyond the farmgate. ERS systematically examines the factors that help set retail prices, including an assessment of the roles of the transpor-

tation, processing, manufacturing, wholesaling and retailing sectors, the impact of imports and exports, and linkages to the total economy.

Goal 3: The nation's population is healthy and well-nourished

ERS helps identify efficient and effective public policies that promote consumers' access to a wide variety of high-quality foods at affordable prices. ERS economists analyze factors affecting dietary changes as well as trends in America's eating habits; assess impacts of nutrition education and the implications for the individual, society and agriculture; and provide economic evaluations of food nutrition and assistance programs, such as factors determining changes in Food Stamp program participation. In addition, ERS studies the implications for producers and consumers of movement towards adoption of the dietary guidelines, evolution of trade in food products, and the determinants of food prices.

Analysis of nutrition education efforts considers what kinds of information motivate changes in consumer behavior, the food cost of healthy diets, the influence of food assistance programs on nutrition, and the implications of healthy diets for the structure of the food system. In 1999, ERS released the study, America's Eating Habits: Changes and Consequences, which poses questions and answers on several issues including: what are the economic costs associated with unhealthy eating habits; how much do people know about nutrition; how do national income and prices and demographic trends affect nutrient intake; and how do Government programs and regulations influence food expenditures and consumption. Since trade in high valued agricultural products now exceeds the value of bulk commodity flows, ERS will spend more time to disaggregate the components of these trade flows, understand their relationships to international investment and strategic behavior of U.S. food firms, and investigate the implications for U.S. consumers of a globalized food marketplace.

Goal 4: Agriculture and the environment are in harmony

In this area, ERS research and analytical efforts in cooperation with the Natural Resource Conservation Service (NRCS) support development of Federal farm, natural resource, and rural policies and programs. Such efforts promote long-term sustainability goals, improved agricultural competitiveness, and economic growth. This effort requires analyses of the profitability and environmental impacts of alternative production management systems in addition to the cost-effectiveness and equity of public sector conservation policies and programs. ERS analysts focus on evaluating the benefits and costs of agricultural and environmental policies and programs in order to assess the relationship between improvements in environmental quality and increases in agricultural competitiveness. For example, in its 1999 publication Economic Valuation of Environmental Benefits and the Targeting of Conservation Programs: The Case of the CRP, ERS demonstrated that targeting of land for inclusion in the Conservation Reserve Program with the use of a new environmental benefits index approximately doubled the benefits of outdoor activities affected by the CRP—particularly freshwater-based recreation and wildlife viewing. The ERS research report, Economics of Water Quality Protection from Nonpoint Sources (released in November 1999), compares and contrasts five different approaches to the prevention or resolution of the type of water quality problems most frequently associated with agriculture. This serves as a guide to agriculturally-related program development under the Clean Water Act. ERS is working with NRCS to provide a combination of economic, farm structural, and geographic information to inform ongoing decision making about the regulation of animal waste.

ERS is putting increasing emphasis on understanding and analyzing trends in adoption of genetically modified crops and the emergence of markets for both genetically modified and non-genetically modified commodities—becoming a leader in the public sector in releasing new and timely information on this topic. For example, ERS was the first government agency to provide and interpret survey data on the extent of adoption of genetically engineered soybeans, cotton, and corn. This included information on impacts on pesticide use, crop yields, and net returns.

Carbon sequestration initiative

This initiative will focus on the economic potential for domestic carbon sequestration and control of greenhouse gases (GHG) in agriculture, the use of economic incentives to encourage carbon sequestration on agricultural lands, and the potential to target USDA conservation programs to promote GHG mitigation activities in the farm sector. A request of $700,000 for this initiative would allow ERS to analyze the economic potential of alternative practices that increase soil carbon levels and identify the most efficient policies to facilitate adoption of soil carbon building practices. It would also enable ERS to collaborate with researchers around the world to incorporate estimates of carbon sequestration in global economic models, as well as

to consider the potential for other GHG mitigation efforts on agriculture. This would build on modeling work to estimate the impacts of climate change on agriculture which links to the broader issue of threats to global agricultural sustainability such as water quantity and quality and land constraints and soil degradation.

Goal 5: Enhanced economic opportunity and quality of life for rural Americans

The ERS contribution to this goal is based on analysis that identifies how investment, employment opportunities and job training, and demographic trends affect rural America's capacity to prosper in the global marketplace. ERS economists analyze rural financial markets and how the availability of credit (particularly Federal credit) and public spending, taxes, and regulations influence rural economic development. ERS analyzes the changing size and characteristics of rural and farm populations and the implications of these changes on the performance of rural economies. In addition, ERS studies the economic structure and performance of non-farm economic activities in rural areas, including the rebound in population growth in nonmetropolitan counties.

ERS will also monitor rural earnings and labor market trends with emphasis on regional and other disaggregations in order to provide insight into the determinants of variation in trends among rural counties. Such work should yield a better understanding of the factors that promote rural vitality and the opportunities for effective public sector intervention.

Because the effects of changes in welfare programs may vary between rural and urban residents, ERS social scientists will track implementation of recent program changes to understand impacts unique to rural residents. In particular, ERS analysis can help anticipate changes in participation across assistance programs for rural housing and for food security. For example, ERS has conducted the first nationally representative sample survey of participants in USDA's Section 502 rural housing program. Responses indicated that without the Section 502 program, 90 percent of borrowers thought it would have taken longer than 2 years, if ever, for them to be able to buy a comparable home. Another opportunity for understanding whether rural America faces unique circumstances will come with analysis of a recently-completed survey designed to determine characteristics of the rural manufacturing sector.

ERS continues to monitor the financial situation of the farm sector through establishing farm business organization and performance benchmarks. This task includes study of the financial position of farmers who employ technological advances and innovative risk management strategies in their businesses, compared with the financial position of farmers who use more traditional approaches. ERS has developed and widely disseminated a new farm typology that goes beyond the traditional classification of farms by sales class alone to a grouping that is much more reflective of operators' expectations from farming, stage in their life cycle, and dependence on agriculture. The development of the typology brings new understanding about the diversity of the U.S. farm community and the factors that can enhance success among small and minority-owned farms.

CUSTOMERS, PARTNERS, AND STAKEHOLDERS

The ultimate beneficiaries of ERS's program are the American people whose well-being is improved by informed public and private decisionmaking leading to more effective resource allocation. ERS shapes its program and products principally to serve key decision makers who routinely make or influence public policy and program decisions. This clientele includes White House and USDA policy officials and program administrators/managers; the U.S. Congress; other Federal agencies and State and local government officials; and domestic and international environmental, consumer, and other public organizations, including farm and industry groups interested in public policy issues.

ERS depends heavily on working relationships with other organizations and individuals to accomplish its mission. Key partners include: the National Agricultural Statistics Service for primary data collection; universities for research collaboration; the media as disseminators of ERS analyses; and other government agencies and departments for data information and services.

CLOSING REMARKS

I appreciate the support that this Committee has given ERS in the past and look forward to continue working with you and your staff to ensure that ERS makes the most effective and appropriate use of the public resources. Thank you.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

PREPARED STATEMENT OF DR. CHARLES W. LAUGHLIN, ADMINISTRATOR

Mr. Chairman and Members of the Committee, I appreciate the opportunity to present the proposed fiscal year 2001 budget for the Cooperative State Research, Education, and Extension Service (CSREES), one of four agencies in the Research, Education, and Economics (REE) mission area of the United States Department of Agriculture (USDA). I am especially honored as this is my first opportunity to submit testimony to this Committee.

I have been the Administrator of CSREES for a little over eight months, having come to CSREES from the land-grant university system. Through the years I spent in that great system, first as a student and then as an educator, I gained an appreciation for the strong partnership the agency has forged with the land-grant system, other colleges and universities, and public and private research and education organizations.

Over the years, I have witnessed how funding from the broad portfolio of CSREES programs has taken scientific discovery from conception to application. Formula funds have leveraged dollars from other sources, provided the start-up funds needed for an investigator to establish a research program and obtain the results needed to compete successfully in a competitive program, and allowed for a rapid response to an emerging problem. Competitively funded research from the National Research Initiative has supported individual investigators undertaking basic research aimed at generating new knowledge. Finally, research results were applied to real life problems through the Cooperative Extension System's outreach efforts. All of these efforts were undertaken in an environment which prepared students to meet the ongoing needs of agriculture, the environment, individuals and communities.

The broad portfolio of CSREES programs, whether formula based or competitively awarded, ensure that research leads to the transfer and implementation of practical outcomes. With this broad portfolio as a base, the strong Federal, state, and university partnership has supported great successes that have far reaching impacts on the food we eat, the environment in which we live, and the quality of life of our citizens. For example: In an Animal Health Program in the School of Veterinary Medicine at the University of Minnesota, three investigators teamed up to study three important pathogens, *Pasteurella multocida* (a multispecies animal pathogen of major national importance), *Cryptosporidium* (primarily a disease of cattle causing morbidity in calves, but also an opportunistic cause of disease in humans), and Avian pneumovirus (a new and emerging disease of turkeys). University and National Institutes of Health (NIH) funds supported the establishment of a gene sequencing facility. The research on *Pasteurella* and the *Pneumovirus* was extended by a grant from private industry, while CSREES formula funds were used to support the initial gene sequencing. These preliminary studies, in turn, led to successful grant applications to the National Research Initiative (NRI) and NIH. The NRI grant funds provided the sequencing of the entire *Pasteurella* genome, one of the first non-viral animal pathogens to have its entire genetic blueprint deciphered. The practical outcomes of this work have been enormous. First, for all three organisms, there has been the development of practical diagnostic kits and experimental vaccines based on knowledge gained from gene sequences. In the case of Avian pneumovirus, experiment station support allowed an accurate and sensitive diagnostic kit to be available within three months of obtaining the genome sequence. Two vaccines were developed within 12 months.

As a result of the development of the diagnostic kits and vaccines, extension professionals were able to work with producers to confine the spread of the disease and prevent a national epidemic. This example indicates how a variety of funding mechanisms may be necessary to take discovery research from conception to application. In particular, it demonstrates how formula funds provided to research directors can underwrite a new study such that it quickly becomes competitive. It shows how funds from one source can be used to leverage funds from another, and how both research and extension formula monies can be used to respond quickly to an emerging and potentially devastating disease that began at the local level but showed every likelihood of becoming a national catastrophe.

The questions before us involve not only important issues requiring the application of hard data and science, as in the scenario described above, but problems involving human behavior and motivation, complex social systems, and personal values. These questions require an agency that is engaged, and an engaged agency must be organized to step up to today's and tomorrow's needs. The challenge to CSREES is to move from a knowledge-dissemination model to an engagement model, developing and sustaining mutually beneficial partnerships with a wide

array of constituents. The fiscal year 2001 budget strongly moves us in that direction.

The fiscal year 2001 budget proposes an increase of approximately 2.3 percent in discretionary funds. CSREES is committed to seven overarching themes in its fiscal year 2001 budget:

—*Increases for competitively awarded grant programs* such as the $30.7 million increase for the NRI;

—*Funding for targeted areas*, including Biobased Products, Invasive Species, and Pest Related issues;

—*Integrated research, extension, and education activities*, as evidenced by an increase of $36.6 million increase in the Integrated Activities Account;

—*A balanced program portfolio*, as evidenced by sustained support at the fiscal year 2000 level for all formula programs;

—*Expanded partnerships to reach diverse audiences* through increases in funding for the 1890 and 1994 land-grant institutions, as well as for Hispanic-Serving Institutions; and through increases in programs that support the USDA Civil Rights Implementation Team Recommendations;

—*Development of human capacity* to address the need for a highly trained cadre of quality scientists, engineers, managers, and technical specialists in the food and fiber systems through increased funding for the Higher Education Programs and International Science and Education Grants; and

—*Streamlined management and improved accountability* of CSREES programs through increases for the Research, Education, and Economics Information System (REEIS), and through the integration of research, extension, and education under certain programs as intended in the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA).

FISCAL YEAR 2001 BUDGET HIGHLIGHTS

The fiscal year 2001 budget request is a conscious effort to address concerns raised about the distribution of funding between formula grant programs and competitive grant programs in the Administration's fiscal year 2000 Budget. In order to reduce the disparity in funding between formula and competitive grant programs, the fiscal year 2000 budget proposed $200 million for the National Research Initiative and $489 million for the six major formula programs (a reduction from the fiscal year 1999 enacted level of $540 million). In response to the concerns raised about this reduction, the fiscal year 2001 budget has proposed to fund major formula programs at the fiscal year 2000 enacted level of $542 million, and to request a more modest funding level of $150 million for the NRI. We hope that the Committee will recognize and respond to this action, and provide this more modest increase for the NRI.

One of the most crucial variables in the food and fiber system is scientific and professional human capital. The research and education agenda of the future depends on a highly trained cadre of qualified scientists, engineers, managers, and technical specialists. However, the higher education institutions that produce this essential human capital are confronted with two increasingly serious issues: expertise development and institutional development. Increases are provided in the fiscal year 2001 budget for several of the CSREES Higher Education Programs. An increase of $2 million is provided for the Food and Agricultural Sciences National Needs Graduate Fellowships Grants Program to expand support for the recruitment and training of outstanding graduate students in the food and agricultural sciences. An increase of $1.65 million is provided for the Higher Education Challenge Grants Program to enhance programs and capabilities for educating baccalaureate students in priority food and agricultural science areas, including food safety. An increase of $1 million is provided for the Multicultural Scholars Program which will support efforts to increase the multicultural diversity of the food and agricultural scientific and professional workforce .

The CSREES budget request reflects USDA Civil Rights Action Team recommendations to address disparities in funding and enhance the Department's cooperative efforts with institutions of higher education that are primarily devoted to the needs of minority students. An increase of $650 thousand is provided for the Hispanic Serving Institutions Education Grants program and an increase of $300 thousand is provided for the 1890 Institutions Teaching and Research Capacity Building Grants Program. CSREES is proposing an increase of $2.5 million for the Native American Institutions Endowment Fund to increase the endowment which will increase the interest earned on the endowment for use by the 1994 Institutions. CSREES also is proposing that the 1994 Institutions be authorized to use endowment income for facility renovation and construction and will encourage the 1994

Institutions to use the increased funding for that purpose. An increase of $0.5 million is provided for the second year of the 1994 Institutions competitive research program; an increase of $0.4 million is provided for the Extension Services at 1994 Institutions program; and an increase of $3.3 million is proposed for the Extension Indian Reservations Program to enhance the ability of extension agents to provide educational programs to isolated and under-served audiences on the reservations. Additionally, eligibility under the Section 406 Integrated Authority, first used in 2000 and for which a total of $76 million in 12 programs is requested in 2001, is open to colleges and universities, including the 1890 institutions.

Achieving sustained long-term improvement in the competitive position of United States agriculture relies critically on the Federal government's assurance that producers and marketers have access to the basic tools for success. Studies have shown that successful producers (farmers, ranchers, and foresters) are better educated, more apt to adopt new technology, have lower costs of production, and take better advantage of or have more opportunities for spreading production and marketing risk across alternative enterprises and mechanisms, than their less successful counterparts. The fiscal year 2001 CSREES budget proposes a new $9.6 million Biobased Products Program that will generate information and tools for farmers to grow, harvest, and handle alternative crops, and for manufacturers to convert renewable, raw materials to useful products for industry and/or consumers. The $4 million proposed for a new Small Farms Initiative will develop research, education, and extension programs in appropriate marketing strategies for small farms, business skills for small farmers, and help beginning farmers establish viable farm operations and enterprises. A proposed increase of almost $3.7 million will be focused on organic farming under the research and extension components of the Sustainable Agriculture Research and Education Program. An additional $1 million is requested for a new program to develop and implement biologically based pest management practices that mitigate the ecological, agronomical and economic risks associated with the transition from conventional to organic production systems.

Increases are proposed to support the development and application of new technology and management practices to replace the traditional pest controls that are at risk of being restricted or prohibited due to the Food Quality Protection Act of 1996 (FQPA). The budget proposes a $6 million increase to support long-term development and implementation of innovative pest management for major acreage crops, fruits, and vegetables through an integrated research, education, and extension competitive grants program. A $2 million increase is proposed for the development of intermediate-term alternative pest controls for fruit and vegetable crops to replace pesticides at risk of not meeting the new FQPA requirements.

An additional $3 million is proposed for development of practical management alternatives and technologies for commodities affected by the methyl bromide phase-out now scheduled for 2005 under recent amendments to the Clear Air Act. The budget includes an increase of $1.5 million for a Regional Crop Information and Policy Centers program that will address high priority pest management needs of Federal and State regulators, extension personnel, and the public through a coordinated effort at the regional level. These programs, in conjunction with increased funding for the Critical Issues, Pest Management Alternatives, Minor Crop Pest Management, Expert IPM Decision Support System, Integrated Pest Management extension, and Pesticide Applicator Training programs, as well as sustained funding for the Integrated Pest Management research program, will ensure a more safe and secure food and fiber system.

Establishing the scientific basis for optimal health, developing knowledge of the eating habits of Americans, and modifying food intake behavior are critical components to having a well-nourished population. An increasingly important component to having a well-nourished population is empowering our communities to build their capacities to meet a greater share of their food needs. The fiscal year 2001 budget proposes a new $5.25 million Anti-Hunger and Food Security Grants Program to provide support to non-profit entities for projects that reduce hunger, improve nutrition, bolster community food security, and help families move from poverty to self-sufficiency. An increase of $2.3 million above the 2000 appropriated level also is proposed for the Expanded Food and Nutrition Education Program (EFNEP) to support nutrition education programs aimed at meeting the needs of undernourished segments of the population, especially children.

As a Nation, we increasingly value the environment—clean air and water, unique ecosystems, and pristine land. We recognize that, given the vast amounts of land being used in agricultural or forestry production, we must ensure that our production practices, as well as our public policies and programs affecting these practices, are consistent with the dual objectives of promoting competitiveness while preserving natural resources and environmental quality. To achieve these goals, a bet-

ter understanding of the complex interactions between agricultural production and the environment is needed. An increase of $1.5 million is proposed for a new Invasive Species Program in fiscal year 2001 to target invasive species issues on an ecoregional basis. Water Quality also is a serious national concern as reflected in the President's Clean Water Action Plan. We propose an increase of $3.2 million for the integrated research and extension water quality program that will support projects to investigate such issues as the linkage between agricultural practices and outbreaks of harmful algal blooms, which can lead to conditions that cause massive fish-kills, human health problems, and significant economic losses to the seafood industry.

Americans recognize that their quality of life depends largely on economic, physical, and institutional factors affecting their families, businesses, and communities. The fast pace of changes in these factors, and their increasingly complex interactions, present a growing challenge. CSREES, in partnership with the land-grant university system, enhances the capabilities of individuals, families, and communities to improve their quality of life. An increase of $5 million is proposed for a new Youth Farm Safety Education and Certification Program for support to States to provide formal safety training and certification programs targeted to youth who are 16 to 17 years of age and working in agriculture to help mitigate farm-related injuries and deaths. The fiscal year 2001 budget proposes an increase of $1 million for the Children, Youth, and Families at Risk program to enhance child care programs for those segments of the population in greatest need, including limited resource families, isolated farm and rural families, and families needing child care during non-traditional hours, such as families of migrant farm laborers.

CSREES strategies to ensure responsive and effective management of USDA's extramural research, extension, and education programs include: strengthening the Federal/State partnership; integrating research, extension, and education activities as appropriate; improving information management systems which are accessed by both internal and external users; and participating in efforts to improve financial management within USDA. The fiscal year 2001 budget proposes an increase of $250 thousand for REEIS. Increased funding will help further the implementation of the system to enable CSREES and the REE mission area to meet the reporting requirements of the Government Performance and Results Act and help facilitate implementation of various reporting requirements and accountability provisions of AREERA.

The fiscal year 2001 Budget also includes mandatory funding of $120 million for the Initiative for Future Agriculture and Food Systems under Section 401 of AREERA for competitive research, education, and extension grants to address critical and emerging agriculture issues. Mandatory funding also is available under the Fund for Rural America, where a minimum of $20 million is expected to be provided for a wide range of research, extension, and education activities. The budget also supports funding for the Community Food Projects grants program at $2.5 million (supported with mandatory funds provided by the Food and Nutrition Service Food Stamp Program).

An increasing portion of Federal funds will be distributed competitively to address the most critical needs of the agricultural community and fund the most highly meritorious projects. The increases proposed for competitive programs are partially offset by decreases in non-competitive projects slated for reductions due to constrained budget resources. The additional flexibility provided in AREERA, where a portion of the formula funds can be used to support either research or extension projects, allows states more authority to use Federal funds in addressing their highest priority needs.

SUMMARY

The CSREES fiscal year 2001 budget represents a critical investment in research, extension, education, and integrated programs that focus on the development and delivery of tools to help agriculture compete in the long-term, enhancement of the environment, improvement of human health, and development of human capacity.

FOOD AND NUTRITION SERVICE

PREPARED STATEMENT OF SAMUEL CHAMBERS, JR., ADMINISTRATOR

Thank you, Mr. Chairman and members of this Subcommittee: I am Samuel Chambers, Jr., the Administrator of the Food and Nutrition Service (FNS). This is my second appearance before the Subcommittee having come to FNS eighteen months ago from the Michigan Family Independence Agency for Wayne County

where I served as the Director. In my previous position, I gained a substantial familiarity with the U.S. Department of Agriculture's nutrition assistance programs, particularly how these programs operate at the State and local level. I wish to thank you and the other Subcommittee members for the opportunity to again appear before this Subcommittee to discuss the fiscal year 2001 budget request for FNS.

2001 BUDGET REQUEST

The FNS requests $36.3 billion in new budget authority for fiscal year 2001, a level that will maintain and augment the long-standing contribution of the Nation's nutrition assistance safety net in fighting hunger and improving nutrition for children and low-income people. The request meets the priorities described in FNS's Strategic Plan, which was recently revised to better reflect the agency's unifying mission and purposes. The new Strategic Plan, and the fiscal year 2001 Annual Performance Plan which was derived from it, chart a clear course toward the food security and nutrition outcomes that these vital programs are intended to achieve, and to meeting the stewardship responsibilities that are critical to continued public confidence in Federal nutrition assistance. Both plans provide a strengthened foundation for both internal management improvements, and better coordination with our State and local nutrition assistance partners. I look forward to working with you as we meet the challenges of implementing these plans.

The fiscal year 2001 request includes funds to fully support all Federal nutrition programs and to make targeted improvements to these programs in a number of areas, some of which include the following.

—We propose to restore Food Stamp benefits to certain legal immigrants who lost their eligibility as a result of Welfare Reform;
—We are proposing simplification of certain food stamp rules related to the ownership of vehicles, which would encourage work by eliminating barriers to participation that result from owning a reliable vehicle;
—We propose an array of management changes designed to improve oversight in the Child and Adult Care Food Program (CACFP);
—The request includes the second increment of resources necessary to carry out the School Breakfast Program Pilot which we initiated in fiscal year 2000; and
—The request for the Women, Infants and Children's (WIC) Program is sufficient to provide benefits for all those eligible who wish to participate.

FOOD STAMP PROGRAM

The Food Stamp Program continues to serve the Nation as the primary source of nutrition assistance for low-income Americans. The program's mission is to ensure that low-income Americans have access to a nutritious, healthful diet through nutrition assistance and education. The resulting improvements in the nutritional status of low-income Americans protects their health and strengthens the food and agricultural economy. We are requesting $22.2 billion for the Food Stamp Programs in the context of continuing strong economic conditions. This estimate includes a benefit reserve of $1 billion, a $900 million increase over fiscal year 2000 level. This benefit reserve will ensure that funds can be made available quickly in the event of some unforeseen circumstance, thereby ensuring the program's ability to get food quickly to people who need it. Based on current economic forecasts from the Office of Management and Budget (OMB) for fiscal year 2001:

—The average unemployment rate is projected to be 4.4 percent;
—Food Stamp Program participation is projected to average 18.8 million persons monthly under current law; and
—The average monthly benefit is projected to be $76.40 per person.

The cost of the Thrifty Food Plan for a family of four is projected to rise about 2.9 percent from fiscal year 2000 to fiscal year 2001. Participation is projected to rise by approximately 750,000, reflecting a slight increase in the population eligible for benefits. In addition, the request reflects our legislative proposal to restore benefits to legal immigrants made ineligible for benefits under welfare reform. Benefits would be restored: (1) to legal immigrants who resided in the U.S. on August 22, 1996 and who subsequently reach age 65 benefiting 10,000 people by fiscal year 2005 ; and (2) to legal immigrant adults who resided in the U.S. on August 22, 1996 and live with eligible children, effective April 1, 2001, benefiting 155,000 people by fiscal year 2005. Another proposal will allow States the option of conforming food stamp rules on the treatment of vehicles to a more generous Temporary Assistance to Needy Families Program (TANF) policy. This change would help participants to access food stamp benefits and also own a reliable vehicle so they may have the needed transportation to obtain and keep a job. A final proposal in our request

would allow States to use the same rules for defining income in the Food Stamp Program as in the Medicaid Program. Also included under the Food Stamp account is $100 million authorized for the purchase of commodities for The Emergency Food Assistance Program and $1.3 billion to fund the Nutrition Assistance Program for Puerto Rico. Our request also includes $76.5 million for the Food Distribution Program on Indian Reservations (FDPIR), a slight increase from fiscal year 2000 reflecting the increased costs to the Indian Tribal Organizations (ITO) for administration of the program. The FDPIR provides benefits to eligible needy persons living on or near Indian reservations and was authorized by the Food Stamp Act in response to the need for an alternate program for those who do not have access to the regular Food Stamp Program. The estimates for participation in the program during fiscal year 2001 average 133,300 persons monthly, the same level projected for fiscal year 2000.

CHILD NUTRITION PROGRAMS

The purpose of the Child Nutrition Programs is to assist State and local governments in providing healthful, nutritious meals to children in public and nonprofit private schools, child care institutions, including family day care homes and summer recreation programs. FNS is requesting $9.5 billion which is slightly less than the level enacted for fiscal year 2000. We estimate that in fiscal year 2001, the requested funds, plus about $416 million in projected carryover funds available from fiscal year 2000, will support:

—4.6 billion meals in the School Lunch Program;
—1.3 billion meals in the School Breakfast Program;
—1.8 billion meals in Child Care Centers and Day Care Homes;
—155 million meals in the Summer Food Program; and
—130 million half pints of milk in the Special Milk Program.

For fiscal year 2001, expected average daily participation in both the National School Lunch Program (SLP) and the School Breakfast Program (SBP) are projected to be somewhat higher than in fiscal year 2000—the SLP is up by 1.6 percent while the SBP is up by about 3.2 percent.

Included in our request for fiscal year 2001 is $6 million to fund the final phase of the School Breakfast Program Pilot which was initiated by FNS during fiscal year 2000. During the three year project, FNS will carefully evaluate the effect of eating a free school breakfast on children's behavior and educational performance. The final increment of resources requested is sufficient to fully fund the collection and analysis of data as well as food costs necessary to complete the evaluation.

In the Child and Adult Care Food Program we project a 4.5 percent increase (77 million) in meals served over fiscal year 2000. In an effort to improve program integrity of the CACFP program, we are proposing legislation that would net the agency estimated savings of about $800 thousand in fiscal year 2001 and $115.2 million over a five year period. The proposal will include measures to strengthen oversight by sponsors, including prohibiting participation by sponsors that have a track record of mismanagement in other government programs and limiting and funds that may be retained by sponsors of child care centers for administration. The proposal also includes measures to strengthen State oversight, such as allowing States to retain a portion of program funds recovered through audits and reviews. In addition, the proposal would enhance Federal oversight and fund an evaluation of the program's administrative reimbursement structure. This proposal effectively addresses a number of issues raised in Federal audits which can only be addressed through legislation. These resources would be a complement to and reinforced by the additional funds for Child Nutrition Program integrity enforcement which we are requesting in the Food Program Administration (FPA) account.

Included as part of our child nutrition request is $2 million for the Nutrition, Education and Training (NET) Program. I urge your support for this modest amount which will help to fund the State infrastructure that provides training for school food service personnel in food service management, for instructing teachers in nutrition education, and for teaching children about the relationship of nutrition and health in order to help them make better food choices.

SCHOOL MEALS INITIATIVE AND TEAM NUTRITION

The School Meals Initiative for Healthy Children regulation updated the nutrition standards for school meals and recognized the importance of training and technical assistance for school food service professionals and nutrition education for students. To implement this regulation, the Food and Nutrition Service established the Team Nutrition Initiative, a comprehensive, structured plan for improving the nutritional standards of school meals as well as creating an environment in the school dining

area, in the classroom and in the community that fosters good dietary practices among children and their families. This initiative involves schools, parents and the community in efforts to continuously improve school meals, and to promote the health and education of 50 million school children in more than 96,000 schools Nationwide. Through training and technical assistance for school food service professionals; fun, interactive nutrition education for children and their parents; and support for school and community leaders, Team Nutrition works to change current behaviors to be more supportive of healthy eating and physical activity. These strategies are accomplished through direct Federal operations as well as grants to State agencies. In fiscal year 2001, we are requesting a total of $10 million for Team Nutrition, the same level appropriated for fiscal year 2000.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)

The purpose of the WIC Program is to improve the health of nutritionally at-risk, low-income, pregnant, breastfeeding and postpartum women, infants and children up to their fifth birthday. WIC participants receive three primary benefits: nutritious food packages designed to supplement their diets; nutrition education intended to improve their nutrition practices; and referrals to other critical health and social services.

We are requesting $4.1 billion in fiscal year 2001 to provide nutrition education and food benefits to a monthly average of almost 7.5 million needy women, infants and children. This funding level is sufficient to provide benefits for all those eligible who wish to participate in the program.

WIC ELECTRONIC BENEFIT TRANSFER (EBT)

FNS is engaging in activities complementary to the Food Stamp Program to advance EBT systems to improve program benefit delivery and client services for the WIC Program. Our WIC Program request for fiscal year 2001 includes $6 million which will be dedicated to EBT development. Our goal is to implement EBT in States that have embarked on planning and eventually expand EBT development to additional States. Our current progress includes:

—A successful WIC/Food Stamp EBT pilot in Wyoming which resulted in the State's decision to proceed with implementing the EBT system Statewide;
—Nevada has completed WIC EBT system design development and is scheduled for a March 2000 launch of a pilot in the Reno area involving 7,200 WIC recipients and 30 retailers;
—Ohio has finalized their contract with Citibank for WIC EBT system design, development and implementation and expects to launch their pilot during the summer of 2000 in Montgomery County. The Ohio WIC EBT pilot will include up to 11,000 WIC recipients and 80 retailers;
—Michigan has finalized their contract with Citibank for WIC EBT system design, development and implementation and is in the process of negotiating the timeline and details of the WIC pilot, which is expected to begin by the end of calendar year 2000;
—Texas and New Mexico expect to launch WIC EBT pilots in fiscal year 2001;
—The PARTNERS project, a consortium of 6 WIC State agencies (CT, MA, ME, NH, RI, VT), plans to release a joint Request For Proposal (RFP) for WIC EBT pilots in fiscal year 2001, and is continuing extensive planning for the development and implementation of WIC EBT systems; and
—New Jersey plans to release an RFP for a WIC EBT pilot in fiscal year 2001.

FARMERS' MARKET NUTRITION PROGRAM

The Farmers Market Nutrition Program provides WIC participants access to fresh fruits and vegetables while also expanding the awareness and use of farmers' markets by consumers. We firmly believe this program is a strong complement to the WIC Program and should not be competing with WIC for needed funds. Accordingly, we are requesting funding for the Farmers' Market Nutrition Program separate from the WIC Program, that is, as part of the Commodity Assistance Programs. The requested level of $20 million for fiscal year 2001 is an increase of $5 million above the fiscal year 2000 level. This level of funding would allow the program to continue to grow to new counties in States currently participating and to expand beyond the current 39 State agencies participating in the program to other States which have expressed interest in having this program.

COMMODITY ASSISTANCE PROGRAMS

The Commodity Assistance Programs include funding for the Commodity Supplemental Food Program (CSFP), administrative funding for The Emergency Food Assistance Program (TEFAP) and funds for the Farmers' Market Nutrition Program. Our budget request for fiscal year 2001 includes:

—$93.3 million in support of the women, infants, and children and elderly caseload in CSFP;

—$45 million for TEFAP administrative expenses in addition to the $100 million for commodity purchases available in the Food Stamp account providing for a cumulative total program of $145 million; and

—$20 million for the Farmers' Market Nutrition Program.

The CSFP level requested will support an average monthly participation of 102,800 women, infants and children as well as an average monthly participation of 320,100 elderly. The request of $93.3 million, in conjunction with use of $7 million in inventory, will allow for a total program of about $100 million in fiscal year 2001. The request of $93.3 million (which is a $5 million increase from fiscal year 2000) is required in order to continue the program at the level of participation expected to be attained by the end of fiscal year 2000 which will include participants from five new States. These States include Ohio, Mississippi, Texas, Montana and Vermont.

NUTRITION PROGRAM FOR THE ELDERLY

Our request for the Nutrition Program for the Elderly is $150 million, an increase of $10 million above the fiscal year 2000 level. The request will allow FNS to support an increase in the number of meals served by about 7.7 percent.

FOOD PROGRAM ADMINISTRATION

Our request for fiscal year 2001 is $128.6 million—an increase of $14.0 million over fiscal year 2000. We are requesting a total of $8 million (a $5 million increase) to be used for program integrity initiatives in both the Food Stamp Program and the Child Nutrition Programs. This investment in program integrity, although significant in absolute terms, is small when compared to the more than $36 billion spent annually for program benefits, State administration and other supporting activities. The requested increase of $5 million would be divided between the Food Stamp and Child Nutrition Programs. Efforts in the Food Stamp Program would be directed to improving the accuracy of the quality control systems, working with States to reduce error rates and avoid error rate increases while ensuring benefits for eligible households; and efforts to ensure that States are efficiently using procedures designed to help eligible families retain food stamp benefits when they move from welfare to work. Efforts in the Child Nutrition Programs would be used in part to study sources of errors in school meals applications and evaluate alternative methods for determining and verifying children's eligibility for free and reduced price benefits in the School Lunch Program. Also, some of the resources would be devoted to enhanced Federal monitoring of the CACFP State agencies, sponsors and child care facilities.

The overall importance of nutrition to health is being increasingly recognized with diet-related medical and lost productivity costs soaring over an estimated $71 billion annually. To reduce these costs, we are asking for $2 million to develop an integrated nutrition education campaign to aggressively promote both the Dietary Guidelines for Americans and the Food Guide Pyramid to targeted segments of the general population (including the Spanish language community). This increase also provides for development of consumer materials that will help income individuals apply the Dietary Guidelines and Food Guide Pyramid concepts within a limited budget.

We also are asking for $5 million to support an intergovernmental partnership led by FNS to address the nutrition, health, and employment needs of impoverished citizens in border areas known as "Colonias." These resources will allow FNS to expand efforts to a larger proportion of the 1,500 Colonias located near the Mexican border in Arizona, California, New Mexico and Texas.

STUDIES AND EVALUATION

For fiscal year 2001, we are requesting funds for practical, focused analysis in support of the agency's nutrition assistance programs. In the Food Stamp account, our request is for $10.7 million; in the Child Nutrition account, our request is $3 million; and in the WIC account, we are requesting $3.5 million. The continued absence of study, demonstration and evaluation funds over the last three fiscal years

has severely limited the depth of FNS support to Congressional staff, decreased our ability to respond to States, and restricted us from providing practical, research-based guidance to the managers of our programs. FNS has a critical need to target program specific studies and evaluations, rather than general research. FNS has designed its studies and evaluations to be useful in formulating its nutrition policy, measuring program impacts and integrity, and advising both Administration officials and the Congress of the potential costs and effects of legislative proposals under consideration.

GOVERNMENT PERFORMANCE AND RESULTS ACT

The FNS Annual Performance Plan (APP) has been submitted as part of the fiscal year 2001 budget request. As previously indicated, the fiscal year 2001 APP has been structured to support the revised FNS Strategic Plan which has been extensively modified to better support the FNS mission. The goals outlined in the APP are directly related to the achievement of the agency's strategic goals and objectives.

CONCLUSION

The mission of FNS is to increase food security and reduce hunger in partnership with cooperating organizations by providing children and low-income people access to food, a healthful diet, and nutrition education in a manner that supports American agriculture and inspires public confidence. This fiscal year 2001 budget request reflects our commitment to the achievement of this mission. We also believe that our request for $36.3 billion is crucial to continued efficient program operations. Mr. Chairman, this summarizes the FNS fiscal year 2001 budget request. I will be happy to answer questions that you or other members of the Subcommittee may have.

FOOD, NUTRITION AND CONSUMER SERVICES

PREPARED STATEMENT OF SHIRLEY R. WATKINS, UNDER SECRETARY

Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to present the fiscal year 2001 budget request for the Food, Nutrition, and Consumer Services (FNCS). I am accompanied today by Samuel Chambers Jr., the Administrator for the Food and Nutrition Service (FNS), Dr. Rajen Anand, the Executive Director for the Center for Nutrition Policy and Promotion and Stephen Dewhurst, the Department's Budget Officer. As Under Secretary for FNCS, I am responsible for nutrition assistance programs administered by the Food and Nutrition Service, including the three core programs: Food Stamp; Child Nutrition; and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). I am also responsible for the Center for Nutrition Policy and Promotion which is the lead Federal agency in the research and promotion of human nutrition issues.

The mission of FNS is to increase food security and reduce hunger in partnership with cooperating organizations by providing children and low-income people access to food, a healthful diet, and nutrition education in a manner that supports American agriculture and inspires public confidence. The importance of the nutrition assistance programs administered by FNS is clear. Despite the strongest economy in a generation, hunger in America remains a problem, and about one in five individuals participates in one or more of these programs. In 1998 over 9 million people, more than one-third of them children, lived in households that experienced hunger.

A nutritious diet and access to sufficient food are critical to lifelong health and well being, and a poor diet has been proven to be a significant factor in 4 out of the 10 leading causes of death in the United States. We know that obesity, in children and in adults, is a major factor in the incidence of such conditions as diabetes, hypertension and stroke, osteoporosis, heart disease, and some types of cancer. These diseases account for 1.4 million deaths annually, and they cost society an estimated $71 billion in medical costs, lost productivity and premature deaths. Diet plays a central role in the prevention of virtually all of these appalling statistics. Our programs can play an effective role in education and prevention.

By fighting hunger and promoting good nutrition, these programs help to promote the well-being of millions of families and children in this country, and they play a crucial role in supporting those who are making the difficult move from welfare to work and self-sufficiency. Today we celebrate an extraordinarily strong economy and good times for the majority of our people. But even now, National economic success has not led to personal prosperity for everyone. Many continue to face difficulty and hardship, and our nutrition assistance programs exist to help. Even now—especially

now—we must not lose sight of the ongoing contribution that Federal nutrition assistance programs make in ensuring that, in good times and bad, no one in this land of unparalleled agricultural abundance should have to go without adequate and nutritious food.

PROGRAM HIGHLIGHTS

Before discussing some of the particulars of our budget request, I would like to share with you some of our efforts to maintain and improve the effectiveness of the Federal nutrition assistance programs.

The Food Stamp Program

Food Stamp Program (FSP) participants represent a broad cross-section of the Nation's needy families and children. The Food Stamp Program provides a critical nutrition safety net for low-income working families, children, the disabled, some of our legal aliens, and the elderly. We are working to ensure that the program reaches all those who need it and to serve them efficiently and with dignity.

As a result of welfare reform legislation, some groups of individuals have become ineligible for our programs. Many immigrants and unemployed adults without dependents are no longer entitled to receive food stamps. The Agricultural, Research Extension and Education Reform Act of 1998 (the 1998 Act) restored food stamp benefits to some of our legal aliens, but we continue to be concerned for those who remain ineligible for benefits. In our fiscal year 2001 request, we are asking that eligibility be restored (1) to certain legal aliens who become elderly and (2) to certain legal aliens living with eligible children. Additionally, we are requesting simplification of certain food stamp rules which relate (1) to the ownership of vehicles and (2) to the definition of income. I will have more to say about these specific policy initiatives.

The agency is leading the way in new benefit delivery technologies. At the end of fiscal year 1999, about two-thirds of all food stamp benefits were issued using Electronic Benefit Transfer (EBT). Thirty-two States and the District of Columbia had fully implemented EBT for issuing food stamp benefits. FNS continues efforts to provide needed technical assistance associated with State EBT implementation and to provide ground breaking technology in the development of a multi-program delivery system which includes both WIC and food stamp benefits.

Participation in the Food Stamp Program averaged 18.2 million people in fiscal year 1999, and has since fallen even further, reaching a 20 year low. Part of this decline can be attributed to the strength of the economy and the success of welfare reform in moving many families from welfare to work. Part of the decline is also due to new restrictions on the participation of legal aliens and unemployed able-bodied adults without dependents. However, between 1995 and 1997, food stamp participation fell five times faster than the poverty rate, a sign that the nutritional needs of some low-income people may be going unmet. The number of people in poverty fell by .8 million over this period while the number of food stamp participants fell by 3.8 million, suggesting that many poor families have left the program despite their continuing eligibility. Some families who leave welfare for work may not be aware that they are still eligible for food stamps and, in other instances, State or local agencies may have discouraged or even prevented those eligible for benefits from applying. In any case, families and children are suffering needlessly.

In July, 1999, the President responded by taking action to help these needy families. The efforts included (1) issuing guidance to make it easier for families to own reliable vehicles without losing their benefits, (2) providing States with options to simplify income reporting rules and (3) announcing a public education campaign for the Food Stamp Program. The goals of the education campaign are to reach and inform potential applicants about the Program and its requirements and to help those who may be eligible. The campaign is targeting four groups: the general public, the elderly, working poor, and immigrants. Using models developed by FNS, a variety of materials have been produced in both English and Spanish, and have been distributed by State and local agencies, community organizations, and advocacy groups.

FNS continues its efforts to support State welfare reform efforts while providing technical assistance as State policies evolve. In early fiscal year 1999, Food Stamp Program eligibility was restored to about 225,000 legal aliens who were made ineligible by the welfare reform legislation of 1996. FNS developed guidance for States on implementation and bilingual materials for immigrants, and also worked with the Social Security Administration (SSA) on a notice to Social Security Income (SSI) recipients advising them that they may again be eligible for food stamp benefits.

FNS continues to be a leader among Federal agencies in the implementation of the Treasury Offset Program (TOP) to collect delinquent food stamp recipient debt. Through TOP, Treasury is able to match Federal payments to a delinquent debtor

database. Under certain circumstances, when a match occurs, the payment is intercepted to satisfy the debt, either in whole or part. Claims collections for overissued food stamps increased to $206 million in fiscal year 1999. In fiscal year 1999, over $88 million in food stamp recipient debt was collected through TOP. FNS is currently working with State agencies to improve the process of submitting debts to TOP by (1) allowing State agencies to move from an annual submission process to a quarterly process and (2) providing direct online access to TOP for States for more timely updates and submissions.

In the Food Distribution Program on Indian Reservations (FDPIR) we have been working through a unique partnership between the Tribal Governments and USDA to make some important program changes. First, we have improved the FDPIR food package based on a comprehensive review conducted in fiscal year 1997. The nutritional content of the food package has been improved by decreasing the percent of calories from fat and making it conform more closely to the USDA's Food Guide Pyramid. Second, the successful and popular FDPIR Fresh Produce Initiative continues to expand to new sites across the country, providing enhanced nutritional benefits to nearly 78,000 people each month. This initiative is the result of a successful partnership with the Department of Defense, and has now expanded to 64 sites. Third, Indian Tribal Organizations (ITO's) that receive shipments through Federal warehouses are now enjoying significantly better service. By altering the basis on which orders are placed, the ITO's now only need place their requests two months in advance of delivery instead of the five months previously required.

In early fiscal year 1999, FNS published a rule which reinstated the agency's authority to grant waiver requests from ITO's in Oklahoma to allow Indian households living in urban areas to participate in the Food Distribution Program for Indian Households in Oklahoma (FDPIHO). This rule provides households living in urban areas with the choice of receiving either food stamps or commodities each month. To date, two Indian tribes in Oklahoma (the Choctaw Nation and the Chickasaw Nation) have requested waivers to expand FDPIHO services to urban areas. Both waivers were approved.

Child Nutrition

The Child Nutrition Programs, which include the National School Lunch and School Breakfast and After School Snack Programs, the Child and Adult Care Food Program, Summer Food Service Program and the Special Milk Program serve meals to millions of children in schools and other sites each day. For example, on an average school day during fiscal year 1999, more than 50 percent of all children enrolled in school ate a Federally supported school lunch. These programs are important because providing nutritious meals and nutrition education to these children helps them to be more productive and more likely to succeed in school and in life. Well-educated and healthy children mature into productive and healthy adults.

We are currently working to evaluate the potential impact of changes in the School Breakfast Program on student behavior and performance in school. The William F. Goodling Child Nutrition Reauthorization Act of 1998 (the Goodling Act) authorized FNS to pilot test the serving of breakfast in elementary schools in six districts. This pilot will test the impact of providing free breakfasts to all elementary school children without consideration to family income. I am pleased to report the agency has done a considerable amount of work in preparation for the planned beginning of the pilot in school year 2000–2001. Our fiscal year 2001 budget request includes $6 million for the second and final installment of funding necessary to complete the pilot. These funds will support the provision of meals and a rigorous evaluation of the impact of providing free breakfasts regardless of income on student nutrition and educational achievement.

In the Child and Adult Care Food Program (CACFP) the Agency continues to aggressively expand program integrity activities. We are taking advantage of the Goodling Act which authorizes $1 million each year targeted toward improved management and oversight of the CACFP. The preponderance of these resources are being used to fund additional staff years and associated travel costs to provide additional management support to State agencies. Additionally, we have reconvened the CACFP Management Improvement Task Force and significantly expanded its efforts. To date, the Task Force has developed training modules based on the previously issued management improvement guidance. As a part of our comprehensive integrity improvement strategy, we expect to publish a proposed and final child care initiative rule during the current fiscal year (2000). In addition to ongoing program oversight activities in fiscal year 2000, the agency will conduct an enhanced management evaluation of CACFP administration in one State in each of our seven regions. Finally, we are submitting, as part of the fiscal year 2001 budget, a proposal

which includes an array of management changes designed to further address the issues of integrity and oversight in the CACFP.

WIC

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is widely regarded as one of the Nation's most successful, cost-effective public programs, and it continues to be one of our top priorities. This Administration has consistently demonstrated its commitment to ensuring that every eligible mother, infant and child is provided the opportunity to receive WIC benefits. In fiscal year 1999, average monthly participation was slightly above 7.3 million persons. We are working hard to make the program an even greater success. I would like to mention some noteworthy examples:

—In mid-December 1999 Vice President Gore's National Partnership for Reinventing Government announced that the WIC Program scored second highest among 30 high impact government programs in customer satisfaction. Only the Head Start Program scored higher. The rating was 83 out of a possible 100, and was about 10 points higher than the National average for the programs evaluated. These high customer satisfaction ratings are a testament to the close and productive partnership among USDA, the National Association of WIC Directors (NAWD), and the staff at the State and local levels who work with WIC participants every day. Together we vow to continue to provide the best quality service to WIC customers to help ensure the health of America's children.

—The agency has also continued its efforts to improve WIC program integrity. We recently issued a regulation to strengthen the determination of income eligibility during the certification process. All WIC State agencies have implemented a standard set of criteria to be used for nutritional risk determinations, and work continues to improve the consistency of determinations based on dietary risk. In the area of vendor management, we issued a proposed rule in June 1999 that would implement the provisions in the Goodling Act pertaining to vendor selection, monitoring, and the detection of high-risk vendors. This rule further proposed other comprehensive management provisions designed to strengthen vendor integrity. We plan to issue this final rule before the end of fiscal year 2000. In addition, in March 1999 we published a final rule to curb vendor-related fraud in the WIC Program by mandating uniform sanctions across WIC State agencies for the most serious program violations. These violations include trafficking, overcharging, and exchanging food vouchers for alcohol or tobacco products. The rule also requires the disqualification of any WIC vendor who has been disqualified from the Food Stamp Program. This rule is intended to promote WIC and Food Stamp Program coordination in the disqualification of vendors and retailers who violate program rules.

—FNS is engaged in activities to advance EBT systems that would improve benefit delivery and client services for the WIC Program. The agency is working with individual State initiatives to research, plan, fund, and implement WIC EBT systems. Several States continue to pursue hybrid benefit delivery systems at point-of-sale locations which would combine on-line food stamp benefit redemption with off-line WIC benefit authorization. FNS has earmarked $2.6 million in grants for WIC EBT in fiscal year 2000. Our fiscal year 2001 request includes $6 million dedicated to EBT development in States that have already begun EBT planning, with an ultimate goal of implementing EBT in additional States.

—The Farmers' Market Nutrition Program (FMNP) now operates in 39 State agencies, providing fresh fruits and vegetables to WIC participants. During 1999, the FMNP was expanded to add one new State (Alabama), one new Territory (Guam) and two Indian Tribal Organizations (Rosebud and Osage Tribal Councils). The President's budget transfers the program from WIC to the Commodity Assistance Program (CAP) and proposes to increase funding to allow for growth in those States currently participating as well as expansion into other States not currently in the program.

—FNS and the Center for Disease Control (CDC) continue to work with non-federal partners to increase access to immunization services through the WIC Program. Currently, about three quarters of all local WIC agencies assess client status and make appropriate referrals to immunization services for children. The CDC reports that about 81 percent of pre-school children are being assessed for immunization status and receive the needed services thanks to the intervention of the WIC Program.

—Over the past 10 years, WIC per person food costs have either declined or have reflected only a modest increase due to the diligent cost containment efforts of State and FNS partnerships. The most successful part of this strategy has been

competitively bid rebate contracts between State agencies and infant formula manufacturers. These successes have been instrumental in supporting more participation than would otherwise have been possible.

—The WIC Program promotes breastfeeding as the best form of nutrition for infants through the provision of support and encouragement to new mothers and through nutrition education during pregnancy. In fiscal year 1998, State agencies spent nearly $57 million on this effort. FNS continues to sponsor semi-annual meetings of the Breastfeeding Promotion Consortium—a group of health professionals representing government, advocacy and public health interests. In 1997, FNS implemented a National Breastfeeding Promotion Campaign, in cooperation with State agencies. The goal of the Loving Support Campaign is to raise awareness of the benefits of breastfeeding among WIC-eligible women, fathers, and family health care providers to help create a community environment that accepts and supports a woman's decision to breastfeed. Currently, 54 WIC State agencies are participating in the campaign and a recent evaluation indicates that the campaign is a tremendous success. Along with the Department of Health and Human Services (DHHS), USDA participated in the development of a Health Care Physicians' and Providers' Breastfeeding Support Kit by Best Start. The kits were developed for health care professionals to complement the Loving Support Campaign materials which focus on consumer education. Finally, the authorization in the Goodling Act to allow program funds to be used for the purchase or rental of breast pumps was a giant step forward.

WIC is, without a doubt, one of the best nutrition assistance programs ever created. It provides mothers access to nutrition education, health care referrals, and supplemental foods rich in the necessary dietary elements they could not otherwise afford. WIC babies do get a healthier start in life, and we intend to continue our hard work so that all who need the program will be able to participate.

Commodity Supplemental Food Program

In our Commodity Supplemental Food Program (CSFP), we have improved the flexibility of State and local agencies to serve needy populations. In short, agencies operating CSFP can now serve women, infants, children and the elderly as needed. We are seeing a distinct increase in elderly participation, and we want to make sure that the program is responsive to their needs.

Program services have been improved through a redesign of inventory systems. Federal inventory is now replenished based on historical data, rather than on a requirement for organizations to place orders five months prior to delivery. This change significantly reduces the need for organizations to adjust orders and helps to ensure that they will have the foods they need on hand.

The Emergency Food Assistance Program

During fiscal year 1999, the States once more had the prerogative of using administrative funds for the purchase of food. This was a significant improvement and allowed administrative funds to be more efficiently used to increase the total flow of food from all sources through The Emergency Food Assistance Program (TEFAP). As a result, we have been able to purchase a greater variety of healthful foods. In fiscal year 1999, bonus commodities donated to States were valued at a total of $108 million.

Food Program Administration

FNCS has a fundamental responsibility to ensure both the program and financial integrity of each nutrition assistance program including the timely delivery of benefits to all qualified recipients. It is a responsibility that the Administrator and I take very seriously. The FNS Food Program Administration (FPA) account, which supports most of the Federal administrative activity for our nutrition assistance programs, is an important part of such assurance. The FNS staff continues to be committed to finding new and innovative approaches to improving program integrity and services. I will have more to say concerning those new initiatives in this account.

In addition to its nutrition assistance programs, FNCS operates the Center for Nutrition Policy and Promotion. The Center is the focal point for the advancement and coordination of nutrition promotion and education policy. It provides important research and analysis and actively collaborates with public, private and non-profit organizations to expand the body of critical nutrition information and research.

Nutrition Education

FNCS nutrition education programs offer one of the Nation's best opportunities to improve dietary practices in our target populations in ways that promote health and well-being. These programs offer an extraordinary opportunity to reach partici-

pants, particularly children who participate during their formative years, with nutrition and healthy lifestyle messages. Research confirms that well-designed, behavior-focused interventions can effectively improve diets and nutrition-related behaviors. FNCS is working toward a comprehensive nutrition education approach that is fully integrated into all FNCS programs, and provides consistent, reinforcing nutrition messages across programs. Members of the target groups are encouraged to make healthy food and nutrition-related choices throughout their life cycle. The FNCS nutrition education objective is to reach all those we serve with state-of-the-art nutrition education that can effectively change behavior and promote long-term health. Last year, in response to a request included in the conference report accompanying the Fiscal Year 2000 Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, FNS prepared and submitted a report to Congress, "Promoting Healthy Eating: An Investment in the Future." That report presents a range of recommendations in support of a comprehensive, integrated nutrition education approach that reaches across programs. I commend the report to your attention, and I look forward to working with Congress to implement its recommendations.

FISCAL YEAR 2001 REQUEST

FNS has recently revised its Strategic Plan to better reflect the agency's unified mission and purposes. The new Strategic Plan (and the associated fiscal year 2001 Annual Performance Plan) charts a clear course toward the nutrition security outcomes that each of our vital programs are intended to achieve and fully meets our stewardship responsibilities which are so critical to maintaining public confidence. Our request of $36.3 billion in new budget authority for fiscal year 2001 fully supports the goals and objectives set forth in the Strategic Plan and will maintain and augment the long-standing contribution of the Nation's nutrition assistance programs. I will focus the remainder of my remarks on key aspects of the budget request, including a number of policy changes we have proposed. The testimony of the Administrator, Samuel Chambers, is being submitted for the record and presents many of the technical aspects of our request.

FOOD STAMP PROGRAM

We are requesting $22.2 billion for the Food Stamp Program, a slight increase from fiscal year 2000, resulting principally from an increase in projected participation and food costs. The request would also fund a number of important policy changes that the Administration is proposing. Two of our policy initiatives deal with the issue of eligibility for certain legal aliens. As I have indicated on previous occasions, the Administration believes that some provisions of welfare reform went too far, making some changes that had nothing to do with the stated goal of moving people from welfare to work. The 1998 Act restored food stamp eligibility to several of the most vulnerable groups of legal aliens, including those who were age 65 or older and legally residing in the U.S. when welfare reform legislation passed in 1996. It is now time to take the next steps. We propose to restore food stamp eligibility to aliens who legally resided in the U.S. on August 22, 1996, and who subsequently reach age 65, correcting the inequity of treating some elderly legal aliens differently from others solely on the basis of a birth date.

Another proposal included in our request for fiscal year 2001 will restore food stamp eligibility to aliens adults who legally resided in the U.S. on August 22, 1996, and who live with eligible children—effective April 1, 2001. Families with children of immigrant parents, even the children born into citizenship in this country, receive fewer benefits than families with children of native born parents facing the same circumstances. This proposal will eliminate this inequity and improve the well-being of children by increasing food stamp benefits to their low-income households.

We are also pursuing changes to better serve the working poor. As more families move from welfare into the job market, there is a growing recognition of the importance of owning a reliable vehicle to find and keep a job. Under today's Food Stamp Program rules, people leaving welfare to go to work may not qualify for food stamps because of the value of their vehicle(s). These rules are complicated and may be inconsistent with the regulations States use in the Temporary Assistance to Needy Families (TANF) Program. The stringent limit currently in place is a barrier to participation by low-income people, many of whom are faced too often with the choice between buying food and reliable transportation. To mitigate this situation, we have included in our request a legislative proposal to allow States the option of making Food Stamp Program vehicle rules conform to TANF Program rules, simplifying administration and improving access for the working poor.

Finally, we have included a legislative proposal to allow States to conform the mandatory income exclusions in the Food Stamp Program to those used in the Medicaid Program. Current food stamp law excludes certain categories of income from benefit calculations, exclusions which are somewhat different from Medicaid. These differences introduce unnecessary complexity in State administration. This proposal, which allows for the alignment of Food Stamp and Medicaid income definitions, will help eliminate this complexity.

This estimate includes a benefit reserve of $1 billion—a $900 million increase from fiscal year 1999. The Food Stamp Program is the primary source of nutrition assistance for low-income families with a mission to ensure that all households have access to healthful diets and receive sound nutrition education and guidance. As part of the Food Stamp Program operations, States conduct an Employment and Training (E&T) Program to assist program participants in gaining the skills, instruction or experience that will increase their ability to move from welfare to regular employment. In fiscal year 2001, we are requesting $381 million to support the E&T Program. In addition, during fiscal year 2000, States will be allowed to use any carryover fiscal year 1999 E&T funds.

Also included in our request for the Food Stamp Program is $10 million to support a nutrition education initiative and a campaign designed to reach potentially eligible families and individuals with information about (1) the nutritional benefits of the Food Stamp Program and (2) application procedures. The effort will target the following groups: the general public; the elderly; working poor; the disabled; and households containing legal aliens. Educational materials will be produced in both English and Spanish.

CHILD NUTRITION PROGRAMS

In the Child Nutrition Programs, we are requesting funding of $9.5 billion—a very slight decrease from fiscal year 2000. The decrease is the result of a $416 million projected carryover from fiscal year 2000, reducing the need for new budget authority. We do project modest increases in participation in both the National School Lunch and School Breakfast Programs. These increases are attributable to higher school enrollments and the resulting rise in the numbers of children participating in the programs.

We have included a modest request of $2 million for Nutrition Education and Training (NET) Program activities for which I strongly urge your support. NET provides training for school food service personnel in food service management and for teachers in providing nutrition education and information for children. It is a critical tool for building capacity at the State level to support and deliver nutrition education to our young people—education that helps them develop healthy eating habits that can last a lifetime. We are also requesting $6 million for meals and to fund a rigorous evaluation of the School Breakfast Program Pilot which was authorized by the Goodling Act. The evaluation will be designed to ensure that the results of the pilots are measured and analyzed so they will be reliably valid and useful in making future policy decisions. Finally, our request for resources to support the crucial Team Nutrition Program remains at the fiscal year 2000 level of $10 million.

I have been most concerned about the cases of mismanagement and fraud that both FNS and Federal auditors have identified in the Child and Adult Care Food Program (CACFP). In an effort to improve CACFP program management, we are proposing legislation that would net the agency savings of about $800 thousand in fiscal year 2001 and $115.2 million over a five year period. This legislative proposal includes an array of management changes designed to improve integrity and oversight in CACFP. The proposal will include measures to strengthen oversight by sponsors, including prohibiting participation by sponsors that have a track record of mismanagement in other government programs and limiting the funds that may be retained by sponsors of child care centers for administration. The proposal also includes measures to strengthen State oversight, such as allowing States to retain a portion of program funds recovered through audits and reviews. In addition, the proposal would enhance Federal oversight and fund an evaluation of the program's administrative reimbursement structure. This proposal effectively addresses a number of issues raised in Federal audits which can only be addressed through legislation. These resources would complement and reinforce the additional funds for Child Nutrition integrity enforcement which we are requesting in the Food Program Administration (FPA) account.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC)

For the WIC Program, our request is $4.1 billion—a $116 million increase from the level enacted for fiscal year 2000. This level of funding will support an average monthly participation of nearly 7.5 million at-risk women, infants and children who receive the nutrition education and food benefits of this crucial assistance program. This requested amount is sufficient to ensure that all who are eligible will be able to participate.

COMMODITY ASSISTANCE PROGRAMS

In our Commodity Assistance Programs (CAP), we request a funding level of $158.3 million—a net increase of only $5 million from the fiscal year 2000 level. The Farmers Market Nutrition Program (FMNP) is included at $20 million—an increase of $5 million over the fiscal year 2000 level which is funded in the WIC appropriation. The $20 million request will sustain or expand the current program level in the 39 State agencies now participating and allow for new States that have expressed an interest in joining the program. To give you a sense of the magnitude of the program, in fiscal year 1998, coupons were given to 1.3 million WIC participants. The participants redeemed their coupons at 1,529 authorized farmers' markets providing revenue for almost 9,600 small family farmers—contributing to the commitment to support American agriculture which is reflected in the FNS mission statement.

As you know, the CAP also supports the Commodity Supplemental Food Program for women, infants and children as well as the elderly. Our request of $93.3 million, in conjunction with the use of about $7 million from inventory, will serve a combined caseload estimated at about 423,000—an increase of almost 9,000 from fiscal year 2000. The nominal $100 million which we will spend in fiscal year 2001 will include participants from five new States which are being brought into the program in fiscal year 2000. Those new States are Ohio, Mississippi, Texas, Montana and Vermont. Our request for The Emergency Food Assistance Program (TEFAP) administrative expenses is $45 million—the same level as for fiscal year 2000.

FOOD DONATIONS PROGRAMS

We are requesting $150 million for the Nutrition Program The $10 million increase will provide for an approximate 7.7 percent increase in the number of meals served. Our two smaller programs remain at the same level as fiscal year 2000.

FOOD PROGRAM ADMINISTRATION

In the Food Program Administration account, our request is $128.6 million—about $14 million above the fiscal year 2000 level. Included in our request level are several noteworthy initiatives. First, we are requesting $5 million to support a new intergovernmental partnership to be led by FNS. The objective is to address the nutrition, health, housing and employment of the very impoverished Southwest border areas known as Colonias. FNS would help these communities maximize the current assistance programs offered by Federal, State, local and non-profit partners. FNS began work in fiscal year 1999 in 10 Colonias in Texas, providing partnership support and program benefits to participants. The fiscal year 2001 level of $5 million will allow FNS to expand its efforts to a larger proportion of the 1,500 Colonias near the Mexican border in Arizona, California, New Mexico and Texas.

Second, we are requesting $2 million for use in developing an integrated nutrition education program which will aggressively promote the 5th edition of the Dietary Guidelines for Americans and the Food Guide Pyramid, including the recently-released Food Guide Pyramid for Young Children. Nutrition promotion efforts will be targeted to individuals with particular needs, such as low-income children and women, and pregnant and post-partum women, particularly teenagers. The increase for CNPP also provides for development of consumer materials that will help low-income individuals apply Guidelines and Pyramid concepts within a limited budget. With diet-related medical and lost productivity cost in the U.S. now reaching an estimated $71 billion annually, we must move decisively to promote both the Guidelines and the Pyramid if we are to effectively help Americans improve and maintain their health. This is a very modest investment which can result in a large payback in terms of a healthier America.

Third, we are requesting a total of $8 million to supplement other ongoing program integrity activities within FNS. The $8 million will be distributed to the Food Stamp and Child Nutrition Program integrity activities. Efforts in the Food Stamp Program would be directed at: (1) improving the accuracy of the quality control sys-

tems, (2) working with States to reduce payment error rates and avoid error rate increases, while ensuring access to Food Stamps for all eligible households; and (3) efforts to ensure that States are effectively implementing procedures set forth in regulations which are designed to guarantee that eligible households moving from welfare-to-work continue to receive nutrition assistance. Efforts in the Child Nutrition Programs would be used, in part, to study sources of errors in school meals applications and evaluate pilots of alternative methods for determining and verifying eligibility for free and reduced price benefits in the National School Lunch Program. Also, some of the resources would be devoted to enhanced Federal monitoring of the CACFP State agencies, sponsors and child care facilities.

Federal administrative resources to support our nutrition assistance programs have declined very significantly over the years to the point where they represent less than one-half percent of the total FNS funding. For example, resources available to oversee States and implement improvements such as WIC EBT are extremely limited. Therefore, it is most important to us that our FPA request be fully funded.

STUDIES AND EVALUATIONS

The Administration is once again requesting that funding for studies and evaluations be provided to FNS. Our request is for $10.7 million in the Food Stamp account, $3 million in the Child Nutrition account and $3.5 million in the WIC account. The continued absence of study, demonstration and evaluation funding over the last three fiscal years has severely limited the depth of FNS support to Congressional staff, decreased our ability to respond to requests from the States, and restricted us from providing practical research-based guidance to the managers of our programs. FNS has a strong record of studies and evaluations used to formulate its nutrition policy, measure program impact and integrity and advise both Administration officials and the Congress of the potential costs and effects of legislative proposals under consideration. The proximity of research staff to FNS' program and policy staff is critical to ensure a research agenda that is practical and relevant to program operations and policy development. With enhanced research funding FNS can more effectively address problem areas on a short term basis. It is appropriate that study funds be located in FNS because of the strong need to target those funds for action-oriented and program-specific studies and evaluations, rather than for general research purposes.

CONCLUSION

As I conclude today, I wish to personally thank you for your support and for the support of the Subcommittee in helping to make our programs the enormous success stories that they have become. Thanks to you, they continue to make a significant and positive impact on millions of families and children across this country. This concludes my statement. I will be happy to answer any questions you may have.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

PEREPARED STATEMENT OF JAMES R. BAKER, ADMINISTRATOR

Mr. Chairman and members of the Committee, I am pleased to submit the fiscal year 2001 budget proposal for the Grain Inspection, Packers and Stockyards Administration (GIPSA).

GIPSA is part of USDA's Marketing and Regulatory Programs, which works to ensure a productive and competitive global marketplace for U.S. agricultural products. GIPSA's mission is to facilitate the marketing of livestock, poultry, meat, cereals, oilseeds, and related agricultural products, and to promote fair and competitive trading practices for the overall benefit of consumers and American agriculture.

GIPSA has both regulatory and service roles. GIPSA's Packers and Stockyards Programs (P&S) ensure fair business practices for livestock, meat, and poultry while providing financial protection to livestock producers. The Agency's Federal Grain Inspection Service (FGIS) provides the U.S. grain market with Federal quality standards and a uniform system for applying them. It also provides impartial, accurate measurements of grain quality to create an environment that promotes fairness and efficiency in the U.S. grain marketing system. GIPSA, an unbiased, third-party entity in the marketplace, helps ensure fair and competitive marketing systems for all involved in the merchandising of livestock, meat, and poultry, and grain and related products.

ORGANIZATION

During fiscal year 1999, GIPSA completed its consolidation of headquarters activities and established three field offices for the Packers and Stockyards (P&S) Programs to replace the previous 11 offices. Each office is responsible for the major issues in a particular commodity—beef, pork, or poultry—and has investigative units to focus on the core activities of competition, trade practices, and financial responsibility. Funding to complete the reorganization was provided for in fiscal year 1999, which allowed GIPSA to step up staffing efforts in the regional offices and to fill resident agent positions that provide routine services to areas not proximate to the three main offices. The reorganization has significantly improved P&S Programs' ability to focus program resources on providing financial protection and promoting fair business practices and a competitive marketing environment for livestock, meat, and poultry. The new structure and the addition of economic, statistical and legal expertise to the investigation staff of the field offices significantly strengthens GIPSA's ability to investigate anticompetitive practices, and provides greater flexibility and efficiency in enforcing the trade practices and payment protection provisions of the P&S Act. This, in turn, enables GIPSA to rapidly respond to high priority investigations that require fast action.

Federal grain personnel work with over 2,000 State and private inspectors to provide high-quality inspection and weighing services on a user-fee basis. Federal inspectors service 37 export elevators located in Georgia, Illinois, Indiana, Louisiana, Maryland, New York, Ohio, Oregon, and Texas. Under a cooperative agreement with GIPSA, the Canadian Grain Commission provides official services, with GIPSA oversight, at 6 locations in Canada for U.S. grain transshipped through Canadian ports. Eight delegated States provide service at an additional 19 export elevators located in Alabama, California, Minnesota, Mississippi, South Carolina, Virginia, Washington, and Wisconsin. Fifty-nine (59) designated agencies service the domestic market under GIPSA supervision. In 1999, this unique mix of Federal, State, and private inspection agencies provided nearly 2 million inspections on over 228 million metric tons of grains and oilseeds; weighed over 106.5 million metric tons of grain; and issued over 90,000 official weight certificates.

GIPSA'S PACKERS AND STOCKYARDS PROGRAMS (P&S)

GIPSA's P&S Programs provides financial protection and promotes fair business practices and a competitive marketing environment for livestock, meat, and poultry. Our programs foster fair competition, and guard against deceptive and fraudulent practices affecting the movement and price of meat animals and their products. The production and marketing of livestock, meat, and poultry are important to American agriculture and significantly impact the Nation's economy. The Commerce Department estimates the annual wholesale value of livestock, meat, and poultry products produced in fiscal year 1999 by firms subject to the P&S Act to be $109 billion. At the close of fiscal year 1999, there were 1,287 stockyards; 6,434 market agencies/dealers; 2,000 packer buyers registered with GIPSA to engage in the livestock marketing business. In addition, there are 377 slaughtering packers who purchased over $500,000 of livestock annually that are required to be bonded, 205 poultry firms, and a significant number of meat distributors, brokers, and dealers subject to the P&S Act.

P&S Programs conducted over 1,200 investigations during the 1999 fiscal year. Most violations were corrected on a voluntary basis with several resulting in livestock and poultry producers receiving additional funds for the sale of their product. During fiscal year 1999, 12 administrative or justice complaints were issued to bring subject firms into compliance with the provisions of the P&S Act. In addition, 18 decisions and orders were issued by USDA against 22 individuals or firms for violating the P&S Act.

GIPSA closely monitors anticompetitive practices which may impede the free trade of livestock, meat, and poultry. A high priority is placed on investigating all complaints and further developing information received concerning the failure of firms and individuals in the livestock, meat, and poultry industries to operate in a fair and competitive manner. Appropriate corrective action is initiated when evidence of anticompetitive practices is discovered.

USDA has committed to conducting peer reviews of major investigations to ensure that the investigators asked the right questions, collected the right data, and conducted appropriate analyses. Peer reviews by objective, qualified reviewers may contribute to GIPSA's plans to strengthen enforcement of anticompetitive behavior in the livestock, meat, and poultry industries. GIPSA initiated the peer review process for the current Texas fed-cattle investigation. A panel of seven outside peer reviewers was assembled in January 1999; the group reported their findings to GIPSA in

May 1999. Their comments were used by the analysts who conducted econometric analyses as part of the Texas investigation as they prepared their final report.

GIPSA has received information that some livestock transactions are conditioned on an agreement that the transaction price not be reported to public or private reporting services. GIPSA is concerned that the non-reporting of price as a condition of the purchase or sale of livestock may result in inaccurate and incomplete price information, thereby adversely affecting the price discovery process. On September 10, 1998, GIPSA published in the Federal Register an Advance Notice of Proposed Rulemaking (ANPRM) concerning the practice of non-reporting of price as a condition of purchase or sale of livestock. The comment period for the ANPRM closed on December 9, 1998. Eighteen comments were received and have been analyzed by GIPSA.

USDA's fiscal year 2000 appropriation mandates, subject to funding, creation of a swine marketing-agreement library and monthly reporting of types of contracts in use, provisions providing for expansion in the number of swine to be delivered in 6 months and 12 months, estimated number of swine committed for delivery to packers in 6 months and 12 months, and the estimated maximum number of swine that could be delivered to packers in 6 months and 12 months. GIPSA is preparing a regulation to implement the provisions.

As part of its responsibility to strengthen investigations and assess competitive implications of structural changes in the livestock, meatpacking, and poultry industries, GIPSA entered into five cooperative research agreements. Two of the projects will examine competitive conditions in beef markets. Two projects will examine competitiveness issues and compensation methods used in broiler production. The final project will examine bidding behavior in a laboratory auction setting in order to gain insights into expected behavior in actual markets. GIPSA obtains special procurement information for the Nation's top 15 steer and heifer slaughter firms annually. This information is related to livestock purchased through contracts, packer feeding arrangements, or marketing agreement/formula-priced transactions. Much more work must be done to determine the effects of these captive supplies in both the beef and pork industries. Additional resources are critical to provide for data collection, and economic and statistical analyses in this very important and sensitive area.

GIPSA's P&S Programs continues to provide payment protection to livestock and poultry producers. Financial investigations, during fiscal year 1999, resulted in $2.7 million being restored to custodial accounts established and maintained for the benefit of livestock sellers. Since the 1976 amendments to the P&S Act, livestock sellers have been paid $53.8 million under the statutory trust provisions. In 1999, no poultry trust complaints were received by GIPSA. During Fiscal year 1999, 169 insolvent dealers and market agencies corrected or reduced their insolvencies by $4.5 million. Insolvent packers corrected or reduced their insolvencies by $4.6 million.

GIPSA continues to receive complaints from contract growers that integrators use their dominant positions to impose unfair or unjustly discriminatory terms or conditions on contract growers. GIPSA published an Advance Notice of Proposed Rulemaking in the Federal Register to solicit input on the need for regulations to protect growers. Subsequently, GIPSA proposed amending regulations pertaining to scales and weighing in regard to feed weights. These amendments to the regulations are in the clearance process. Specifically, GIPSA is proposing to include requirements regarding the weighing of feed whenever the weight of feed is a factor in determining payment or settlement to a livestock grower or poultry grower when that livestock or poultry is produced under a contract growing arrangement.

Concentration in the poultry processing industry and its effects on contract growers is an area that needs attention to determine whether the processors are using their dominant positions to impose unfair or unjustly discriminatory terms or conditions on contract growers. Grower complaints continue to highlight the need to address concerns about their relative bargaining position. If GIPSA is to effectively address this issue, it must obtain the resources needed to fully staff both the Trade Practices and Competition Units in its Atlanta office, which are responsible for major issues in the poultry industry across the Nation.

GIPSA'S FEDERAL GRAIN INSPECTION SERVICE

GIPSA's grain inspection program plays a critically important role in facilitating the marketing of U.S. grain and related commodities for the benefit of American agriculture. We provide the U.S. grain market with Federal quality standards and a uniform system to apply these standards. Through this program, GIPSA provides descriptions (grades) and testing methodologies for measuring the quality and quantity of grain, rice, edible beans, and related commodities, and, provides an array of

inspection and weighing services, on a fee basis, through a unique partnership of Federal, State, and private laboratories.

By serving as an impartial third party, GIPSA ensures that the standards are applied and the weights recorded in a fair and accurate manner. Our presence in the market advances the orderly and efficient marketing and effective distribution of U.S. grain and other assigned commodities from the Nation's farms to domestic and international buyers.

Our guidance in carrying out these important tasks is provided by the U.S. Grain Standards Act (USGSA) and the Agricultural Marketing Act of 1946 (AMA) as it relates to the inspection of rice, pulses, lentils, and processed grain products. Through voluntary and mandatory programs, GIPSA promotes the efficient and effective marketing of U.S. grain and other commodities from farmers to end users.

For an average cost of 22 cents (adjusted for inflation to 1992 dollars) per metric ton of grain in fiscal year 1999, exporters received USDA export certificates from GIPSA on which they relied to facilitate the marketing of over $20 billion worth of cereals and oilseeds. Likewise, here at home, buyers and handlers requested over 1.9 million domestic inspections that facilitated the trading of 127 million metric tons of cereals and oilseeds destined for domestic use.

While current services are effective and efficient, GIPSA recognizes that to remain relevant in today's marketplace, continuous efficiency enhancements and service improvement are essential. To that end, GIPSA is focusing on improving our efficiency and service delivery through the introduction of new technology; preparing to enter the world of e-commerce; and responding to new market needs being driven by technology and global market demands. The grain program has made a number of enhancements to its operations and structure to improve the efficiency and productivity, not only of the inspection and weighing process and GIPSA's service delivery, but, more importantly, to the actual handling and marketing of grain.

Structurally, GIPSA has, over the years, continuously realigned to optimize its staffing levels and organization. Since 1994, the grain program reduced staffing levels by 8 percent and streamlined its field structure from 31 to 21 offices, thereby allowing for more flexible staff utilization and more consistent policy implementation. Our Commodity Testing Laboratory, formerly in Beltsville, Maryland, was merged into our Technical Center in Kansas City, MO. The Technical Center is now a model of how streamlining and cross-functional teams can result in cost efficiencies and a sharpened customer service focus.

We also are reengineering to provide more efficient and effective programs and services. We reengineered our quality assurance program, already known worldwide for ensuring consistent and accurate inspection and weighing results. By automating to a PC-driven system and decentralizing the process to the local level, our reengineered quality assurance program provides for proactive problem solving and immediate quality control feedback. Automation is also the key to improving our inspection services. To integrate our export inspection process with the export industry's technological advances, GIPSA is automating the export inspection statistical shiploading plan, also known as Cu-Sum Plan. Automating Cu-Sum allows for direct data sharing with our export grain customers, thereby eliminating manual data entry and reducing administrative costs both for GIPSA and our customers. We are working closely with export elevators to automate their scales and material systems to official requirements. This automation reduces official oversight personnel, which produces a considerable cost savings for our customers, and provides for superior supervision and greatly improved efficiency for GIPSA. To date, five export elevators are operating approved systems; 6 more are in the process of automating. To improve the efficiency and productivity of U.S. grain handling, GIPSA established a public/private partnership to automate inspection processes. This effort reduced the agency's operating costs and improved the speed, productivity, and efficiency of export operations—essential factors in today's competitive global market. A prototype system currently is being installed at an export elevator in Destrehan, Louisiana. These are only some of the ways that GIPSA is seeking to enhance the efficiency of our operations. Future technological advances and customer needs will drive even further improvements.

Our efforts are paying off for our customers, both in terms of their bottom lines and in greater customer satisfaction. GIPSA's service delivery costs decreased from $0.27 per metric ton in fiscal year 1994 to $0.22 per metric ton in fiscal year 1999, saving American agriculture over $5 million in fiscal year 1999 alone.

These savings in inspection service costs pale in comparison to the savings achieved by the industry thorough improved productivity. GIPSA is proud to be a partner with the industry in realizing that productivity enhancement. Last year, at a single facility in Iowa, GIPSA fostered a unique and unprecedented cooperative partnership to provide service and made rules more flexible in order to implement

a new, on-site rapid inspection program that saved one the customer more than $250,000 per year.

Applying technology to our inspection and weighing services is only one part of our continuous improvement process. We also are implementing new services to keep pace with an increasingly sophisticated market that requires end-use quality information. In fiscal year 1999, GIPSA approved two new deoxynivalenol (DON) test kits for use in the official grain inspection and weighing system. These test kits expand the availability and choice of test kits for the official system. In fiscal year 1999, GIPSA also approved a new instrument for use in conjunction with an approved mycotoxin test kit—this flourometer provides the official system alternative equipment at approximately half the cost of the original equipment.

In fiscal year 1999, GIPSA also developed a reference method for fumonisins in grain. This method reduces direct costs and improves efficiency through use of robotics technology. In the spring of 2000, the Food and Drug Administration is expected to establish advisory levels which will specifically address fumonsins levels in grains destined for human, cattle, swine or poultry consumption. The reference method will be used to evaluate the performance of rapid fumonisin tests submitted to GIPSA to for approval and use in the official system. GIPSA plans to evaluate and approve fumonisin rapid tests for the official inspection system prior to the fall corn harvest.

Our efforts to harness technology, improve service delivery, and meet new market needs are diverging most clearly in our work to address American agriculture's needs in the area of biotechnology.

Biotechnology has accelerated the rate of change in agriculture with new varieties meeting both the agronomic needs of the farmer and the specific quality attributes of the end user. It also has created new market challenges as a result of increased consumer demand for non-biotech foods.

The entire infrastructure of agriculture including production, transportation, storage, handling, processing, distribution, and marketing is being influenced.

When markets around the world reject or limit imports of biotech crops, it has enormous implications for all of America's farmers. In 1999, one third of the U.S. corn crop and over half of the soybean crop were biotech varieties. U.S. corn growers lost approximately $400 million in potential export sales since 1998, and face similar losses this year.

As local markets around the world began to demand a distinction between conventional and biotech crops, GIPSA provided a letterhead statement indicating that for certain crops, the United States was not producing any biotech varieties. Specific statements to facilitate trade involved dry edible beans, sorghum, wheat, and barley.

GIPSA also initiated action to establish a biotech reference facility. Our laboratory will meet the market's need for reliable and accurate analytical techniques that differentiate non-biotech from biotech grains and oilseeds by evaluating and verifying the validity of analytical procedures used to detect and quantify genetically enhanced traits in grains and oilseeds. It also will be used to establish sampling procedures for use in testing genetically enhanced grains and oilseeds. These standardized sampling and testing methods will be implemented through GIPSA's inspection program. The laboratory will meet a market need to ensure reliability of biotech crop detection methods and to facilitate information exchange, which, in turn, will decrease transaction costs and increase overall market efficiency. GIPSA's fiscal year 2001 budget request includes funding that will enable GIPSA to complete establishment of the laboratory.

GIPSA has developed and will continue to develop the standardized testing methods needed by the market to measure the true value of the new enhanced quality attributes being introduced through biotechnology. This is a formidable challenge as more and more traits are introduced. New soybean traits alone include high content levels of oleic and stearate fatty acids, low linolenic acid content, and high sucrose content.

GIPSA has traditionally taken this role in the marketplace. We facilitate the marketing of grain by providing accurate and cost-effective measures of grain quality. We have been viewed as an independent, third party in providing grades and standards, establishing procedures, and in the actual provision of inspection and weighing services.

We are an integral part of America's grain handling infrastructure—a superior infrastructure of storage facilities, rail lines, and waterways that makes American agriculture preeminently successful in the global marketplace. We recognize our role and will continue to provide all members of the U.S. grain handling system with the innovative, high-quality official inspection services they need to efficiently and effectively meet the challenges of a changing marketing environment.

Our commitment to reaching our customers does not end at our borders. Exporters, importers, and end users of U.S. grains and oilseeds, as well as other USDA agencies, USDA cooperator organizations, and other governments, frequently ask for GIPSA personnel to travel overseas. These activities include representing the Agency at grain marketing and grain grading seminars, meeting with foreign governments and grain industry representatives to resolve grain quality and weight discrepancies, helping other countries develop domestic grain and commodity standards and marketing infrastructures, assisting importers with quality specifications, and training local inspectors in U.S. inspection methods and procedures. In fiscal year 1999, GIPSA saw a dramatic increase in the number of requests for technical assistance overseas. During the fiscal year, GIPSA helped other USDA agencies and USDA cooperators conduct destination sampling, provide technical assistance, give grain inspection seminars overseas, lead a U.S. delegation to review several receiver's grain scale operations, and investigate quality discrepancies, on a cost recovery basis.

At home, GIPSA regularly holds seminars and meetings to educate our worldwide customers about the quality and value of U.S. grain exports. In fiscal year 1999, GIPSA representatives met in the United States with 89 teams from 50 countries to provide information, technical guidance, and educational seminars. These international outreach efforts help promote greater harmony between U.S. and international standards, and foster a better understanding of the U.S. grain marketing system, the official U.S. grain standards, the national inspection system. This, in turn, reduces the risk of new barriers in today's open and freer global marketplace, enhances purchasers' confidence in U.S. grain, and facilitates the export of U.S. agricultural products.

The grain program will continue to work to ensure our relevance and value to American agriculture. We are reaffirming our commitment to facilitating the marketing of U.S. grain by responding to our customers' needs and providing the highest quality grain inspection and weighing services to all whom we serve—from farmer to domestic and international end users, and all those in between.

Our efforts in fiscal year 2001 will focus on working with our customers to identify how we can apply automation to reengineer our administrative and inspection processes to achieve greater efficiency and productivity, and on helping American agriculture maximize the opportunities presented by biotechnology by providing the information the market needs to effectively and equitably market value-added products. In fiscal year 2001, our commitment to improved efficiency and effectiveness will continue to serve American agriculture well, as U.S. agricultural exports are expected to total $49 billion.

GIPSA accomplished a great deal in fiscal year 1999 and much is planned for fiscal year 2000. Our efforts to continuously improve our programs and services were further guided by the Agency's Strategic Plan, developed under the provisions of the Government Performance and Results Act.

CIVIL RIGHTS

In addition to improving our services and programs in fiscal year 1999, GIPSA also accomplished a great deal in the area of civil rights. In accordance with USDA's efforts to change and improve the way we do business; and to ensure that every employee and customer is treated fairly, equitably, and with dignity and respect, GIPSA is working to improve all areas of Civil Rights. Accordingly, we have taken a number of actions.

In fiscal year 1999, GIPSA implemented a strengthened Alternative Dispute Resolution (ADR) Program that reflects GIPSA's commitment to operate more efficiently and effectively, and to encourage, where possible, consensual resolution of disputes. Under this program, GIPSA is promoting greater use of mediation, arbitration, early neutral evaluation, agency ombuds, and other alternative dispute resolution (ADR) techniques.

GIPSA continued to seek early resolution of employee complaints. The Agency targeted several formal cases for resolution and worked closely with the USDA's Employee Complaints and Adjudication Division to reduce the Agency's caseload by 25 percent by the end of fiscal year 1999.

In addition, GIPSA strengthened its support for educational initiatives, Land Grant and other minority institutions, the USDA summer intern program, and the college recruitment initiative Ag-HOPE, Agriculture Helps Our People Earn, at Alcorn State University, Lorman, Mississippi. The Agency also strengthened its relationships with small and disadvantaged businesses by entering into agreements with these contractors where possible.

These are only some of the steps GIPSA has taken in the EEO/CR area. The Department of Agriculture has made Civil Rights a major priority and GIPSA is completely committed to supporting the Department's efforts.

FISCAL YEAR 2001 BUDGET REQUEST

To fund these important initiatives and to enable GIPSA to remain a valuable part of American agriculture, GIPSA's budget request for fiscal year 2001 is $33.5 million under current law for salaries and expenses and $42.6 million for our Inspection and Weighing Services. GIPSA also is submitting legislation to collect $23.1 million in new user and license fees in fiscal year 2001.

The President's fiscal year 2001 budget proposes a current law request for grain inspection of $14.2 million. There are proposed increases of $150,000 to support GIPSA's increased role in international trade services and trade activities, and $1,980,000 for methods development activities. Proposed legislation to authorize the collection of $3.7 million in new user fees to cover the costs of grain standardization activities also is being submitted.

The budget proposes a current law request of $19.3 million for the Agency's P&S Programs.

There are proposed increases of $1,200,000 to develop sophisticated models to help identify anti-competitive behavior and examine causes and competitive implications of contract livestock production; $800,000 to examine the competitive structure of the poultry industry; $1,300,000 for rapid response teams within GIPSA; and $400,000 to establish a swine contract library. Additionally, proposed legislation is being submitted to authorize the collection of $19.3 million in new license fees to cover the cost of the P&S Programs.

There are additional increases in the budget of $100,000 for Civil Rights activities and $350,000 for an Information Staff that will benefit both the grain inspection program and the P&S program.

The $150,000 increase to support GIPSA's increased role in international trade services and trade activities would allow GIPSA to increase international travel. GIPSA has become increasingly involved in addressing international grain trade issues, including emerging sanitary and phytosanitary (SPS) issues and other technical barriers to trade, as well as trade issues with the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA). For example, compelled to adhere to the requirements of WTO and NAFTA, some grain and oilseed importing countries have created other barriers to limit or restrict unencumbered trade.

GIPSA works cooperatively with associated agencies to resolve critical issues that limit or restrict trade; assist individual governments and organizations in developing and/or enhancing their grain inspection and weighing capabilities; and enhance the international market's understanding of the U.S. inspection and weighing system.

The increase of $1,980,000 for methods development activities will enable the Agency to begin the process of addressing the changes occurring due to biotechnology. As the commercialization of bioengineered crops has expanded, consumers worldwide have expressed an interest in having access to better and more reliable information about foods that do not contain biotech ingredients. In addition, U.S. producers and industry representatives are seeking to ensure that claims by competitors as to the biotech-free nature of their products are not false and misleading. As American agriculture works to address these complex and difficult issues involving the production and marketing of bioengineered crops, it is vital that USDA establish the framework to ensure the reliability of biotech crop detection methods. Measuring the traits of newly engineered grains is of critical importance in keeping grain markets open and fair. Of greater importance is the United States government's ability to provide leadership in establishing consistency in test methods to measure bioengineered grain and oilseeds. Producers, grain handlers, processing facilities, life science companies, and foreign buyers have all expressed their full support of USDA-GIPSA providing this leadership.

The $1,200,000 increase to develop sophisticated models to help identify anti-competitive behavior, and to examine the causes and competitive implications of contract livestock production will allow the Agency to look closely at potential anti-competitive behavior and its effects. The increase will be used to (1) develop econometric models to help identify collusion, predatory behavior, price leadership, market allocation, failure to compete, price and non-price discrimination, and other restraints in the procurement of cattle, hogs, and lambs by meatpackers; and (2) examine economic variables associated with production and marketing contracts for livestock, and the effects of contracting on the structure of livestock production and slaughter,

and on competition in meatpacking and processing. This initiative addresses complex issues that are important in examining the competitiveness of firms and markets in the meatpacking industry. An ongoing effort will be needed to develop methodology, databases, and analyses to effectively monitor competitive behavior and the competitive effects of structural changes in the meatpacking industry.

The increase of $800,000 to examine the competitive structure of the poultry industry will assess the characteristics of markets for poultry grower services and develop basic information about the structure and competitive conditions associated with the market for grower services. It will examine geographic distributions of growers around integrators' facilities; production and transportation costs; entry and exit conditions; contract terms; general grower-integrator relationships; and how contract terms are implemented; such as which chicks are assigned to which growers, feed weighing arrangements, and measurement of factors used in settlements.

This project will provide fundamental information about the relevant markets for grower services and address questions such as whether treatment of growers varies among integrators and among growers of a particular integrator. We have long focused our attention on contract disputes. This project will begin to examine underlying competitive conditions in the market for grower services.

The $1,300,000 increase will allow the Agency to designate a special investigation rapid response team for each of the three regional offices to handle the complex, high priority investigations. These investigations are time sensitive that require expeditious examination and analysis to protect constituent interests, and to prevent or minimize major competitive or financial harm caused by ongoing violations of the P&S Act. These teams will be comprise of an economist/marketing specialist, legal specialist, auditor, and computer specialist, all of whom are experts in their area and experienced in P&S investigations. Full utilization of the team is anticipated within in the respective region, however, multi-teams will be used for investigations, when required.

The increase of $400,000 to establish a swine contract library will allow the Agency to comply with Section 222 of the fiscal year 2000 Agriculture Appropriation Bill that mandates that GIPSA implement a "library or catalog of each type of contract offered by packers to swine producers." GIPSA is required to collect, compile, and publish a monthly report on the estimated number of swine expected to be delivered within the 6-month or 12-month periods following the date of the report. This mandate is "subject to the availability of appropriations to carry out this section"; GIPSA was not provided funding for this project.

Additional staff will be required to collect swine contracts on an ongoing basis from all packers slaughtering over 100,000 head of swine yearly. Contracts must be reviewed; all proprietary information redacted from the contracts; and then assembled and cataloged. We anticipate that the library or catalog to be accessible by the general public through the Internet.

Conclusion

Mr. Chairman, this concludes my statement. I appreciate the opportunity to testify on behalf of the Grain Inspection, Packers and Stockyards Administration (GIPSA). I will be happy to answer any questions the Committee may have.

NATIONAL AGRICULTURAL STATISTICS SERVICE

PREPARED STATEMENT OF R. RONALD BOSECKER, ADMINISTRATOR

Mr. Chairman and members of the Committee, I appreciate the opportunity to submit a statement for this Committee's consideration in support of the fiscal year 2001 budget request for the National Agricultural Statistics Service (NASS). This Agency now conducts the census of agriculture which was begun in 1840, and the agricultural statistics program created in 1842. The basic mission of both programs is to provide factual information for and about the Nation's food and agricultural industry.

As American farms and ranches have progressed to making greater use of agricultural science and technology, the need for more detailed information has increased. The periodic surveys and censuses conducted by NASS contribute significantly to the overall information base for agricultural producers, handlers, processors, wholesalers, retailers, and ultimately, consumers. Voids in relevant, timely, accurate data contribute to wasteful inefficiencies throughout the entire production and marketing system.

The most critical complaints received by NASS occur when there is an absence or shortage of official data available for a commodity, and therefore that segment of agriculture is forced to operate with insufficient information. Recent environ-

mental concerns have meant that entirely new surveys are needed to accurately measure the chemicals used by the food and fiber industry. The globalization of agricultural commodity markets also increases the demand for relevant, accurate, timely, and impartial statistical information to assist those who sell U.S. agricultural commodities worldwide. For example, information concerning genetically engineered crops and crop varieties will enable the United States to better compete in the world market.

The crop, livestock, and other related statistics are provided throughout the year, in cooperation with each State Department of Agriculture. This program, which began in 1917, has served the agricultural industry well and is often cited by others as an excellent model of successful State-Federal cooperation. The addition of the census of agriculture, which provides a wealth of detailed information at the State and county level, has strengthened NASS's partnership with its State cooperators. This joint State-Federal program helps meet State and national data needs while minimizing overall costs by consolidating both staff and resources, eliminating duplication of effort, and reducing the reporting burden on the Nation's farm and ranch operators. The success of this partnership was demonstrated this past year as NASS, through its State-Federal cooperation, was able to complete the census in almost half the time of previous censuses, increase the total response, and, through the use of a toll-free number, better respond to questions from farmers and ranchers completing the census questionnaires. NASS's 45 field offices, which cover all 50 States (New England States are combined), support the six goals and outcomes in the Research, Education, and Economics (REE) mission area strategic plan by providing statistical information that serves national, State, and local data needs.

NASS statistics contribute to providing fair markets where buyers and sellers alike have access to the same official statistics. This prevents markets from being unduly influenced by "inside" information which might unfairly affect market prices for the gain of an individual market participant.

With the enactment of the Federal Agriculture Improvement and Reform Act of 1996, the demand for agricultural statistics has increased as producers make production decisions based solely on market information. Empirical evidence indicates that an increase in information improves the efficiency of commodity markets. Information on the competitiveness of our Nation's agricultural industry will become increasingly important as producers rely more on the world market for their income.

NASS's agricultural statistics are used throughout the agricultural sector to evaluate supplies and determine competitive prices for world marketing of U.S. commodities, which directly supports Goal 1 of the REE Strategic Plan: Through research and education, empower the agricultural system with knowledge that will improve domestic production, processing, and marketing to successfully compete in the global market.

Through new technology, the products produced in the United States are changing rapidly. This also means that the agricultural statistics program must be dynamic and able to respond to the demand for coverage of newly emerging products. For example, genetic engineering technology will be producing new commodity varieties, such as BT corn and cotton, and Roundup Ready soybeans. Data users are already requesting information on genetically modified crops in order to help assess the magnitude and impact of these new varieties.

Not only are NASS statistical reports important to assess the current supply and demand of agricultural commodities, but they are also extremely valuable to farm organizations, commodity groups, and public officials who analyze agricultural policy, foreign trade, construction, and environmental programs, research, rural development, and many other activities. NASS numbers are scrutinized very closely by producers, agribusinesses, industry analysts, economists, investors, as well as government policy makers. As a result of their analysis, major decisions are made that affect the Nation's agricultural economy.

All reports issued by NASS's Agricultural Statistics Board are made available to the public at previously announced release times to ensure that everyone is given equal access to the information. NASS has been a leader among Federal agencies in providing electronic access to information. All of NASS's national statistical reports and data products, including graphics, are available on the Internet, as well as in printed form. Customers are able to electronically subscribe to NASS reports by clicking on the appropriate release. A summary of NASS and other USDA statistical data are produced annually in USDA's Agricultural Statistics, available on the Internet through the NASS Home Page, on CD–ROM disc, or in hard copy. Each of NASS's 45 field offices have Home Pages on the Internet, which provide access to special State statistical reports and information on current local commodity conditions and production.

Beginning in fiscal year 1997, NASS received funding for the census of agriculture which is conducted every 5 years. The transfer of the responsibility for the census of agriculture to USDA streamlines Federal agricultural data collection activities and has improved the efficiency, timeliness, and quality of the census data. The release of the 1997 Census of Agriculture on February 1, 1999, came exactly one year from the date the questionnaires were due to be returned by the Nation's farmers and ranchers.

Statistical research is conducted to improve methods and techniques used in collecting and processing agricultural data. This research is directed toward providing higher quality census and survey data with less burden to respondents, producing more accurate and timely statistics to data users, and increasing the efficiency of the entire process. For example, NASS has been a leader in the research and development of satellite imagery to improve agricultural statistics. The NASS statistical research program strives to improve methods and techniques for obtaining agricultural statistics with an acceptable level of accuracy. The growing diversity and specialization of the Nation's farm operations have greatly complicated procedures for producing accurate agricultural statistics. Development of new sampling and survey methodology, along with intensive use of telephone and face-to-face contacts and computer technology enable NASS to keep pace with an increasingly complex agricultural industry. Considerable new research will be directed at improving the 2002 Census of Agriculture to be conducted in 2003.

NASS performs a number of statistical services for other Federal, State, and producer organizations on a cost-reimbursable basis. In addition, NASS has an expanding international program to provide technical assistance to a number of countries on a cost-reimbursable basis.

MAJOR ACTIVITIES OF THE NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

The primary activities of NASS are to conduct periodic surveys and the census of agriculture every 5 years to meet the current data needs of the agricultural industry. The periodic surveys include the collection, summarization, analysis, and publication of reliable agricultural forecasts and estimates. Farmers, ranchers, and agribusinesses voluntarily respond to a series of nationwide surveys about crops, livestock, prices, chemical use and other agricultural activities each year. Periodic surveys are conducted during the growing season to measure the impact weather, pests, and other factors have on crop production. Frequent surveys are also needed for food products that are perishable. Many crop surveys are supplemented by actual field observations in which various plant counts and measurements are made. Administrative data from other State and USDA agencies, as well as data on imports and exports, are thoroughly analyzed and utilized as appropriate. NASS prepares estimates for over 120 crops and 45 livestock items which are published annually in almost 400 separate reports.

Agricultural reports issued by NASS include: number of farms and land in farms; acreage, yield, and production of grains, hay, oilseeds, cotton, tobacco, major fruits and vegetables, floriculture, and selected specialty crops; stocks of grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, trout, poultry, eggs, and dairy products; prices received by farmers for products; farm real estate values and land rental rates; prices paid by farmers for inputs and services; cold storage supplies; agricultural labor and wage rates; agricultural chemical usage; crop production cultural practices; and other data related to the agricultural economy.

The census of agriculture provides national, State, and county data for the United States on the agricultural economy every 5 years, including: number of farms, land use, production expenses, farm product values, value of land and buildings, farm size and characteristics of farm operators, market value of agricultural production sold, acreage of major crops, inventory of livestock and poultry, and farm irrigation practices. The census of agriculture is the only source for this information on a local level which is extremely important to the agricultural community. Detailed information at the county level helps agricultural organizations, suppliers, handlers, processors, and wholesalers and retailers better plan their operations. Important demographic information supplied by the census of agriculture also provides a very valuable data base for developing public policy for rural areas. The local detailed data provided by the census of agriculture which facilitates locality-based policy and business decisions supports Goal 5 of the REE mission area Strategic Plan: Empower people and communities, through research-based information and education, to address the economic and social problems facing our youth, families, and communities.

Nearly two-thirds of NASS's staff are located in the 45 field offices; 24 of these offices are collocated with State Departments of Agriculture or land-grant univer-

sities. NASS's State Statistical Offices issue approximately 9,000 different reports each year and maintain Internet Home Pages to electronically provide their State information to the public.

NASS has developed a broad environmental statistics program under the Department's water quality and food safety programs. Until 1991, there was a complete void in the availability of reliable pesticide usage data which became evident during the Alar situation with apples. Therefore, in 1991 NASS cooperated with other USDA agencies, the Environmental Protection Agency (EPA), and the Food and Drug Administration, to implement comprehensive chemical usage surveys that collect data on certain crops in selected States. Beginning in fiscal year 1997, NASS also began survey programs to acquire more information on Integrated Pest Management (IPM), additional farm pesticide uses, and post-harvest application of pesticides and other chemicals applied to commodities after leaving the farm. These programs have resulted in significant new chemical use data, which are important additions to the data base. These surveys, conducted in cooperation with the Economic Research Service, also collect detailed economic and farming practice information for the purpose of determining the use of IPM practices as well as to analyze the productivity and the profitability of different levels of chemical use. American farms and ranches manage half the land mass in the United States, underscoring the value of complete and accurate statistics on chemical use and farming practices to effectively address public concerns about the environmental effects of agricultural production. NASS's chemical use survey programs supports both Goals 2 and 4 of the REE Strategic Plan which relate to ensuring an adequate food and fiber supply and the promotion of food safety, and enhancing the quality of the environment.

NASS conducts a number of special surveys as well as provides consulting services for many USDA agencies and other Federal, State, and private agencies or organizations on a cost-reimbursable basis. Consulting services include assistance with survey methodology, questionnaire and sample design, information resource management, and statistical analysis. NASS has been very active in assisting USDA agencies in programs that monitor nutrition, food safety, environmental quality, and customer satisfaction. In cooperation with State Departments of Agriculture, land-grant universities, and industry groups, NASS conducted 122 special surveys in fiscal year 1999 covering a wide range of issues such as farm injury, nursery and horticulture, farm finance, fruits and nuts, vegetables, and cropping practices.

NASS provides technical assistance and training to improve agricultural survey programs in other countries in cooperation with other Government agencies on a cost-reimbursable basis. NASS's international programs focus on developing countries, such as those in Asia, Africa, and Central and South America, as well as emerging markets countries in Eastern Europe. Accurate information is essential in these countries for the orderly marketing of farm products. NASS works directly with countries undergoing the transition from centrally-planned to market economies by assisting them in applying modern statistical methodology, including sample survey techniques. This past year, NASS provided assistance to Chile, China, Ecuador, Ethiopia, Ghana, Guinea, Kazakhstan, Mexico, Nicaragua, Russia, South Africa, and Ukraine and received approximately $.9 million in reimbursements for these services.

NASS annually seeks input on improvements and priorities from the public through: displays at major commodity meetings, data user meetings with representatives from agribusinesses and commodity groups, special briefings for agricultural leaders during the release of major reports, and through numerous individual contacts, especially those made at the grass roots level through NASS's 45 field offices. As a result of these activities, the Agency has made many adjustments to its agricultural statistics program, published reports, and electronic access capabilities to better meet the statistical needs of customers and stakeholders.

FISCAL YEAR 2001 PLANS

The fiscal year 2001 budget request is for $100,615,000. This is a net increase of $1,282,000 from the fiscal year 2000 current estimate.

The fiscal year 2001 request includes changes in activities associated with the census of agriculture, implementation of a monthly hog survey to improve market information, expansion of the agricultural chemical use surveys, and improvements to computer security to assure the integrity of market sensitive data prior to official release.

A net decrease of $1,490,000 and 12 staff-years for the census of agriculture.

The 2001 census of agriculture budget request is for $15,000,000. This includes an increase of $410,000 and 5 staff-years for increased activities associated with preparations for the 2002 Census of Agriculture. It also reflects a decrease of

$1,900,000 and 17 staff-years for the Agricultural Economics and Land Ownership Survey. The survey will be completed in 2000 and is being removed from the budget since it is to be conducted only once every 10 years following alternate censuses of agriculture.

A net increase of $572,000 and 4 staff-years consisting of $1,272,000 for the monthly hog survey and a decrease of $700,000 for the quarterly hog survey.

Title IX—Livestock Mandatory Reporting, Subtitle C-Related Swine Reporting Provisions, Section 931. Improvement of Hogs and Pigs Inventory Report, which passed as part of the fiscal year 2000 Agriculture Appropriations Bill in October 1999, states that the Secretary of Agriculture will publish on a monthly basis the Hogs and Pigs Inventory Report, and that for a period of 8 quarters after the implementation of the monthly report, the Secretary shall continue to maintain and publish on a quarterly basis the Hogs and Pigs Inventory Report. The purpose of a monthly survey is to provide more timely information on market supplies of pigs than the present quarterly surveys provide.

The current NASS quarterly Hogs and Pigs report provides detailed information, by State, for the 17 largest hog producing States, accounting for 93 percent of the total U.S. hog inventory, together with all "other States" combined in order to provide U.S. totals. The proposed funding increase of $572,000 would provide, on a monthly basis, total breeding herd inventory, number of sows farrowed, pigs born, and number of sows bred. An offset of $700,000 will limit comparable quarterly and monthly State-level data to nine States covering approximately 77 percent of the total U.S. breeding herd inventory plus the U.S. total. Full funding at $1.272 million is necessary for NASS to implement a monthly breeding herd program which mirrors the existing quarterly program but provides important breeding herd data on a monthly basis. The goal is to provide more timely information on both the location and supplies of pigs to facilitate more orderly marketing of hogs.

An increase of $800,000 and 4 staff-years is requested for expansion of pesticide use surveys.

In order to accurately analyze the impact of chemical use as directed by the Food Quality Protection Act, EPA and USDA, together with other agencies and industry officials, have requested an expansion of NASS's current pesticide data collection program to include coverage of additional crops, sectors, and States. This additional funding would enable NASS to expand the number of field crops covered in the current pesticide use survey program in order to address existing data gaps. Pesticide usage survey information collected by NASS provides accurate data which are critically needed by the agricultural industry, EPA, and others with an interest in the evaluation of pesticides, setting of pesticide residue standards, and the determination of exposure risks. In the absence of actual data, default assumptions or worst case scenarios are often used in chemical risk assessment analysis.

An increase of $1,400,000 is requested for development of NASS Computer Security Architecture.

There is a growing need for cyber-security given the increased incidences and threats of the loss, misuse, unauthorized access to, or modification of information on computer systems. The level of sophistication displayed by hackers and others also supports the need for security reforms, such as the need for early warning systems for attacks, intrusions, and viruses. Cyber-security has replaced Year 2000 as the top priority in the information technology community. Information security is of vital importance to maintain NASS's credibility given the market sensitivity of the reports released as well as the confidential nature of the data collected by NASS from the Nation's farmers, ranchers, and agribusinesses.

This concludes my statement, Mr. Chairman. Thank you for the opportunity to submit this for the record.

NATIONAL APPEALS DIVISION

PREPARED STATEMENT OF NORMAN G. COOPER, DIRECTOR

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you to discuss the fiscal year 2001 budget request for the National Appeals Division.

INTRODUCTION

The National Appeals Division—NAD—was established by the Secretary of Agriculture pursuant to the Reorganization Act of 1994. The Act consolidated the appellate functions and staffs of several USDA agencies to provide for appeal hearings of adverse agency decisions, and review of appeal determinations by the NAD Director. NAD appeals currently involve program decisions of the Farm Service Agency,

Risk Management Agency, Natural Resources Conservation Service, Rural Business-Cooperative Service, Rural Housing Service, and Rural Utilities Service. NAD is headquartered in Alexandria, Virginia, and has regional offices located in Indianapolis, Indiana; Memphis, Tennessee; and Lakewood, Colorado. NAD's staff of 133 includes 75 hearing officers Nationwide.

MISSION

Our mission is to conduct evidentiary administrative appeal hearings and reviews arising out of program decisions of specific USDA agencies. Our strategic goal is to conduct timely hearings and issue timely and well-reasoned determinations that correctly interpret applicable regulations. NAD's mission is statutorily specific, but the administration of such is dynamic and challenging, given the complexities of changing laws, regulations and policies.

FISCAL YEAR 2001 BUDGET REQUEST

NAD is requesting $12,610,000 in direct appropriations for fiscal year 2001. This request represents an increase of $903,000 over the fiscal year 2000 current estimate. The increase is comprised of $589,000 for training costs, and $314,000 for pay costs.

NAD employees must possess a broad, in-depth knowledge of many areas, including adjudication procedures as well as the laws and regulations of subject agencies. The hearing and review officers must stay abreast of changes in the law, regulations and agency policies, in order to issue determinations that withstand challenge in the Federal courts. Continuous training and development is essential to providing the public a competent and fair administrative appeal system that recognizes the rights of program participants and promotes the lawful operations of agency programs. NAD's budget request for training will be used to sustain high-quality skills development that is critical to accomplishing our goal.

We are also requesting $314,000 for pay costs in order to maintain current staffing levels. In the last five years, our funding level has gone from $11,846,000 to a level of $11,707,000. During this time, NAD has absorbed approximately $1,454,000 in pay costs. This trend adversely impacts NAD's ability to execute its mission. To help offset these costs, NAD offered four buyouts in fiscal year 1997, and has reduced costs through attrition and other cost reduction initiatives. Additional pay cost absorption will negatively affect our ability to provide an effective administrative appeals system.

CONCLUSION

NAD's administrative appeals process is a cost-effective means for USDA program participants to have adverse agency decisions fairly and impartially adjudicated in a timely manner consistent with the intent of Congress. The initiatives in the fiscal year 2001 budget will help ensure that we accomplish our mission in a more efficient and effective manner—making correct determinations and continuing to assure the rights of all participants in appeals. The initiatives provide the groundwork for accomplishing the goals and objectives outlined in NAD's Strategic Plan and Annual Performance Plan. More importantly, these initiatives assure farmers, ranchers, cooperatives, agencies, and others an avenue to a fair and equitable adjudicative process.

That concludes my statement, and I look forward to working with the Committee on the fiscal year 2001 National Appeals Division budget.

NATURAL RESOURCES CONSERVATION SERVICE

PREPARED STATEMENT OF PEARLIE S. REED, CHIEF

Mr. Chairman and members of the Committee I am providing a copy of the statement that I used before the House of Representatives for your consideration and use.

Thank you Mr. Chairman and members of the Committee for the opportunity to appear before you today. Conservation is important to me. I've spent most of my life and my professional career devoted to addressing environmental problems and getting sound conservation on the ground.

I want to thank the Committee for their support during the fiscal year 2000 appropriations process. I promise you that I will do my best to make sure NRCS effectively and efficiently delivers the conservation programs and projects we have been directed to oversee.

I will continue our efforts to develop web-based tools that increase employee productivity in service centers and give many farmers and ranchers electronic access to automation that can assist them in making conservation decisions. As Chairman of the National Food and Agriculture Council, I am also working closely with the other field based agency heads to ensure that automation tools in service centers are user friendly for both our customers and employees and that databases are seamless between the agencies and our partners.

I am hopeful that we will be able to work with the Committee to continue your funding support for conservation in fiscal year 2001 and address the top conservation issues facing private landowners and operators, farmers and ranchers, and local communities.

In recent years, public concern for the environment and demand for NRCS technical assistance has increased dramatically. Public concern has grown about pollutants from animal feeding operations, improper application of pesticides and fertilizers, over-application of nutrients, continued excessive soil erosion, and poor land use decisions at the individual and community level. Invasive plant species on agricultural land, pfiesteria and other harmful algal blooms along our coasts, hypoxia in coastal waters, and declines in salmon and other fish and wildlife are leading the public to demand that agricultural producers act to address these natural resource issues.

However, few farmers and ranchers are able to respond to these demands on their own, let alone coordinate efforts at the watershed and regional scales. They frequently call upon the NRCS at the local level to provide them with technical assistance to address these emerging concerns and financial assistance from USDA conservation programs to help share the cost of implementing mitigating conservation measures. In addition, these concerns have required that we increase our investment in new, cost-effective, science-based practices that producers can install, operate, and maintain. I have accelerated our work on identifying appropriate technologies with the Agriculture Research Service and with other research entities. I have made an initial investment to improve the technology transfer and technical training of NRCS' field employees to meet the demands for new and innovative solutions.

Mr. Chairman, as you know, the NRCS conducts a National Resources Inventory (NRI) every five years. Recently, the results of the 1997 study were published. Significant NRI results include:

—Loss of prime and important farmland. From 1992 to 1997, nearly 16 million acres of agricultural and forestland were developed. We are now losing 3 million acres per year, double what was lost each year from 1982 to 1992.

—Soil erosion. Nearly 2 billion tons of soil erosion is occurring annually on the Nation's non-Federal lands. Despite gains in erosion control during the past 15 years, there have been no substantial improvements since 1995.

—Wetland losses. The U.S. still has not reached the goal of "no net loss". But wetland preservation efforts, like the Wetlands Reserve Program are helping us move towards that goal.

—Grazing lands losses. The nation's grazing lands total 583 million acres and include pastureland, rangeland, and grazed forestland. Since 1982, total pastureland and rangeland have declined by nearly 26 million acres.

The fiscal year 2001 budget proposals seek to address many of these significant NRI trends.

DISCRETIONARY FUNDING

Overall, the fiscal year 2001 President's budget proposes a net decrease of $6.2 million from fiscal year 2000 Appropriations level for NRCS' discretionary accounts, including supplemental funding provided in November 1999 for natural disasters. These budget proposals for discretionary funding reflect difficult choices for addressing the most significant environmental and conservation concerns.

Conservation operations

Mr. Chairman, the fiscal year 2001 budget request proposes an increase of $86.4 million for Conservation Operations from the fiscal year 2000 appropriations level of $660.8 million. This increase is essential for NRCS to fund the necessary technical assistance components so vital to getting sound conservation on the ground.

Specifically, the budget includes a $28 million increase for providing basic technical assistance for private landowners who are not typically participants in CCC cost-share conservation programs. Assistance to these landowners and local entities has eroded in recent years. In addition, because of increasing budget constraints, we have had to indefinitely postpone essential training, eliminate key field positions, minimize partnerships, compromise administrative support, and postpone re-

placement of aging equipment. While we have taken internal steps through automation to improve our processes and increase the time available to provide direct customer assistance, we would like to improve our service even more by providing additional trained personnel in the local communities. However, we cannot do this without additional funding assistance.

The budget also proposes a $20 million increase to provide additional staff needed to perform the increased workload associated with developing nutrient management plans for Animal Feeding Operations (AFO). This is an integral part of the President's Clean Water Action Plan (CWAP). During the past 24 months, some form of state or local regulation on AFOs has been debated in 34 states. It is clear that solving the nation's nonpoint source pollution is critical to making drinking water safe and lakes, streams and rivers clean. NRCS provides leadership and technical assistance to local communities in addressing the environmental concerns associated with AFOs. Specifically, NRCS helps set the nutrient management technical standards, develops comprehensive nutrient management plans with producers, including the development and design of manure management systems, and helps producers implement components of the plans.

The AFO related workload is tremendous. Based on our latest workload analysis, there are approximately 300,000 AFOs that will need some form of nutrient management planning in order to address the concerns of the Clean Water Act. With the proposed budget, we anticipate that we can complete the second year of a ten-year work plan to address this AFO workload. In fiscal year 2000, Congress provided an additional $8 million for this increased workload, bringing the total funding for AFO technical assistance to $56 million. The fiscal year 2001 budget proposes a total AFO workload effort of approximately $87 million under the Conservation Operations account, which includes a redirection of $11 million from within the technical assistance from other activities that are currently being provided within the account.

In other CWAP-related activities, the budget also proposes an increase of $13 million to provide $10 million in grants on a competitive basis to local organizations to coordinate watershed restoration activities among our Federal, State, and local partners allowing resources to be more effectively targeted and $3 million to enable additional environmental monitoring and research work that would be used to implement water quality assessment actions and set local and national priorities.

Fifteen million dollars is needed to support the Administration's Global Climate Change Initiative by expanding soil carbon studies and conducting pilot projects to better understand the impacts of climate change on soil carbon status. NRCS global change related activities have focussed on delivering technical assistance to help American farmers and ranchers cope with either human-caused climate change or natural climate variability that influences so many of their land management and farming decisions. NRCS efforts have emphasized the sequestration of atmospheric carbon in the soil, which increases the organic matter of the soil, and leads to improved rainfall infiltration, larger water and nutrient holding capacity, and reduced erosion. The increased funding would enable us to expand our understanding of soil carbon exchanges and develop new technologies and methods for improving carbon sequestration that will aid both producers and the wider American public.

Five million dollars is proposed to help farmers plan, develop, and implement conservation based biomass production systems, and an additional $5 million is requested again this year for the Community Federal Information Partnership. This will support the Administration's Livability Initiative through the development of consistent and compatible geospatial data systems.

Proposed funding remains stable for soil surveys, snow survey and water forecasting, and plant material centers. These functions play a vital role in the delivery of conservation services to private landowners. Soil surveys help us understand soils, snow surveys provide information on future water supplies important to water conservation, and the plant material centers provide native conservation plants unavailable from other sources that help solve natural resource problems. Additional funds are not requested for mandatory pay increases or inflationary costs.

Grazing Lands.—In fiscal year 2000, Congress provided $17 million for the Grazing Land Conservation Initiative, a $2 million increase in funding from past years. The fiscal year 2001 budget proposes to continue funding at that level. At the $17 million level, NRCS is able to maintain staff needed to provide technical assistance to private grazing landowners and managers.

In fiscal year 1999, approximately 700 NRCS employees allocated a majority of their time to providing technical assistance to over 28,000 individuals for grazing related issues. The total impact of NRCS assistance affected more than 20 million acres of grazing land. In addition, NRCS staff provided assistance with 790 grazing land demonstration projects nationwide that demonstrated grazing land technologies

and management, and conducted over 1,800 education and awareness activities (workshops, field days, tours, etc.) involving more than 100,000 individuals. With the increase in fiscal year 2000 funding for Grazing Lands Conservation, NRCS expects to build upon the fiscal year 1999 effort and impact on more than 22 million acres of grazing land.

Resource Conservation and Development (RC&D)

Through the RC&D program, NRCS works in partnership with local volunteers organized as Resource Conservation and Development Councils representing multi-county areas. Council members include local civic and elected officials who set an agenda to care for and protect their natural resources while improving local economies and quality of life. RC&D Councils, established as non-profit entities, undertake projects in the areas of natural resource improvement, recreation and tourism, and economic development. These Councils operate on the premise that local people know the most about the local natural resource and development needs. Currently, 315 USDA designated RC&Ds serve 2,304 counties in all 50 states, the Caribbean, and the Pacific Basin.

Information gathered from our new RC&D management database indicates that councils and their partners are very active in the development and expansion of rural business. In fiscal year 1999, 248 new businesses were created with RC&D assistance. RC&Ds helped expand 284 businesses, and financially assisted 678 businesses with non-RC&D funds. An estimated 3,000 jobs have been created through Area projects. The councils also are very effective in obtaining grant funds to implement their projects. Those Areas reporting in our database brought in over $312.8 million to rural America. Efforts to improve natural resources have resulted in improvement of 500,000 acres of wildlife habitat, improvement of 510,000 acres of lakes, and 1,500 miles of streams. Educational projects have helped 556,000 people develop new skills. RC&D projects have helped 446,500 economic or socially disadvantaged people.

Mr. Chairman, this program plays a vital role in rural communities. The President's budget proposes an increase of $1 million to support mandatory pay increases that cannot be absorbed without seriously degrading the program's success and benefits.

Watershed and Flood Prevention Operations

In fiscal year 2000, the Watershed and Flood Prevention Operations account was reduced by $7.8 million in financial assistance from the appropriated level of $99.443 million as a result of the rescission associated with Public Law 106–113.

For fiscal year 2001, the budget proposes a decrease of $88.2 million from the fiscal year 2000 appropriations level of $171.6 million. This includes a reduction of $80 million in Emergency Watershed Protection (EWP) supplemental funding provided in fiscal year 2000 and an $8.2 million reduction in financial and technical assistance provided under the account reflecting a redirection of administration priorities. The requested level of $83.4 million for the Watershed and Flood Prevention Operations account reflects the minimum needed to address high priority sub-watershed projects under the Public Law 78–534 and 83–566 program authorities.

Also included in the budget proposal is a new loan program for helping communities rehabilitate aging Public Law 78–534 and 83–566 watershed structures that were built 30 to 50 years ago. A recent survey has revealed rehabilitation needs for more than 2,200 of these structures in 22 states for an estimated cost of $540 million. The budget proposes a $4.2 million subsidy budget authority that would be used to support a $60 million program loan level to provide loans to state and local governments to help them begin to address this problem. Under the proposal, Rural Development offices would service the new loans and NRCS would provide technical assistance to communities receiving the loans on a reimbursable basis.

The budget also includes a proposal to use $3 million in funding to provide financial and technical assistance to communities to implement disaster mitigation plans.

Emergency Watershed Protection.—Of the $80 million in supplemental funding appropriated in fiscal year 2000 to repair damages to waterways and watersheds resulting from natural disasters, NRCS has committed funds to 28 states. Currently, we have 173 EWP ongoing projects in 46 states. EWP provides vital assistance to local communities when disasters occur. For Hurricane Floyd, for example, NRCS provided assistance to 98 producers in 20 counties with the disposal of approximately 2 million dead animals. By having funding available, the agency was able to quickly provide the much needed financial and technical assistance. In fiscal year 2000, Congress provided $8 million for pilot rehabilitation projects in New Mexico, Ohio, Mississippi and Wisconsin. The State Conservationists in each state have been working with local watershed project sponsors and state dam safety officials to se-

lect high priority projects. We have set aside $2 million for each state and expect that construction will begin by this fall and will continue through fiscal year 2001. While we are in the planning process for these projects, local sponsors must obtain land rights, easements, permits and other project administrative needs, as well as finding financing for 35 percent of the total estimated cost of rehabilitation.

Watershed surveys and planning

Funding has been requested for fiscal year 2001 at the same level as the fiscal year 2000 appropriation, $10.368 million.

Forestry Incentives Program

In fiscal year 2000 the Forestry Incentives Program was reduced by $948 thousand in financial assistance from the appropriated level of $6.325 million as a result of the rescission associated with Public Law 106–113. The President's budget does not propose funding for fiscal year 2001.

COMMODITY CREDIT CORPORATION FUNDED CONSERVATION PROGRAMS

Conservation Security Program

Under Secretary Lyons has highlighted the budget proposal in his testimony, I would like to provide an overview of how NRCS would deliver the program if it were authorized and funded.

First, we would issue program regulations in an expedited manner. We would base our program delivery on past successes and complement other conservation programs. In the field, we would quickly train our existing staff and use conservation district employees to help us roll out the program.

The program will be designed to reward those who are currently maintaining sound stewardship on their private lands. It will ideally also provide an incentive for those who wish to increase their level of conservation treatment. Under the program, farmers and ranchers would receive an annual payment based on the level of conservation treatment covered by the program agreement. One option could have payments covering conservation measures by land use. Examples could be crop residue management for cropland, proper grazing use for range and pastureland, integrated pest management, hayland management, and irrigation water management for irrigated land.

Our goal is to gain conservation benefits. The Secretary has asked us to provide the opportunity for those not covered by current commodity programs such as owners and operators of grazing land, orchards, vineyards, as well as those covered by the current farm programs. Both of these groups are the NRCS traditional customers. Essentially, the program would be used to help keep past investments intact and reward good stewards of our natural resources.

Environmental Quality Incentives Program

This program, which began in late 1996, has provided producers and landowners with incentives to implement long term, comprehensive conservation farm plans. We've had some growing pains. We've listened to public and Congressional concerns, and we are taking action to reduce program processing problems and overall make the program more responsive.

The fiscal year 2001 funding request reflects the full $200 million authorized level under current law and, an additional $125 million for a total program level of $325 million. Demand for EQIP has historically exceeded available funding. For example, approximately 52,000 program applications were received in fiscal year 1999 with only 36 percent, or approximately 19,000 applications, approved. Cost-share assistance programs like EQIP provide a significant incentive to installing voluntary conservation practices based on local and national conservation issues. Components of the $325 million EQIP budget include: $178.5 million for AFO related activities, $16 million for priority environmental issues on American Indian and Alaskan Native lands, $10.5 million for Pacific salmon habitat recovery and $3.6 million to fund demonstration or pilot projects concerning methane gas recovery and utilization projects. The remaining $116.4 million would be available for local priority conservation concerns.

Wetlands Reserve Program

Re-authorized under the 1996 Federal Agriculture Improvement and Reform Act (1996 Act), the program is authorized to enroll a total of 975,000 acres in permanent easements, 30-year easements, and wetland restoration cost-share agreements.

Through the end of fiscal year 2000, the agency will have enrolled approximately 935,000 acres toward the total authorized for the program. The fiscal year 2001 budget proposes to enroll the remaining 40,000 acres and under proposed legisla-

tion, to enroll an additional 210,000 acres for a total acreage enrollment of 250,000 acres. The proposed legislation would also increase the total annual enrollment to 250,000 acres through 2010. This requested program level is needed in order for us to achieve a no-net loss of acres per year and begin to achieve our national goal of an increase in wetlands annually.

Farmland Protection Program

According to the Census of Agriculture, nearly 85 percent of domestic fruit and vegetable production and 80 percent of our dairy products come from urban influenced areas. Rapid development and urban sprawl have significantly threatened this valuable and productive farmland.

As part of the Farm Safety Net proposal, the budget proposes legislation to fund the Farmland Protection Program at $65 million level annually. The initial funding level of $35 million authorized by the 1996 Act was exhausted at the end of fiscal year 1998. The FPP provides assistance to communities interested in protecting unique or prime agricultural lands from conversion to non-agricultural uses. The FPP provides matching funds to states, tribes or local government entities to acquire conservation easements or other interests in land. It helps protect strategic farmland from urbanization and ensures that valuable farmlands are preserved for future generations.

If the requested $65 million is provided in fiscal year 2001, NRCS would be able to reduce the significant loss of prime agricultural lands and protect approximately 130,000 farmland acres from conversion.

Wildlife Habitat Incentives Program

First authorized by the 1996 FAIR Act, the program provides incentives to farmers, ranchers, and other landowners to install conservation practices that improve wildlife habitats. These practices include native grass restoration, riparian area restoration, and aquatic habitat establishment. The budget proposes, under new legislation, an annual funding level of $50 million since all available funds from the original authorization have been used.

Conservation Reserve Program

NRCS provides technical assistance to CCC in the delivery of this conservation program. Under proposed legislation, the acreage enrollment caps would be increased from 36.4 million acres to 40 million acres in fiscal year 2001. The acreage increase, coupled with bonus payments proposed for continuous signup, would help address the significant problem of soil erosion and improve the quality of our nation's waterways.

The Department has concern regarding technical assistance funding to implement the WRP and CRP. These two programs fall under a legislative cap in the Commodity Credit Corporation fund transfers, known as Section 11. Although $35 million in emergency supplemental appropriations was enacted in May, 1999 for the fiscal year 2000 program to make up for shortfalls under this cap, our most recent estimates raise the possibility that amounts available may not be sufficient. This matter is under review within the Administration.

CONSERVATION THROUGH PARTNERSHIPS

Mr. Chairman, as you know, NRCS has operated since its creation through voluntary cooperative partnerships with individuals, state and local governments, and other Federal agencies and officials. That partnership is as important today as it ever was. In fact, it may be even more important, if we are to meet the challenging conservation problems facing our Nation's farmers and ranchers.

NRCS has worked with 4.7 million farmers, ranchers, producers, operators, private landowners and local communities to help them conserve their natural resources by gaining knowledge about new conservation problems and solutions, by providing guidance and advice, and by developing and helping implement conservation plans. NRCS does this by working with 3,000 local conservation districts that have been established by state law and with American Indian Tribes and Alaska Native Governments.

State and local governments contribute substantially, with both people and funding to complement NRCS technical and financial assistance. Approximately 7,750 FTE of assistance is provided annually by NRCS partners and volunteers. In addition, state and local governments match Federal funding by $1.60 for every one Federal dollar provided for conservation. And Americans have generously given their time to volunteer with NRCS as part of the Earth Team Volunteers effort. In fiscal year 1999, over 29,000 people volunteered their time locally, working approximately

350 FTE. The Points of Light Foundation calculated the value of this volunteer service at $10.4 million.

And we work closely with other Federal agencies such as our sister agencies in the Department of Agriculture, the Forest Service, Farm Service Agency, and Rural Development, as well as Agricultural Research Service, Cooperative State Research, Education and Extension Service and other Departments, including the Environmental Protection Agency.

Good conservation doesn't just happen. It takes all of us, including Congress, working together to make it happen. This concludes my statement, Mr. Chairman. I will be glad to answer any questions.

OFFICE OF THE CHIEF FINANCIAL OFFICER

PREPARED STATEMENT OF SALLY THOMPSON, CHIEF FINANCIAL OFFICER

Mr. Chairman and members of the Subcommittee, I am pleased to present the fiscal year 2001 budget request for the Office of the Chief Financial Officer—OCFO—and the Department's Working Capital Fund—WCF.

I would like to thank you, your colleagues, and your respective staff members for taking this time to focus on the multiple financial management challenges facing USDA and how we are working to address these concerns. Secretary Glickman has made resolving these issues a major priority, and I thank him for his strong leadership. I also want to recognize this committee's staff for your efforts on behalf of improving financial management. We are moving forward, and this budget request highlights the next steps that we must take to fully achieve USDA's financial management objectives.

During fiscal year 1999, USDA made significant progress towards improving its financial credibility and accountability. The following examples give you a glimpse of our progress:

Financial Statements.—USDA submitted its consolidated financial statements to the Office of Management and Budget—OMB—by the March 1 deadline. The previous year's submission arrived at OMB five months past the deadline. USDA has six stand-alone audits, three of which-—the Food and Nutrition Service, the Rural Telephone Bank, and the Federal Crop Insurance Corporation—received unqualified—clean—audit opinions. An unqualified audit opinion assures policy makers, the Congress, program recipients, and taxpayers that these financial statements reflect credible, reliable information that complies with laws, regulations, and accepted authoritative requirements. These clean opinions on three stand-alone audits are a major step toward USDA achieving an unqualified audit opinion on its consolidated financial statements in fiscal year 2001.

Debt Collection.—USDA collected $136.2 million in delinquent debt through Treasury's Administrative Offset Program and other debt-collection tools during fiscal year 1999. This figure represents a 45 percent increase over the $93.9 million collected in fiscal year 1998 and a 90-percent increase over the $71.5 million collected in fiscal year 1997. In addition, USDA lowered the amount of delinquent debt in its overall loan portfolio from $7.5 billion in delinquencies in fiscal year 1997 to $6.4 billion in fiscal year 1999, a drop of nearly 15 percent.

Integrated Financial Management System.—USDA made significant progress in implementing the Foundation Financial Information System—FFIS. Along with senior-level staff from the Office of the Secretary and other top USDA officials, I made significant changes to the implementation's project management. Under this new management structure, the Forest Service and the Food Safety and Inspection Service, which together represent 46 percent of USDA's workforce, implemented the system on October 1, 1999. The Risk Management Agency implemented this administrative system on October 1, 1998. This success led the Secretary to accelerate the system's implementation in the current fiscal year to include four major agencies—Animal and Plant Health Inspection Service—APHIS, Rural Development—RD, Farm Service Agency—FSA, Natural Resource Conservation Service—NRCS. These agencies are expected to have the system in place by October 1, 2000.

National Finance Center.—OCFO's National Finance Center—NFC—in New Orleans processes the payroll for 40 percent of the Federal civilian workforce and administers the $90 billion Thrift Savings Plan, a 401(k) type plan for 2.5 million Federal employees. NFC has added three new payroll clients: The Peace Corps—900 employees, The Federal Elections Commission—350 employees, and the county-based employees from the Farm Service Agency within USDA—1,200 employees in addition to the 16,300 in fiscal year 1999. NFC has added 21,400 individuals to the list of employees receiving payroll services in the last two years. Adding customers to the

NFC payroll service helps to reduce the cost per transaction for all users of the service.

These examples represent progress that will continue only if we receive the necessary resources to establish the framework in which we will lead, direct, and coordinate USDA's financial management priorities to satisfy congressional mandates and provide the Secretary, the Congress, and program managers with credible financial information on which they can base decisions.

FISCAL YEAR 2001 BUDGET REQUEST

Mr. Chairman, OCFO is requesting an increase of $1,505,000 over our fiscal year 2000 appropriation. The $500,000 increase that we received in fiscal year 2000 marked the first time in several years that OCFO, or its predecessor agency, received an increase in its appropriated budget. We thank you for recognizing financial management's increasingly important role in ensuring that sound business practices are in place. We will use the increase in fiscal year 2001 to devote the necessary staff and resources to continue working on the following goals:

Lead Corporate Systems Strategy.—The Secretary has directed me to lead a executive group, including the Chief Information Officer and the Assistant Secretary for Administration, to develop a corporate strategy for Department-wide administrative/financial systems, including accounting/budget execution and formulation functions, procurement, property, human resources, travel, and the associated telecommunications and security. These financial management systems require OCFO to review all current business practices in the affected agencies to ensure that these systems will produce accurate, timely and reliable data. Currently, program managers, policy officials, members of Congress, and other stakeholders do not always have the reliable and timely information needed to support essential program and financial management decisions, as well as develop, monitor, and report on performance plans and their goals and objectives, as required by GPRA. The added resources for this corporate systems strategy will help OCFO accomplish these specific objectives: (1) adequately implement Congressionally mandated debt collection provisions, (2) implement a financial information architecture that fully complies with Federal requirements, (3) maintain guidelines for cost distribution processes to include guidelines for the establishment of fees, (4) ensure compliance with the Single Audit Act and non-procurement debarment and suspension/drug-free workplace requirements, and (5) participate as a key player in Government-wide efforts to continually define and refine financial information requirements.

Implement Information Infrastructure.—Consistent with the corporate systems strategy, OCFO will work with four agencies—Rural Development, FSA, NRCS and APHIS—to implement FFIS, the integrated administrative accounting system that 46 percent of the Department's workforce now relies on for its accounting services.

Resolve Credit and Debt Management Issues.—In fiscal year 1999, OCFO initiated a pilot with the Department's two major credit agencies—Rural Development and FSA—to jointly address credit reform issues in partnership with OCFO, the Office of Inspector General, and the Office of the General Counsel. The pilot was funded through reimbursable agreements among OCFO, FSA, and Rural Development. The Federal Government's quest for a clean audit opinion on the Government-wide Financial Statements is in jeopardy if the Department does not resolve these credit-related issues.

Fully implement GPRA.—OCFO must (1) conduct oversight and provide expert guidance within the Department to ensure that the strategic planning function meets legislative requirements; (2) publish the Department's Strategic Plans and the annual performance reports; and (3) ensure that a demonstrated linkage exists between annual performance plans and the strategic plan and that cost data are aligned with performance goals and correlate with budget requests. The resources OCFO needs to manage financial and administrative systems reforms will be used to link program managers with the essential information they need to examine performance measures and cost data.

Direct Cost Accounting Reforms.—OCFO leads the USDA Cost Accounting Task Force efforts and will use the additional resources to ensure that the systems modernization efforts comply with these standards and produce the appropriate cost-accounting information that program officials need.

Produce An Accountability Report.—Without additional resources, OCFO would have to divert resources from other high profile financial management initiatives, new systems implementation, and/or audit resolution to issue an accountability report. An accounting report would streamline financial and performance reporting and provide internal and external stakeholders with a single source of comprehensive information on the Department's performance on program and financial man-

agement issues. With this funding, an accountability report could be produced by March 31, 2001.

Provide oversight, guidance, and coordination for audit monitoring, tracking, and resolution.—The added resources would ensure that Federal funds are utilized for the purposes for which they are intended, and that instances of program abuse and/or fraud do not go undetected, but are addressed by Government managers in a timely fashion. In the last year, OCFO developed an Automated Tracking System—ATS—to produce better, more efficient management information. Since the OCFO has been designated as the central point to receive and track USDA audits these funds are needed to carry out that function.

WORKING CAPITAL FUND

Finally, Mr. Chairman, I will conclude my remarks by providing you with a brief update on our WCF. As you know, the WCF serves as the Department's primary financing mechanism for centrally managed financial, administrative, and information technology services. As such, it supports more than 20 distinct activity centers. Much of what I have already discussed, with respect to implementing FFIS and our new corporate systems, will be financed by our WCF and result in some short-term cost increases.

I cannot tell you, Mr. Chairman, how many USDA officials have come to me over the last twenty-three months and raised concerns on the WCF and the perceived lack of controls over its costs. I share these concerns and last fall initiated a study to evaluate those WCF costs at the National Finance Center. I recently expanded the study to look at all services performed at the Center, with the exception of those performed on behalf of the Thrift Investment Board. When the study is concluded, my goal will be to determine what it costs the Center to provide its accounting services.

USDA's leadership wants to control costs, not only for the WCF but for the individual agencies. The agencies' support for establishing a corporate strategy is indicative of this awareness. Furthermore, we are seeing a much greater collaboration between the activity centers that provide the WCF services and the agencies to ensure we are not duplicating each others work. For example, Mr. Chairman, last year the Department's Executive Information Technology Investment Review Board—EITRB—reviewed the major administrative, financial, and program systems. This Board is comprised of the Department's senior policy officials chaired by the Deputy Secretary. In this manner, we are better able to reduce the duplication of systems development and to coordinate the Secretary's administrative and financial priorities. In the long run, I also see this process as a means to maintain and improve the WCF's integrity.

As you know, the WCF is a revolving fund and totally dependent on transfers and income it receives from its customers for the services we provide. We are here today requesting no funding from the Committee, only to justify them. Much of the increase includes a number of items related to the modernization investments, re-engineering efforts, and enhanced accounting services I have spoken of already, along with associated increases related to the Thrift Savings Plan, or TSP. These increases are essential to modernize our operations, so we can maintain and improve upon the high quality of service delivery all of our customers demand. Only a small portion of the increases are related to inflation or other cost increases. With respect to TSP, we are requesting an increase in operating funds to provide for an expansion of services. The Thrift Investment Board has requested these increases so they can meet the expected legislative requirements allowing military personnel to participate in the TSP; make certain other changes relating to changes in employees' eligibility; and significantly expand the plans capabilities. These increased costs will be fully reimbursed by the Board as the customer. I am pleased to report that we, along with the Board and a private contractor, are in the final stages of implementing a new system in October 2000 that will provide two new investment options for TSP participants and allow them the capability to conduct on-line investing within their own accounts. These changes will bring TSP up to the standards on-line traders currently enjoy on the Web.

We have learned that modernizing our financial and administrative systems is an expensive and continuing process, and we are currently paying for years of inadequate investments that prevented NFC from keeping up with current technology standards. That's why we are having to bear high costs for modernizing NFC and for re-engineering a wide variety of administrative, information technology, and financial processes.

As I mentioned, we are evaluating innovative methods to provide financing for our major initiatives, including the performance-based contracting. With this in mind,

the President's Budget includes new language to be included in the Department's General Provisions that would grant authority to the Secretary to transfer certain funds to the WCF for plant and equipment investments in administrative, financial, and information technology services. In a rapidly changing technological environment, we are always going to be faced with the need to make improvements, redesign systems, re-engineer processes, and generally manage our operations in a virtual environment. Our customers will no longer accept less than what they can get in the market place or from our competitors. Therefore, we must have access to investment capital that is both sustainable and flexible. We need to be able to bring needed resources to bear quickly and efficiently. There is no clearer example of our emerging need than our efforts to re-engineer our corporate systems, as I noted before. When completed, we will be able to provide to all of our customers real-time information in an interactive environment. Again, our customers will accept no less.

Mr. Chairman, we have a shared responsibility to ensure that we can meet the needs of our agencies as they address the needs of the American farmer and agricultural community. I am eager to work with you and the members of this Committee to ensure that those needs are met. The resource estimates that I am presenting to you is our commitment to fulfilling our responsibilities. Thank you, Mr. Chairman. I welcome any questions the Committee might have.

OFFICE OF INSPECTOR GENERAL

PREPARED STATEMENT OF ROGER C. VIADERO, INSPECTOR GENERAL

INTRODUCTION AND OVERVIEW

Good morning, Mr. Chairman and members of the Committee. I am pleased to have this opportunity to visit with you today to discuss the activities of the Office of Inspector General (OIG) and to provide you with information on our audits and investigations of some of the major programs and operations of the U.S. Department of Agriculture (USDA).

Before I begin, I would like to introduce the members of my staff who are here with me today: Jim Ebbitt, Assistant Inspector General for Audit; Greg Seybold, Assistant Inspector General for Investigations; and Del Thornsbury, Director of our Resources Management Division. I want to thank the Committee for its support during the 5½ years since my appointment as Inspector General. We have tried to work closely with you, and I hope we have been able to address some of your concerns. We have a diverse staff of auditors, criminal investigators, and other personnel in our offices throughout the Nation to carry out the agency's audit and investigative mission.

I am proud to say that in fiscal year 1999, we continued to more than pay our own way. In the audit arena, we issued 146 audit reports and obtained management's agreement on 348 recommendations. Our audits resulted in questioned costs of over $262 million. Also, as a result of our audit work, management agreed to recover more than $55 million and put another $114 million to better use. Equally as important, implementation of our recommendations by USDA managers will result in more effective operations of USDA programs. In addition, our investigative staff completed 515 investigations and obtained 502 indictments, 559 convictions, and 2,780 arrests. OIG investigations also resulted in $68 million in fines, restitutions, other recoveries, and penalties during the year.

We continued to work closely with USDA agency officials during fiscal year 1999 to address key issues and expand our cooperation with other Federal, State, and local law enforcement and audit agencies to broaden the impact of our work. Working together, our staffs identified program weaknesses and program violators. Capitalizing on the staffs' respective expertise, we created solutions for positive action.

In fiscal year 2000, our primary concerns continue to be in the areas of food safety, public health, and consumer protection. In the food safety arena, we continue to identify contaminated food, misbranded products, uninspected meat or other products, or items smuggled into the United States containing unwanted and unsafe pests. With the Nation's food supply being highly susceptible to tampering, diseases, or infestation with unwanted plant pests, OIG's resources, especially our investigative resources, continue to be drastically overextended in these highly critical areas.

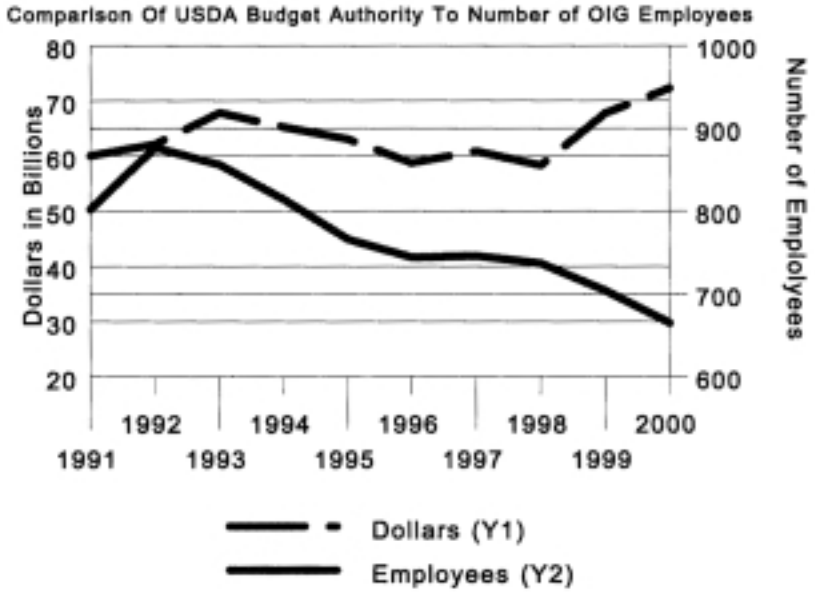
We are also focusing our audit efforts on the Department's financial information systems, which process billions of dollars in payments and an extraordinary amount of sensitive data. And, of course as conditions change, we adapt quickly to address critical, time-sensitive situations. For example, when Congress passed supplemental appropriations to help farmers suffering from natural disasters and low commodity

prices last year, our audit staff immediately teamed up with Department officials to make sure controls were in place to quickly get the right payments to farmers. Another area we are addressing is employee integrity. We are concerned by the occurrences of corruption within the Department's ranks. For instance, during fiscal year 1999, we issued 40 investigative reports and obtained 22 convictions of current or former USDA employees.

Before I continue with our accomplishments during the past year, I want to take a few minutes to address an issue that has me deeply troubled. I have been candid with the committee on whatever issues came before me and reported the facts as I have known them. This is as it should be. But now, I want to speak of the special agents and auditors of my own agency. These dedicated individuals have accomplished so very much, only a small portion of which I have ever had the time to share with you. Their work literally saved the lives of large numbers of our citizens, particularly children, and elderly. They have saved our precious tax dollars, worked with USDA agencies to restore integrity to our programs, and protected American agriculture. I am immensely proud of them and hope you are too.

While I have reported to you some of their accomplishments, I have not told how they have been stretched beyond the breaking point. The numbers of special agents and auditors, and the resources available to them, were severely limited when I arrived 5½ years ago, and while our responsibilities have increased since my arrival, our staff and resources have continually diminished. In January 1993, we had 875 employees on board. Now we have only 665 210 less, a 24 percent loss. Yet, the decrease to 665 people means little until one considers that the Department's budget, including loan authority, currently is $177 billion; with a personnel staff of approximately 110,000 for fiscal year 2000. Not included in this dollar amount are the operations and actions of millions of companies, plants, and individuals regulated by USDA. As you know, investigating criminal activity by any of them is the responsibility of OIG agents. Ensuring the integrity of all of these programs is the responsibility of OIG auditors.

To put it in perspective, when we compare OIG staffing to the Department's programs and personnel, we find that each auditor must ensure the integrity of approximately $635 million in program activity. Each special agent is responsible for investigating all crimes involving nearly $840 million of USDA funds, and any crimes committed by the Department's approximately 110,000 employees, such as embezzlements, thefts, bribes, or extortions. This lone agent is also responsible for investigating criminal activity committed by immense numbers of companies, plants, and individuals whose actions are regulated by the Department through its animal and plant, meat, poultry, grain, fruit, and vegetable inspection and grading programs. Then, there are USDA's forests. It's like having one police officer and one auditor to handle all crime and corruption in New York City.



As our funding shortages have grown more severe, we have been forced to change our standards for determining which criminal activities we investigate. For years we have declined to investigate large numbers of prosecutable cases, focusing instead on those with higher dollar amounts or those that would have a significant impact on a USDA program. In recent years, as our resources have diminished, we have had to elevate the standard further, leaving thousands of prosecutable criminal cases in the files. The types of criminal activity which we do not have resources to investigate continue to vary widely, and range from corruption in USDA's grading programs, to smuggling of agricultural products, to large frauds in the Department's benefit programs. Proactive investigations have been, by necessity, severely curtailed.

Of course, our people continue to do their best, continue to lock up some of those who steal from the taxpayers, poison our citizens, and endanger American agriculture, but you must know that there are now huge gaps in that "thin blue line" that is OIG.

Our auditors and investigators can continue to recover and save money for the taxpayers only if they have the tools needed to perform their duties. The changing world of automation has added to the tools needed, and these tools come at a heavy price. For example, audits of computer security require specialized and costly training, hardware, and software. Without these tools, we stand little chance of staying abreast with the "hacker community," and the Department's exposure to system penetrations remains high, with potentially devastating effects. The highly publicized breakins over the past 2 weeks via the Internet of such major cyberspace vendors as Yahoo, Amazon.com, and eBay only highlight the urgency of protecting the Department's data bases and vulnerable computer systems.

Compounding our dilemma, for several years we have been required to absorb increases in personnel costs. This has forced us to limit our replacement hiring and has extensively curtailed the funding we have available for other necessary items, such as travel and specialized law enforcement equipment. At the same time, programs and activities administered by USDA to protect consumers have undergone substantial increases due to liberalized world trade and travel, and purchases of commodities for use in the National School Lunch and related programs. In addition to fewer staff, we received no additional resources for such mandated activities as auditing the Department's financial statements, yet this activity consumes about 20 percent of our audit resources. Under these conditions something has to give, and it is reduced coverage of the Department's increasing activities and expenditures. To illustrate this, in fiscal years 1997 through 2000, we determined that on average a little over 100,000 workdays were needed in each of those fiscal years to provide

audit coverage. Yet with available audit resources, we could staff only an average of 67,000 workdays, a shortage of 33,000 workdays. In fact, in fiscal year 2000 only 61,400 workdays are available. By way of example, because of these shortages, we have not been able to provide in-depth audit coverage to issues such as the Department's efforts to increase collection of debts owed to it, and the Department's new computer system for tracking the Rural Housing Loan Program. Overall, more needs to be done with information technology information since, with the advancing state of automation, more data involving payment systems, health and safety, economic matters, and research becomes at risk because of unauthorized access and possible irreparable damage.

At our current staffing level, we are simply not able to deal with crisis issues needing immediate audit and investigative attention without neglecting important work elsewhere. OIG is often required to pull its special agents from assigned investigations of large frauds in USDA's benefits and loan programs to investigate criminal activity that threatens the health and safety of the public. We currently have 34 open investigations on those who intentionally sold meat products that could have sickened or killed consumers, including school children and military personnel. While most cases involved those who processed the meat products, we also investigated those who endangered the public in other ways. For example, just this month we immediately responded to an incident where individuals had stolen tractor-trailer loads of meat and poultry from several locations in Georgia. Our immediate concern was that the thieves were repackaging and relabeling the stolen product and not properly maintaining it, making it hazardous to consumers. A portion of one tractor-trailer load transported to Texas had spoiled because the refrigeration unit on the trailer was not properly working. Other stolen meat product was found in Mississippi and in Tennessee, where it had been sold to prisons.

Another area that significantly affects our resources being available for criminal investigative operations is our need to provide protective security for the Secretary of Agriculture. OIG special agents continue to protect the Secretary during his official duties in Washington, D.C., and during his extensive official travel domestically and abroad. In the past 5 years, the number of threats to the Secretary has increased by 250 percent. In January 2000, the OIG security detail provided protection to the Secretary while he attended the World Trade Organization (WTO) meeting in Seattle, Washington. The WTO conference was ground to a halt by thousands of protestors who blocked entrances to meeting halls and hotels, virtually shutting down the city for 3 days. In 1999, 20 individuals either wrote threatening letters to the Secretary or protested the Secretary's agricultural policies and programs. One individual repeatedly wrote letters to the Secretary threatening deadly force against him or any other Government employee who attempted to foreclose on his farm. This individual was arrested by OIG special agents on January 28, 1999, and has been confined to a medical facility for psychiatric evaluation. At the time of his arrest, the individual was carrying a semiautomatic pistol and a shotgun in his vehicle. An OIG search of his home found five shotguns, three 22-caliber rifles, ammunition, and a gas mask. The weapons were placed at various doors and windows throughout the house, and ammunition was placed beside the weapons. The criminal complaint filed in Federal court against this individual is still proceeding.

Adequate funding and staffing for our office makes good sense because we help create a Government that works better and produces positive results. While I recognize that funding is limited, I believe OIG cannot continue to provide sufficient service and assistance to you, the Congress, and to USDA agencies without being provided adequate resources, and I request that our proposed funding level be approved. I believe that resources allocated to OIG are very cost-effective in view of the money we save the taxpayers.

Also, to keep the Committee informed, I have attached a summary to my testimony of the forfeiture funds we have received to date as a fully participating member of the Department of Justice's Asset Forfeiture Fund and how these have been used. These monies have been very helpful to the agency and have also enabled us to provide support to the State and local law enforcement agencies we work with in such joint efforts as Operation Talon. For example, we have been able to provide these law enforcement agencies nearly $100,000 during the last year and a half to assist in this particular operation as a result of our forfeiture authority.

Mr. Chairman, at this time, I would like to highlight some of our audit and investigative activities.

Animal and Plant Health Inspection Service (APHIS)

Last year, OIG began an antismuggling campaign to interdict foreign agricultural products that are being illegally brought into the country. Such products can contain pests and diseases that could be catastrophic to U.S. plant and animal populations. Ongoing criminal investigations are targeting smuggled fruits, vegetables, plants, animals, and other commodities that bring high dollars in underground "black market" commerce. This initiative requires significant agent resources dedicated to intelligence collection, undercover operations, and foreign law enforcement liaison, as well as a need for high-tech surveillance equipment.

OIG is currently conducting 26 investigations into the smuggling of agricultural products that are entering the United States through Canada, Mexico, and U.S. ports in Florida and California. We are working closely with foreign customs and agricultural inspection officials, the U.S. Customs Service, the Animal and Plant Health Inspection Service, and State and local agricultural inspection personnel to locate the illegal products and identify the manner in which they are being brought into and moved around the country. These ongoing investigations have uncovered sophisticated smuggling conspiracies that are bringing in large quantities of agricultural products. These individuals fly products into areas of the country with little agricultural inspection, but then move them into other States where they pose a danger. They devise paper trails that hide the source of the products, and conceal the products when moving them. All of the products could harbor pests and diseases that could devastate the agricultural sector. Many of our investigations are being conducted on individuals who are bringing products into California, where outbreaks of plant pests have been common and costly. There is heightened concern in California because of the fruit fly quarantine imposed as a result of these pests being introduced. OIG must do proactive work to ensure these destructive pests are not being brought into the country on smuggled plants and commodities to infest our plants and crops. We must shift staff from current work to address these immediate issues to prevent loss of crops and dire economic consequences to the local economies.

Antismuggling operations also include our long-term joint Special Field Enforcement Program with APHIS, the U.S. Customs Service, and State and local law enforcement agencies in Florida. This Special Field Enforcement Program will target organized transportation and distribution networks responsible for the smuggling of foreign fruit contaminated with fruit flies and other pests into the United States via Florida. This program will eventually expand to other States with pest smuggling problems.

In another OIG criminal investigation that demonstrates our work in this area, we worked with APHIS to convict two owners and their company operating a horse export/import business in Virginia and Germany. The owners pled guilty to smuggling and providing falsified information concerning the age of horses being exported from Germany. The German veterinarians unknowingly issued inaccurate health certificates that allowed the horses to be exported to the United States. The certificates were presented to APHIS officials so that the horses could avoid the 50 days of quarantine in the United States paid for by the owner which is a requirement for all horses over the age of 731 days in order to prevent the spread of Contagious Equine Metritis, a sexually transmitted disease. Consequently, at least 10 mature horses were imported into the United States without being placed in quarantine. One owner was sentenced to 4 months in prison while the second owner and corporation were given probation. Collectively, the three were fined $45,000. Because of OIG criminal enforcement actions, the Government seized the owners' horse farm in Virginia, valued at $1.2 million, which the owners forfeited to pay damages in this case.

In another case, a husband and wife, both Canadian citizens, were indicted in Washington State for smuggling prohibited Asian fruit into the United States. The Asian fruit is prohibited entry into the United States because it is known to carry pests and diseases not found here that could devastate local crop economies. Four hundred pounds of fruit were discovered hidden in the cargo area of the subjects' station wagon as well as inside the walls of the cargo area. This was the third time these individuals had been caught smuggling fruit into the United States. The husband subsequently pled guilty while the charges against the wife were dropped. Both the Federal prosecutor and the defense counsel had initially recommended probation with no jail time. The judge, noting the potential harmful impact of the fruit, which tested positive for insect infestation, could have had on domestic crops and

local economies, declared her intent to "send a message" to the subject. She sentenced him to 2 days in jail and 3 years' supervised release.

Food Safety and Inspection Service (FSIS)

At last year's budget hearings, I reiterated our continuing commitment to placing a high priority on food safety and consumer protection issues. Threats to the health and safety of the public are the most important matters investigated by OIG. Recent criminal investigations addressed the processing and sale of adulterated meat and poultry and tampering with food products consumed by the public.

During the last few months, criminal investigations have necessitated the immediate deployment of special agents to several cities in the United States to protect the health and safety of consumers. These cases, some of which are still ongoing, have involved real or threatened adulteration of meat with E.coli and Listeria from unsanitary production methods intentionally neglected by the processor, sewing needles placed in commercial meat product packages at a supermarket to injure and possibly kill unsuspecting consumers, and substances added by the processor for economic gain.

To address these serious threats and illegal acts against the public's well being, we are pursuing joint activities with other Federal, State, and local agencies to share intelligence and conduct undercover operations. Doing so will help us better target criminal enterprise in general and the threat to the food supply in packing plants and other facilities in particular.

The increasing threat to the wholesomeness and safety of domestic and exported food requires not only vigilance but also advanced preparedness and preemptive undercover operations. Profit-motivated criminal activity that threatens the food industry can cause economic disruption while victimizing innocent members of the industry. Likewise, threats from outside the food industry of criminal adulteration and biological contamination of food products for extortion or ideological motives victimize and disrupt the food production or distribution systems until these threats are resolved through a law enforcement and health and safety response.

Immediate response to emergency situations impacting USDA programs and operations and regulated industries requires the specific, unique law enforcement expertise of USDA OIG. OIG's rapid response and deployment of considerable staff resources has helped to protect the health and safety of consumers this past year, and we will continue to do so in the future. However, the cost to respond rapidly is great and growing. To do so, we require specialized equipment and protective clothing and supplies to ensure the health and safety of our personnel responding to these crises. To date, we have very limited funding for these critical necessities.

A prime example of our work in this area was one of our high-profile cases, which was conducted with the technical assistance of the FSIS Compliance staff. Together, OIG and FSIS identified approximately 30 million pounds of potentially tainted hot dogs and sandwich meat deemed unfit for human consumption and ordered destroyed by FSIS. During December 1998, FSIS suspended the operations of the Arkansas meat processing plant responsible for the unsanitary production process that resulted in Listeria Monocytogenes bacteria infecting the hot dogs and sandwich meat. This processing plant produced approximately 600,000 pounds of hot dogs and cold cuts per week and sold these items to large food stores and the U.S. military. Our criminal investigation continues. An incident at an Iowa grocery store is another significant example of the multitude of food safety issues we deal with on a regular basis. In this case, 18 OIG criminal investigators, in cooperation with the local police department, worked round-the-clock for 4 weeks to identify the individual responsible for placing sewing needles in ground beef packages, fruit, and bakery items to be sold to the public. Due to the immediate response of OIG special agents and their subsequent investigative actions, one individual was indicted on a Federal criminal charge of tampering with food products. Fortunately, no injuries are known to have resulted from these criminal acts. An April 2000 trial date has been set.

As a result of another joint criminal investigation by OIG and the Internal Revenue Service, two owners, the vice president, plant manager, and four salesmen for a large meat company in Philadelphia, Pennsylvania, were indicted for skimming $2.7 million from the company cash register and concealing this income on their tax returns. The owners and plant manager were also indicted for misbranding cheaper cuts of beef and pork and selling this meat as expensive cuts. The two owners pled guilty to all 52 counts brought against them. The plant manager pled guilty to selling misbranded meat and filing false income tax returns. At sentencing, the two owners were ordered to pay a total of $1.5 million in restitution and fined $724,000. In addition, one owner was sentenced to serve 60 days' imprisonment, the other was sentenced to 1 year of home confinement, and each received 5 years' probation.

Ongoing Food Safety Review

Another area that is critical to increasing food safety and ensuring that consumers receive safe and wholesome meat and poultry products is successful implementation of the Hazard Analysis and Critical Control Point (HACCP) and pathogen reduction programs. We developed a "Food Safety Initiative" to review FSIS' food safety mission across a broad spectrum of meat and poultry inspection operations. This initiative, which is now underway, includes a review of meat and poultry establishments' sanitation and HACCP implementation, including efforts to test for pathogens and reduce their presence. Because a key to pathogen reduction is FSIS' laboratory operations, our review is assessing FSIS' quality control system over those laboratory operations, product sample integrity, and laboratory testing operations.

Our review also focuses on the import of meat and poultry products into the United States from foreign countries. In order for a country to ship meat or poultry products into the United States, the country must demonstrate that its inspection system is equivalent to the U.S. system. When the review of the FSIS equivalency determination is completed, our efforts will focus on FSIS' responsibility to inspect the imported product on entry to the United States, and if need be, conduct visits to selected foreign countries to assess their inspection systems. Lastly, our initiative is focusing on FSIS' Compliance Program to determine its effectiveness in preventing and detecting violations of the meat and poultry inspection laws. This includes activities related to businesses engaged in transporting, storing, and distributing products after they leave federally inspected establishments. We are in the process of finalizing our work in this area.

FSIS Oversight of State-Operated Meat and Poultry Inspection Programs Need Further Improvements

Under the State-Federal Cooperative Inspection Program, individual States are authorized to inspect meat and poultry products sold solely within their boundaries, provided that their food safety requirements are at least equal to those of the Federal Government. FSIS retains an oversight role in this effort. Twenty-six States have FSIS-approved inspection programs, covering about 2,700 slaughtering and processing plants. About 7 percent of all meat and poultry production in the United States is inspected at these plants.

FSIS took significant steps to correct problems identified in a previous OIG audit, but additional improvements are still needed. Our most recent audit, released in May 1999, included reviews in two States that represented about 24 percent of the State-inspected establishments nationwide. This audit found that FSIS needs to ensure acceptable ratings are not given to State programs with identified sanitary deficiencies or to States that do not take adequate corrective actions to address serious sanitation problems. FSIS agreed to implement our recommendations.

EMPLOYEE INTEGRITY

The investigation of criminal acts associated with employee integrity violations by USDA employees is another high priority for OIG. During fiscal year 1999, we issued 40 reports of investigation concerning allegations of criminal conduct by USDA employees. Our investigations resulted in 22 convictions of current and former employees and resulted in 68 personnel actions, including removals, suspensions, resignations, reprimands, and alternative discipline.

Our current investigation in New York City epitomizes the agency's work in the employee integrity area. Thus far, in this ongoing investigation, 9 Agricultural Marketing Service (AMS) graders have pled guilty to charges of accepting bribes for downgrading the quality of fruit and vegetables at the Hunts Point Terminal Market in the Bronx. In addition, 3 owners or employees of produce wholesalers have pled guilty to charges of paying bribes to these graders. All 12 owners and employees of other produce wholesalers have also been indicted and are waiting trial. All had been arrested by OIG special agents. During the 2½ year investigation, we uncovered a scheme by which the AMS graders accepted bribes from produce wholesalers to downgrade lots of produce. The wholesalers then used the lower grades to negotiate the price they paid the grower for the produce downward, which resulted in the growers being cheated out of the true value of their produce.

In another investigation, in West Virginia, nine individuals, including two employees of the Farm Service Agency's (FSA) Agricultural Credit Team, were convicted for defrauding the Government of approximately $2 million in FSA direct and guaranteed farm operating loan funds. The loans were obligated by FSA based on false information submitted by the applicants. The two employees of the Agricultural Credit Team assisted the loan applicants by forging signatures or manipulating fig-

ures on official FSA documents for the purpose of making the applicants qualify for loans. Eight of the nine individuals have been sentenced. All seven loan recipients were ordered to make full restitution. The two FSA employees resigned from Government service following their convictions.

In an investigation in Louisiana, five individuals pled guilty and were sentenced in Federal court for their involvement in a kickback scheme in which an FSA credit manager in Louisiana falsified loan documents, resulting in $1.8 million in false FSA farm-operating loans. The credit manager, who resigned, and two other FSA borrowers were indicted and are fugitives. In addition, a local bank vice president was placed on pretrial diversion for conspiring with the former credit manager to provide false information to the Government, which resulted in the issuance of an FSA guaranteed loan that should not have been made. The bank vice president obtained the loan for the construction of an airplane hangar. To date, the sentences have ranged from probation to 2 years 3 months of incarceration. In addition, the court has, thus far, ordered a total of over $670,000 in restitution be paid to USDA.

WORKPLACE VIOLENCE

Another extremely important area for OIG is the investigation of threats of violence against USDA employees. We have responded to numerous situations involving the use or threatened use of force against the Department's employees. For example, in Oklahoma, we investigated a shooting incident involving a farmer, a USDA Natural Resources Conservation Service employee, and a second farmer who was assisting the USDA employee. The USDA employee was present in an official capacity when the shooting occurred. The farmers involved in the situation began arguing about the destruction of several fences, and one farmer shot and killed the other. The USDA employee was held at gunpoint for 30 minutes until he was allowed to leave the scene to obtain help for the farmer who had been shot. The farmer who killed the individual was indicted by a Federal grand jury for murder. He recently appeared in District Court for a detention hearing. He was denied bond and ordered to remain in jail until his trial date which is scheduled for March 6, 2000.

In another investigation, in North Dakota, a dog kennel owner pled guilty to a felony count of threatening to assault an APHIS Animal Care inspector in an attempt to prevent the inspector from performing the required inspections at the kennel. During the OIG criminal investigation of this matter, the subject admitted that he had threatened to kill the inspector, and then proceeded to make a similar threat if the APHIS inspector attempted to perform his inspection duties in the future. The kennel owner was sentenced to 12 months' probation.

INFORMATION RESOURCES MANAGEMENT

Computer security

We have also conducted numerous reviews of the vulnerability of agencies' computer systems to unauthorized access. Using advanced techniques known to the hacker community our audits disclosed over 600 security vulnerabilities. For example, sensitive data such as passwords could be identified which would enable hackers to penetrate the Department's systems. With the continued expansion of Internet use and public access to departmental systems, security risks will continue to increase. The potential harm of improper entry to the Department's computer systems is extraordinary given the degree of sensitive data processed and the extent of program payments made through these systems. Alteration of data on quantity and price compiled by the National Agricultural Statistics Service could drastically impact world commodity markets. Penetration of Rural Development's $56 billion loan portfolio could significantly reduce the safeguarding of those assets. Finally, data that FSIS depends upon to ensure a safe and healthy meat and poultry supply could be compromised. Although we have been successful in our audit efforts in this area, much work remains, and our ability to address it has been limited due to staffing and resource constraints.

The Department achieves "year 2000" compliance

Year 2000 testing was essential to provide reasonable assurance that new or modified systems processed dates correctly and would not jeopardize an agency's ability to perform core business operations after the millennium change. Throughout fiscal year 1999, we continued to review and report on the Department's Year 2000 compliance or necessary remedies. Our reviews were essential to provide the public with assurance that the Department would continue to operate and provide needed benefits to program participants.

The Department overcame the Y2K threat without significant interruption. OIG played a major role in this achievement.

Farm Service Agency (FSA)

Monitoring the Implementation of the Crop Loss Disaster Assistance Program (CLDAP)

In 1998, Congress appropriated $2.4 billion for distribution to eligible farmers under the 1999 CLDAP. This program provided emergency assistance to over 270,000 farmers, many of whom suffered multiyear losses from drought or floods. The value of lost production totaled around $2 billion. When the bill passed, we began working with FSA and the Risk Management Agency (RMA) as they began to implement this massive farm program, to ensure that all eligible farmers received this Federal farm assistance timely. We provided input on program controls to FSA and RMA as they drafted program regulations, and, in doing so, were able to proactively review and provide comments on the agencies' implementing regulations. This cooperative effort helped to preclude many of the problems we had noted in prior ad hoc disaster programs. We had staff at the FSA field offices shortly after CLDAP was implemented, checking on the effectiveness of FSA's and RMA's outreach program to ensure all eligible farmers were notified of this program and to determine if there were any backlogs or other problems in the timely processing of applications from all eligible farmers. We worked with the agencies to alert them to potential problems in getting this massive assistance to all farmers. We were also alert to potential abuses in the program through ineligible program overpayments submitted by individuals. As a result of our work with FSA and RMA, they were able to revise the program procedures and on a timely basis, which helped to preclude improper CLDAP payments.

On the investigative side, historically, one of our primary responsibilities has been the investigation of criminal violations of the various farm support programs administered by USDA. For example, as a result of a criminal investigation in Georgia, three Mitchell County farmers have each pled guilty to one count of conspiracy to launder money. These 3 individuals were believed to be the masterminds in a disaster fraud scheme that netted them and 12 of their relatives and friends approximately $1.6 million in unentitled disaster payments. The defendants filed fraudulent claims to receive FSA disaster payments for themselves and the others and submitted fictitious seed invoices to support the fraudulent claims. Each farmer was sentenced to serve 1 year in Federal prison for involvement in this scheme.

In another investigative case in this area, two Idaho warehouse operators, a husband and wife, were ordered to pay restitution of $166,000 to the Commodity Credit Corporation and local farmers after they pled guilty to Federal charges related to the theft of grain that was being stored at their State-licensed grain warehouse. Producers in Idaho and Oregon lost more than $1.5 million as a result of the theft. The wife was sentenced to serve 6 months in Federal prison to be followed by 4 months of home detention and 3 years of supervised release. Her husband was placed on probation for 4 years. As part of their plea agreement, they also agreed not to contest debarment action by USDA. This investigation was a cooperative effort with the warehouse examiners from the FSA Kansas City Commodity Office; the Oregon State Police; the Canyon County, Idaho, Sheriff's Department; the FBI; and the IRS's Criminal Investigation Division.

Risk Management Agency (RMA)

Reinsured companies were not properly servicing catastrophic (CAT) risk protection policies

The CAT Program is part of the safety net for farmers. It provides basic coverage to all producers at a minimal cost and to limited-resource farmers at no cost. In 1996–1997, a decision was made to transfer the delivery of CAT policies from FSA to the reinsured companies. We evaluated the transfer and found a number of servicing problems, such as farmers not receiving adequate local agent servicing. Frequently, these producers were not contacted by insurance agents, and the needs of the limited-resource farmers were not being addressed.

In our recent followup review, we evaluated how effectively the delivery of this safety net program had been implemented by the reinsured companies. We found that the number of limited-resource farmers with CAT policies declined by about 78 percent between 1997 and 1998, during the time the reinsured companies assumed sole delivery of the program. RMA acknowledged there is a problem in the CAT Program as currently authorized. However, RMA believes that the significant decline in participation by limited-resource farmers stems from the elimination of the legal requirement that farmers purchase crop insurance in order to receive other Federal farm assistance and from the farmers' perception as documented in RMA's re-

views—that the CAT Program, as currently devised, does not provide an adequate safety net. Without improvements in the CAT Program, we believe that producer participation will likely continue to decline and that the effectiveness of the program as part of the safety net against catastrophic losses for farmers, especially small and socially disadvantaged farmers, will diminish further.

Foreign Agricultural Service (FAS)

Monitoring of FAS' Food Aid Assistance Agreements With the Russian Government

For the past several years, OIG has evaluated various aspects of the Department's food aid assistance to the Independent States of the Former Soviet Union. In response to our recommendations, the Department took actions to strengthen future programs' controls over accountability for the commodities and monetary proceeds and oversight of cooperating sponsors. We believe these actions have improved the Department's current food aid assistance.

In December 1998, the Governments of the United States and Russia signed two food aid agreements that would provide over 3 million metric tons of wheat and various other commodities to the Russian Government. Shortly thereafter, we began to monitor FAS' efforts to implement procedures to minimize potential misuse and improper losses of commodities. The estimated total costs for all the agreements, including transportation costs, are about $1 billion. The commodities alone are estimated to have cost $746 million, and their monetary proceeds in Russia are estimated at over $403 million.

In February 1999, we recommended specific actions to strengthen FAS' monitoring plan, including the need to increase the size and effectiveness of its monitoring staff detailed to Russia, and to verify the financial integrity of any Russian financial institutions involved with monetary proceeds. In May 1999, we participated on a U.S. Government Interagency Team to Russia to observe the implementation of the agreements. We documented our observations in a memorandum to FAS in August 1999, suggesting that it needed to quickly finalize the financial guarantees for payment of the commodities and to increase coordination and communication among all parties. In that memorandum and in our testimony before the U.S. House of Representatives, Committee on Agriculture, in October 1999, we stated that even though we could not provide complete assurance that the controls are fully in place and working, we believed that FAS had made significant efforts to establish controls and strengthen monitoring efforts.

FOOD, NUTRITION, AND CONSUMER SERVICES

Food and Nutrition Service (FNS)

Operation Talon

Previously, I informed you we had initiated a new law enforcement initiative, code named "Operation Talon." This initiative provides for the exchange of information between law enforcement and State social services agencies. Specifically, law enforcement fugitive records are matched with social service agencies' food stamp recipient records, and the information is used by OIG and State and local law enforcement officers to locate and apprehend dangerous and violent fugitive felons who may also be illegally receiving food stamp benefits.

Overall, Operation Talon has been the most successful investigative initiative we have yet undertaken. To date, this initiative has resulted in the arrest of approximately 5,600 fugitive felons. This has included 33 wanted for murder or attempted murder; 24 for child molestation; 14 for rape or attempted rape; 9 for kidnapping; and 1,695 for assault, robbery, and drug offenses. Also, a number of States are removing arrested fugitives from their food stamp rolls, which will result in savings to the Food Stamp Program and allow food stamp benefits to continue to go to the needy who are the intended recipients and entitled to this benefit.

Operation Talon is an ongoing initiative, and we are planning future arrest operations in many parts of the country. During the next phase of Operation Talon, we will initiate data matches between State social service agencies' records and Federal fugitive information provided by the U.S. Marshals Service. Following these matches, our agents and the U.S. Marshals Service will conduct fugitive apprehension operations. These Federal arrest operations will take place concurrent with OIG, State, and local law enforcement agency operations targeting non-Federal fugitive felons.

Food Stamp Program (FSP)—Electronic Benefits Transfer (EBT)

In fiscal year 1999, just over $19 billion in FSP benefits was issued with about 70 percent issued via EBT. This now involves 34 statewide systems and the District

of Columbia. It is critical that we provide audit coverage to ensure not only that the systems operate as designed, but also that only eligible persons receive benefits in the proper amounts. We will need to provide periodic assurances that EBT is working and that interState operability is functioning as it is expanded.

In fiscal year 1999, we completed EBT system work in seven States. The EBT systems were successfully implemented in all seven States; however, controls need to be strengthened in some areas. Six States need to improve controls over access to their EBT systems. Two States need to establish procedures to reconcile program authorizations to those received by the EBT processor and the system operated by the Federal Reserve. In another State, controls were not in place to correct an erroneous benefit file that had been transmitted to the contractor. This resulted in a system error, causing an estimated $730,000 in erroneous FSP benefits to be issued to about 10,000 individuals. Even with these problems, however, we believe EBT has been successful it gets stamps off the street, thereby reducing the opportunities for food stamp trafficking. Our reviews of EBT systems will continue as States endeavor to implement EBT to meet the deadline of October 2002 mandated by the Welfare Reform Act.

We also continue to devote significant investigative resources to combating fraud in FSP. Ever since this important program began distributing food stamps to needy Americans, unscrupulous people have been willing to devise methods to unlawfully benefit from it. As the result of three OIG criminal investigations in Cleveland, Ohio, that initially seemed unrelated, a local grocer pled guilty to laundering $8.6 million in connection with food stamp trafficking. The investigation showed that, from June 1993 through March 1998, the grocer organized the illegal redemption of food stamps for himself and other Cleveland area grocers. The grocer was sentenced in Federal court to 12 years' imprisonment. This individual also had two prior convictions for food stamp trafficking as a result of OIG investigations conducted in 1989 and 1994. The other two store owners involved in the conspiracy, who cooperated with the prosecution, were sentenced to 2½ years and 18 months, respectively. All involved grocers were permanently disqualified from FSP. This investigation was conducted by the Cleveland Food Stamp Task Force, which is composed of OIG, the Secret Service, the FBI, the IRS Criminal Investigation Division, the U.S. Customs Service, the Cleveland Police Department, and the Ohio Department of Public Safety.

In another 2-year criminal investigation by OIG, the Texas Department of Human Services' OIG, the IRS, and the Secret Service, six family members in Houston, Texas, were convicted for food stamp fraud, money laundering, and conspiracy, and criminal forfeiture actions were imposed. The subjects illegally accepted and redeemed in excess of $2 million in food stamp benefits via the EBT system. The six subjects received sentences that ranged from 27 months' imprisonment to 97 months' imprisonment, and $2 million was ordered in restitution.

Child and Adult Care Food Program (CACFP)

Last year I testified that we would continue with Operation "Kiddie Care" our Presidential Initiative reviewing CACFP as long as we find evidence of abuses in the program. In fiscal year 2000, estimated outlays for this program are $1.8 billion; a program we judge to be at risk because its current control structure is flawed and places the primary controls in the hands of sponsors. Unless the program delivery system is overhauled, the kinds of abuses we have identified will continue, with the result being food literally being taken out of the mouths of hungry children to the benefit of greedy sponsoring organizations. We have continued our "sweeps" to identify, remove, and prosecute unscrupulous program sponsors and recover ineligible payments.

Since last year, the cases of serious deficiencies and criminal activities have continued to mount. Currently, we have 38 open CACFP investigations, which are part of our ongoing efforts to detect fraud committed by CACFP sponsors nationwide.

Our efforts have been very successful. For example, in Michigan, a former City of Detroit School Board member who owned and operated 16 day care centers, as well as an assistant, were indicted by a Federal grand jury for defrauding USDA of an estimated $16 million. Our investigation showed that these individuals inflated the number of meals fed to children and falsified supporting documentation. A food vendor admitted supplying false invoices to inflate the food costs of the day care centers to substantiate the false meals reported to USDA. A Federal District Court jury found the owner of the day care centers guilty of conspiracy to commit mail fraud and Government program fraud, obtaining funds of the Department of Agriculture by fraud, mail fraud, embezzlement of public funds, conspiracy to launder money, and money laundering. This individual was sentenced to 108 months in prison, followed by 3 years' supervised release, and was ordered to pay over $13 mil-

lion in restitution and a $10 million fine. Her assistant recently pled guilty to conspiracy to commit mail fraud and Government program fraud. Sentencing is pending.

Our audit reviews of CACFP, as of December 1999, have identified 40 sponsors whose program deficiencies are so serious that they should be terminated from program participation unless the shortcomings are promptly addressed. These sponsors have been receiving about $78.6 million in CACFP funds annually. Twenty-two sponsors terminated from the program were receiving $45.4 million annually. Fifty-seven individuals have been charged with crimes, and 38 have pled guilty or been convicted thus far.

The focus of our Operation is now on improving program delivery and oversight. After an interim report on Operation "Kiddie Care" in April 1998, we issued our audit report in August 1999, urging needed regulatory and legislative changes to CACFP.

We believe our findings demonstrate a need for dramatic changes in CACFP. We made 23 recommendations to eliminate the structural program flaws, strengthen internal controls, and clarify CACFP requirements. We also recommended that FNS study alternative methods of delivering a meal program to children and adults in day care, specifically one that addresses the problems with private, nonprofit sponsoring organizations. FNS is in the process of preparing new regulations and requesting comments from stakeholders on basic structural changes in how payments are made to sponsors. Until changes are implemented, program abuses assuredly will continue. Returning integrity to this important feeding program and protecting the resources of the American taxpayer are high priorities for OIG, as well as FNS.

Special Supplemental Food Program for Women, Infants, and Children (WIC)

One of the primary purposes of WIC is to provide funds to families with small children to allow them to purchase certain nutritious food items. In an effort to curb fraud in WIC, we are continuing our investigative activities. For example, in a joint criminal investigation by OIG and the Georgia Department of Human Resources', Office of Fraud and Abuse, a Georgia Department of Health clerk responsible for administering WIC pled guilty to creating $47,945 in fraudulent WIC vouchers and converting them for her own use. The investigation disclosed that the clerk created 77 fictitious infants, including 21 sets of twins, in a scheme to defraud WIC from October 1994 to August 1996. The clerk issued 1,073 fraudulent WIC vouchers and redeemed them for infant formula, which she resold to small retail grocery stores in the Atlanta area. While the investigation was in progress, the clerk resigned from her position. She pled guilty and was sentenced to 1 year of incarceration, followed by 3 years of supervised release, and ordered to pay $47,945 in restitution.

RURAL DEVELOPMENT

Rural Housing Service (RHS)

Multifamily Housing Enforcement Program

RHS programs are intended to help finance new or improved housing for more than 70,000 moderate or low-income families. When program funds are diverted, tenants (including many elderly and disabled people) do not receive decent, safe, and sanitary housing as intended by the program. OIG and RHS recently combined forces to develop a team approach for review of borrowers and management agents at high risk of defrauding or abusing the multifamily rural housing program. Our report, issued in March 1999, described a high-risk profile which we used to identify over $4.2 million in misused funds, as well as health and safety hazards posing an immediate danger to the tenants.

Historically, OIG has responded vigorously when indications of fraud and abuse are identified. However, as our resources are stretched, almost to the breaking point, we are frequently unable to respond to requests for audit assistance. As a result, some who abuse the RRH program can continue to do so with impunity at least until additional staffing and resources become available.

We have worked closely with RHS to develop proposed legislation to improve the integrity of the multifamily housing program. The draft bill would authorize a broad range of criminal and civil authorities which could be brought to bear against persons or entities who misuse RHS housing programs. Specifically, the proposed legislation would (1) establish civil sanctions for equity skimming, (2) establish civil monetary penalties for persons or entities who violate agreements and contracts, (3) authorize the Secretary to withhold the renewal or extension of loan or assistance agreements and request judicial intervention to enforce compliance with an administrative decision, (4) provide sanctions for money laundering and provide civil fines for obstruction of Federal audits and, (5) authorize the Secretary to impose civil pen-

alties when project accounting records are found to be in unsuitable condition for audit. These provisions will strengthen our ability to audit and prosecute cases of program fraud and abuse, significantly improve program controls, and facilitate the effective administration of rural housing programs.

Rural Utilities Service (RUS)

Telephone Loan Program Policies and Procedures

RUS continues to make and service loans to financially strong borrowers who likely could obtain financing from other sources. Of $4.8 billion in loans to 815 direct and guaranteed RUS telephone borrowers, we determined that 434, or 53 percent of the borrowers, with loans totaling $1.87 billion had sufficient financial strength to repay their loans or could obtain or be graduated to nongovernmental lending sources. This totaled 39 percent of the loans for the 17-year period, 1981 through 1997, which we reviewed.

By law, RUS is required to assist borrowers to achieve financial strength to enable them to satisfy their credit needs without its assistance. However, RUS' loan eligibility criteria are based on meeting minimum financial standards, with no consideration given to whether the borrower has a financial need. Also, RUS' annual budget is based on anticipated loan requests from all applicants regardless of financial condition. As a result, RUS makes loans to financially healthy telephone companies. Also, we reported that RUS has not established procedures and requirements for financially strong borrowers to seek credit from other sources, nor has it established a loan graduation program for borrowers who no longer need Government assistance.

We recommended that RUS work with the Congress to clarify its policy for the telephone loan program regarding loan graduation and require financially strong borrowers to obtain credit from nongovernmental sources. If Congress determines that RUS should require financially strong borrowers to use other sources of credit, we recommend that RUS establish a graduation program for assisting the 53 percent of its telephone borrowers who are financially strong. We point out, though, that RUS officials disagree that a graduation program is needed. Instead, RUS believes that it is carrying out its mission. We raise the question as to whether or not it makes sense to loan Government funds, limited in the first place, to borrowers who have the wherewithal to obtain credit in the private sector.

NATURAL RESOURCES AND ENVIRONMENT

Forest Service (FS)

While FS' operations are not funded through this Committee, they are a major program operation within USDA. As a result, OIG invests a significant amount of audit and investigative resources in the agency's activities.

We recently evaluated FS' administrative controls over the preparation of environmental documents and the implementation of environmental safeguards for timber sale activities. Our review disclosed that improvements were needed in all aspects of this program. We found that the lack of adequate administrative controls hurt not only the environment, but also the Timber Sale Program and timber purchasers. During our evaluation, FS took immediate action on several key recommendations that will improve the overall effectiveness of the Timber Sale Program. These actions included halting several timber sales in the Southern Region after we advised the region that surveys for threatened, endangered, and sensitive species had not been performed. Also, another region's FS personnel revised the boundaries of a timber harvest after we identified a heritage resource site that was not adequately protected.

We have also looked at a number of FS land exchanges. For example, in the Thunderbird Lodge land exchange, in Lake Tahoe, Nevada, FS obtained a $50 million, 140-acre lakefront estate. During our review, we identified a number of issues that could have resulted in significant liabilities to FS if not resolved before completion of the transaction. For instance, we found that provisions for maintaining the historically significant structures were not adequate. As a result, FS could have been liable for up to $3 million in maintenance costs for the estate over the duration of the agreement. Prompted by our discussion with FS officials, the terms and conditions of the transaction were changed to ensure FS would not be liable for future maintenance of the structure. While we were able to obtain prompt action in this instance, we are aware of other land exchanges where similar questions could be raised that go unaudited due to the lack of resources.

ACCOUNTING AND FINANCIAL MANAGEMENT

Financial Statement Audits

As required by law, we performed audits of the Department's fiscal year 1998 financial statements. These audits provide Congress and the public with information and insight regarding management's stewardship over Federal assets and its overall fiscal performance. We issued unqualified, or "clean," opinions on the financial statements of the Federal Crop Insurance Corporation and FNS. The Rural Development mission area, including the Rural Telephone Bank, received a qualified opinion because we were unable to assess the reasonableness of its credit program receivables or its estimated losses on loan guarantees.

We issued a disclaimer of opinion on FS and the USDA consolidated statements. A disclaimer of opinion means that the books and records of the entity were so poorly maintained we could not complete the required audit analyses. FS received a disclaimer due to significant financial system weaknesses, which include the lack of an integrated general ledger and supporting subsidiary records. Furthermore, FS could not account for its vast property, plant, and equipment holdings. The USDA consolidated statements received a disclaimer of opinion because the Department could not provide assurance that its financial systems provide information that is relevant, timely, consistently reported, and in conformance with accounting principles. In addition to financial system problems, numerous internal control weaknesses materially degrade the Department's ability to report accurate and reliable financial information.

Implementation of the Foundation Financial Information System (FFIS) Needs Improvement

Many of the Department's financial accounting problems stem from extraordinary weaknesses associated with the Central Accounting System (CAS) used by the National Finance Center (NFC). These weaknesses have significantly affected the ability of Department officials to prepare accurate financial statements and cost data necessary to manage departmental programs. To correct these problems, the Department is implementing FFIS to replace CAS at NFC. Our monitoring and review of these implementation efforts continue to find substantial weaknesses, however, and unless corrective actions are taken, the full and effective implementation of FFIS will not be achieved.

USDA Investments at Risk Due to Corporation's Mismanagement

The Alternative Agricultural Research and Commercialization Corporation (AARCC) was established to find innovative uses for agricultural products. We performed an audit to assess the agency's management of its mission program. The audit concluded that AARCC had only minimal assurance that taxpayers' monies had been properly expended and that its $27 million investment portfolio had been adequately protected from loss.

The audit found that the process used by AARCC to select firms for investment was not adequate because the applicants had not displayed any reasonable basis for prospective success. AARCC's monitoring of the investees' operations to ensure compliance with its agreements was virtually nonexistent. Of particular concern were various transgressions by companies that AARCC took no action to preclude or rectify. In one case, AARCC invested $450,000 in a firm for the development, manufacture, and marketing of headbands made from starch absorbents. In return, AARCC was to receive royalties on the sales of the product and an equity interest in the firm. After receiving the funding and procuring the specialized equipment to manufacture the headbands, the firm realized that no market existed for the product. However, the firm discovered there was substantial demand about $80,000 a month for incontinence pads which could be made with the same equipment. The firm asserted AARCC had no claim to the revenues from the manufacture of the pads because the product had changed. The agreement, however, prohibited the use of the equipment for alternative production. AARCC subsequently became aware of the impropriety and unsuccessfully attempted to renegotiate the terms. Congress did not provide any funding for AARCC for fiscal year 2000. However, AARCC's Board of Directors needs to decide how it will manage and protect its existing $27 million portfolio to ensure that the Government's interests are protected.

CONCLUSION

This concludes my statement, Mr. Chairman. As you can see, the work of OIG is far-reaching and expansive. I appreciate the opportunity to appear before you today and share with you some of the work we do. I hope my comments have been

helpful to you and the Committee. I will be pleased to respond to any questions you may have at this time.

DEPARTMENT OF JUSTICE PARTICIPATING AGENCY FORFEITURE FUNDING

Categories	Description	Fiscal year—		Total
		1998	1999	
Total expenditures:				
Third Party Interests	Payment of valid liens and secured mortgages	$5,877	.....	$5,877
ADP Equipment	Automated data processing equipment	4,734	$13,278	18,012
Case Related Expenses	Travel and subsistence expenses, translation services, storage.	40,635	92,078	132,714
Special Contract Services	Contract personnel (Data Analyst, Law Clerk)	646	131,555	132,200
Training and Printing	Training, travel, and printing expenses	37,726	224,111	261,838
Contracts to Identify Assets.	Information services for tracing forfeitable assets.	.....	5,393	5,393
Joint Law Enforcement Task Forces.	Overtime and other operational costs for state and local agencies (including $75,000 for Operation Talon).	7,367	239,692	247,059
Awards for Information	Payment for specific information on criminal activity.	.....	19,802	19,802
Purchase of Evidence	Purchase of evidence for money laundering and other forfeiture related violations.	.....	848	848
Equipping of Conveyances	Equipping agency owned or leased vehicles	185,380	3,586	188,966
Totals		282,365	730,344	1,012,709

Fiscal year 2000: OIG has received an allocation of $940,000 for fiscal year 2000 current year use.

RURAL BUSINESS-COOPERATIVE SERVICE

PREPARED STATEMENT OF DAYTON J. WATKINS, ADMINISTRATOR

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you today to present the Administration's fiscal year 2001 Budget for the Rural Business-Cooperative Service (RBS).

Mr. Chairman, the key to improving the economic conditions of rural areas, and particularly those areas experiencing decades of poverty and stagnant economies, is the creation of more business opportunities and more jobs, and specifically jobs that pay wages that are sufficient to lift families out of poverty. Presently, service sector jobs are the leading employer in many rural areas, and as important as those jobs are to the local economy, they still do not pay a wage sufficient to support a family of four.

The creation of jobs is best accomplished by the private sector, but as we all know, there are a number of rural areas in which private sector capital is not readily available. The programs of the Rural Business-Cooperative Service help close the gap in opportunity for these areas, bringing them closer to sharing in the benefits of the Nation's economic growth. The $1.5 billion requested for the programs in this budget will assist in creating or saving about 105,000 jobs and provide financial assistance to more than 4,200 businesses.

BUSINESS AND INDUSTRY GUARANTEED AND DIRECT LOAN PROGRAMS

For the Business and Industry Program (B&I), the fiscal year 2001 budget includes $13 million in budget authority to support $1.25 billion in Guaranteed Loans and $50 million in Direct Loans. Since the streamlined Business and Industry Guaranteed Loan Program regulations were published in December 1996, demand for the program has increased 300 percent. With this level of funding, we estimate that these two programs will create or save about 40,000 jobs. But equally as important, under the guaranteed loan program, we are able to help the local lender provide financing and thus help build community stability.

Of the $1.25 billion requested for the guaranteed program we are again proposing to make available $250 million for financing for cooperative businesses with a particular emphasis on new value-added cooperatives as a policy objective. Priority will be given to projects involving farmer owned value-added cooperatives. In addition, this financing is available for guarantees of individual farmer's purchase of cooperatives stock in a start-up cooperative established for value-added processing of an ag-

ricultural commodity raised by the individual farmer stockholders. We expect this program to be a key tool in capital investment in rural areas and as a means of helping farmers keep more of the income generated by their product. In fiscal year 1999, $44.4 million of B&I Guaranteed funding was obligated to support cooperative business. In fiscal year 2000, $32 million of B&I Guaranteed funding has been obligated to date. In fiscal year 2001 priority will continue to be given to cooperatives businesses.

INTERMEDIARY RELENDING PROGRAM

The fiscal year 2001 budget also includes $32.8 million in budget authority to support $64.5 million in loans under the Intermediary Relending Program (IRP). The initial investment of this level of funding will create or save an estimated 14,500 jobs, but because these funds are re-loaned 3 or 4 times by the intermediary, we estimate that over 49,300 jobs will result eventually. In an effort to be of more assistance through this program, we revised the regulation in 1998 to expand the $2 million cap on loans to intermediaries to a $15 million cap to any one intermediary in annual increments of $1 million. The Presidents budget also provides that $4 million of the request for IRP shall be for Native Americans. The Administration is directing Federal lending entities to work more closely with Tribal governments and lenders to resolve some of the concerns private lenders have with trust lands and sovereignty issues.

The IRP regulation is now more user-friendly, and authorizes the Rural Development State Offices to process applications at the State level, rather than submitting applications to the National Office for processing. This change has speeded up the application process and allows State Offices to provide immediate feedback to borrowers concerning their applications. Pursuant to Rural Development's mission of prioritizing the most under served communities, we are prioritizing the neediest communities, such as those in low-income or under served areas, those with declining populations, or communities faced with economic restructuring or economic disasters. In addition, the eligible purposes for loans to businesses have been expanded. The demand for this program continues to be strong. To illustrate the benefits the IRP provides to rural America, the Southern Kentucky Economic Development Corporation (SKEDC) has loaned in excess of $1.5 million to more than ten ultimate recipients, leveraging approximately $11 million in new private investments. As a direct result of the IRP and leveraged funds, more than 200 new jobs have been created.

One ultimate recipient organization that directly benefited from the IRP funds was in Laurel, Kentucky. The Grocery Company needed to expand its transportation fleet and construct a modern new warehouse including the installation of a state-of-the-art computer tracking system for inventory control and uniform pricing. The warehouse was expanded by 37,000 square feet for a total of 237,000 square feet under one roof. Thirty new jobs were created, bringing the company's total employment to 290 persons. The total project value was $1,361,000, which included a $150,000 ultimate recipient loan from the SKEDC. The Grocery Company now serves 600 retail stores in Indiana, Ohio, West Virginia, Tennessee, and Kentucky.

RURAL BUSINESS ENTERPRISE GRANTS

For the Rural Business Enterprise Grants Program, the fiscal year 2001 budget includes almost $40.7 million. We anticipate that this level of funding will create or save over 12,700 jobs. The purpose of this program is to assist small and emerging businesses and the small amount of funds we typically invest in a project, on a dollar-for-dollar basis generates another $2.40 in private capital.

RURAL ECONOMIC DEVELOPMENT LOANS AND GRANTS

The fiscal year 2001 budget requests $15 million in Economic Development Loans and $4 million in grants. These programs represent a unique partnership since they directly involve the Rural Electric and Telecommunication borrowers in community and economic development projects. These borrowers are the intermediaries through which the funds are invested locally. Each dollar invested through these programs attracts an additional $3 in other capital. The loan program provides a zero interest loan to the cooperative, which guarantees repayment of the loan to the government. Loans are used primarily for economic development activities, while the grant funds can be used for establishing revolving loan funds and for community development projects. To support the Vice President's Reinvention of Government Plain Language Initiative, we have recently published plain language regulations as a proposed rule. When implemented, these plain language regulations will provide a more efficient and customer friendly procedure for accessibility to the programs.

RURAL BUSINESS OPPORTUNITY GRANTS

The fiscal year 2001 budget includes $8 million for Rural Business Opportunity Grants to provide much needed technical assistance and capacity building in rural areas. We have determined, through the Empowerment Zone/Enterprise Community Rural process, that the most significant non-capital need in most rural areas is the capacity to develop the economic and community development strategies necessary to attract private investment capital and Federal and state assistance. The vast majority of rural communities are served by part-time officials who do not have the time or the necessary training to compete with large communities for funding that may be available to them. The funds requested under this program will aid in providing that invaluable assistance that allows communities to take the first step in assisting themselves.

RURAL COOPERATIVE DEVELOPMENT GRANTS

For the Rural Cooperative Development Grants (RCDG), the fiscal year 2001 budget requests $6 million. This program complements our internal National and State Office technical assistance efforts by encouraging the establishment of centers for cooperative development. Demand for technical assistance through RCDG has exceeded available funding by approximately five or six times over the past few years. Ten centers were funded in fiscal year 1999 and 13 in fiscal year 1998. They provide a focus of development expertise that devotes extensive time to conducting feasibility analysis and outreach for newly developing cooperatives. RBS has demonstrated how we are able to harness a variety of resources to enhance cooperative development efforts. In 1999, the National Pork Producers Council (NPPC) asked for technical assistance to explore cooperative solutions to the concentration issues facing the pork industry and its producers. RBS aggressively worked with a NPPC Task Force to explore formation of a nationwide cooperative business structure of independent pork producers. The result of these efforts has been the incorporation of the Pork America Cooperative in January 2000. RBS will continue its technical assistance in cooperative development as the newly formed organization develops its business plan, membership base and operations.

APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS

The Appropriate Technology Transfer for Rural Areas (ATTRA) program provides technical information to producers and their advisors on best sustainable production practices. A funding increase to $2 million is requested to enhance delivery of this effective program. Direct responses to over 15,000 inquires were made in 1999, in addition to information provided through the ATTRA web site. Requests from agricultural producers, extension personnel, and others focus primarily on sustainable practices that reduce dependence on chemicals and is more environmentally friendly.

COOPERATIVE RESEARCH AGREEMENTS

The fiscal year 2001 budget requests $2 million in funding for cooperative research agreements. These agreements help assure our nation's farmers and their cooperatives have a sound basis on which to make critical economic decisions. In a time of considerable stress and structural change in U.S. Agriculture, it is essential that group action marketing endeavors be on the most solid ground possible.

BIO-BASED PRODUCTS

The President's fiscal year 2001 budget requests $1.5 million to support cooperatives involved with processing and marketing bio-based products. Of that amount, $1 million is for a pilot program for Rural Utilities Service electric borrowers to demonstrate the efficiency of bio-mass fuel generation.

NATIONAL SHEEP INDUSTRY IMPROVEMENT CENTER

The fiscal year 2001 budget requests $5 million in funding for the National Sheep Industry Improvement Center. The Center, while having significant delays in implementing their program, has now made a major grant to an intermediary revolving fund that is loaning money to the sheep and goat industry. In addition, $5 million of the National Sheep Industry Improvement Center's permanent funding has been used to assist the industry in market promotion in light of the unfair trade practices found in the International Trade Commission case against Australia and New Zealand.

COOPERATIVE CAPITALIZATION FUND

The President's fiscal year 2001 budget requests $130 million to cooperative capitalization fund that would be used to provide equity capital for new livestock and other cooperatives and help finance construction of cooperative-owned processing facilities.

RURAL EMPOWERMENT ZONES AND ENTERPRISE COMMUNITIES GRANTS

For the Rural Empowerment Zones and Enterprise Communities, the President's fiscal year 2001 budget requests $15 million to provide grants to designated rural areas including 5 Rural Empowerment Zones and 20 Rural Enterprise Communities. The purpose of this program is to target Federal, State, and local resources to low-income rural areas to demonstrate that innovative, comprehensive, and strategic alliances between private, public and nonprofit entities can work in concert to improve the economic strength of rural communities.

SALARIES AND EXPENSES

Before closing, I would like to urge the Committee to provide the requested funding for Rural Development Salaries and Expenses. We cannot manage the $4.3 billion portfolio without qualified staff. We cannot maintain qualified staff without adequate funding. In addition, our computer systems cannot keep up with the growing portfolio.

CONCLUSION

Over the past several years, RBS has been provided with increased program resources to use in meeting rural business and economic development needs. We have streamlined our programs, improved consumer focus, and developed strategic relationships to benefit all of rural America. Each year we have used all of our resources in this new business environment, but still, the need exists for additional resources to accommodate the needs of those communities not yet experiencing the positive impact of America's economic prosperity. Mr. Chairman, this concludes my formal statement on the fiscal year 2001 Budget. I would be happy to respond to any questions the Subcommittee may have regarding the Rural Business-Cooperative Service programs of the Rural Development Mission Area.

RURAL DEVELOPMENT

PREPARED STATEMENT OF JILL LONG THOMPSON, UNDER SECRETARY FOR RURAL DEVELOPMENT

Mr. Chairman, Members of the Committee, it is a pleasure to present to you the President's fiscal year 2001 Budget Request for the Rural Development Mission Area of USDA. With your permission I will summarize my statement and request that the full text of the statement be presented in the hearing record.

Before discussing the budget request for 2001, I am pleased to share with you some of the results of the funding the Committee provided Rural Development for fiscal year 1999. I am very proud of the results, and I think the Committee will be as well. With the $1.7 billion appropriated for Rural Development programs in fiscal year 1999, investments totaling $9.9 billion were made in rural people, communities and businesses. A conservative estimate of the economic impact of that investment is $18 billion. The following is a sample of the successes.

—The investment in rural businesses, housing and community infrastructure created or saved about 200,000 jobs.

—Almost 66,000 rural families that could not otherwise qualify for mortgage credit were able to buy or improve their homes; over 5,000 affordable rental units were added to the rural housing stock; and 42,357 low-income households were able to obtain decent housing at an affordable rent.

—Almost 500 community facilities projects, such as health clinics, child care facilities, schools, libraries, police stations and fire stations serving over 8 million residents were built.

—Almost 2 million rural residents were provided new or improved public water supply or waste disposal systems; 2.8 million rural residents received improved electrical service; 287 rural schools and 131 rural health care providers benefitted from the distance learning/telemedicine facilities.

—Over 200 marketing networks and cooperative partnerships were established or increasing their business outlets.

While the aggregate statistics are impressive, they do not tell the human side of the story which is substantial, but is difficult to report statistically. Actual successes are described below.

—The local job market in a small, rural community in Kentucky was improved with the reopening of a local textile plant which had been closed by a large national company. With assistance from Rural Development, the plant was refurbished with modern equipment and now employs 125 residents.

—A single mother in rural Maine, suffering from memory impairment due to an automobile accident, now has a home for herself and her 6-year-old daughter. After the accident they had been required to move several times and for a while lived in a motel.

—The 1,200 residents of a small town in Georgia will, for the first time, have local health care and child care facilities. The clinic will provide health care 7 days a week and the child care facility will be open 24 hours a day to accommodate children whose parents work at night.

—A county-wide volunteer fire department in Texas replaced their 30-year-old radio equipment with new communications technology which will allow direct communications with the county police and emergency medical services.

—Approximately 9,100 residents in the very isolated Bering Straits region of Alaska will have improved health care. Diagnosis-quality images will be transmitted to medical specialists in Anchorage from 15 villages, a clinic in tribal headquarters and two health care providers in Nome. The residents are scattered over 25,000 square miles with some having no road access.

Mr. Chairman, as you and the Committee review the fiscal year 2001 Budget request for Rural Development, please keep in mind that the reason each of these programs was authorized, in some cases decades ago, was concern that rural America was being left behind economically. Although there has been significant progress during the past three decades in addressing these needs, the poverty rate in many rural communities is still unacceptable. After showing some improvement in the 1970's, many rural areas are once again significantly lagging behind the improvement in the national economy. And more recently there has been increased concern about the future economic opportunities of rural communities due to the concentration of agricultural production and processing.

We all know that, as farming operations increase in size and processing operations vertically integrate, ties to the rural community are weakened. Larger farms can purchase their inputs, including capital, from larger and more distant sources. Larger farms also find it easier to negotiate directly with processors rather than local buyers. This often results in less income being retained in local communities and less capital available for other business needs and for diversifying the local economy to counter the effects of concentration. This situation is exacerbated by consolidation in the banking, retailing, and in health care. Consequently, there are fewer rural economic hubs than once existed. And evidence shows that the greater the distance from an economic hub, the lower the economic growth rate.

Mr. Chairman, although there have been significant successes in rural areas generated by the programs we administer, the Federal government is not, nor should it be, a substitute for the wealth generating capacity of the private sector. That is why we, in Rural Development, continue to stress that cooperatives are a good solution to some of the development needs in rural areas. Agricultural producers have the opportunity to maximize their position in negotiating prices for their commodities through marketing cooperatives. They can also increase their profits by utilizing cooperatives to process and add value to their commodities. An example is a new cooperative soybean processing plant whose farmer-owners will realize an additional forty cents per bushel. Most of the additional earnings remain in the local community. We would like to see more cooperative business operations such as this one and others that we have financed in recent years. Through market forces, member-owned cooperatives help grow local economies and rural communities.

We believe it is our responsibility to assist the private sector make these opportunities a reality. This has been the focus and the message of the President's " New Markets" initiative to encourage the private sector to view poverty stricken rural and urban areas as potential market opportunities. Last fall I had the pleasure of accompanying the President to Hermitage, Arkansas, to demonstrate the success of a very small cooperative venture that includes 17 member producers. Three years ago before the cooperative was formed, these producers sold 3,400, 20 pounds cases of tomatoes worth $60,000, and fifteen of the producers were on the verge of bankruptcy. Last year the sales had increased to 570,000 cases worth $4 million. During peak season, the cooperative employs 120 people in a town with a population of less than 700.

Other examples include a very small cooperative in northern Florida that is selling its fresh vegetables and fruits to local school districts. Some of the producers have seen their incomes triple as they provide very competitively priced, nutritious and fresh produce to school children. Rural Development was a partner in this cooperative; much of the work was done by the Natural Resources Conservation Service, the Farm Service Agency, and, of course, the farmers. Another success story is a wheat farmer's cooperative in Colorado who purchased a bakery that was closing. They now process their own wheat into bakery products that are sold to a national sandwich chain and local supermarkets in the Denver area. They have already exceeded their capacity and are looking at options for expanding their operations.

In addition to the economic successes enjoyed by these operations, Mr. Chairman, is the satisfaction one sees on the faces of the producers when they realize they can be just as entrepreneurial as some of the "dot com" companies. Success breeds success. Seeing people realize they can be in charge of determining their future is one of the most rewarding parts of this job. A few years ago I told you of the joy I saw in people's faces after they had completed building their own homes through our mutual and self help housing programs—believe me, that joy is equaled when I see agricultural producers realize they can take greater control and generate greater profits in the food chain. They no longer feel captive of the markets.

I urge each Member of the Committee to visit some of these operations and enjoy that experience for themselves. You have appropriated the funds that made it possible.

BUDGET REQUEST

Mr. Chairman, the President's commitment to improving the economies of rural America continues and that is reflected in the budget request for fiscal year 2001. The Rural Development budget request for programs is $12.4 billion, $1.3 billion higher than the level enacted for fiscal year 2000. This level requires only about $300 million in additional budget authority, not counting what is requested in the Farm Safety Net proposals, which I will discuss later. But, Mr. Chairman, if the Rural Development Mission is to deliver programs of this amount and carry out our fiduciary responsibilities of protecting the $80 billion loan portfolio, we must have sufficient administrative expenses.

ADMINISTRATIVE EXPENSES

The request for administrative expenses for fiscal year 2001 is $581 million, $48 million higher than appropriated for fiscal year 2000 and includes $20 million increase in administrative expenses to support a new guaranteed loan accounting system and other system improvements. I realize the burden this places on the Committee, but the potential risk that may occur without the appropriate level of oversight far overshadows this cost. For example, between housing loans of the Rural Housing Service and the farm credit operations of the Farm Service Administration, we are obligating about $8 billion in guaranteed loans annually, and we do not have an automated accounting system that provides the capacity to manage these funds. This is irresponsible and is not a legacy that I want to leave.

Yet, because we cannot afford to reduce staffing any further than we have, I have made the decision to reduce other administrative expenses, including investments in accounting systems, to maintain the staffing level needed to deliver the programs and do the best we can in managing the assets with which we have been entrusted. These were not good decisions, and are decisions I would prefer not to make. For example, when I became Under Secretary, the training budget for Rural Development was about $11 million. Over the past years we have reduced that budget to about $2 million in training that we classify as mandatory, i.e, training that is the minimum needed for our staff to perform at acceptable levels. The loan programs we administer are much more complex than anything found in the private sector, and we have a significant number of new employees that are coming on board. We are not providing them adequate training. We have also reduced travel from over $21 million to just over $11 million at a time when we need to travel more to adequately supervise and monitor our loan portfolio. We have made these decisions because we had to, but I have concerns about our ability to maintain our fiduciary responsibilities. Mr. Chairman, the $48 million increase requested for salaries and expenses is about 40 percent of the pay cost increases that we have had to absorb during the time that I have served in this job. Absorbing these costs is the same as a reduction as a reduction in funding..

An important part of the efforts to modernize field operations for the Natural Resources Conservation Service, the Farm Service Agency and the Rural Development agencies is the effective consolidation of three separate and largely redundant ad-

ministrative systems inot one under the proposed Support Services Bureau. This is a glaring inefficiency that needs to be eliminated. Consolidated support would be provided for information technology, financial management, travel, procurement, civil rights and human resource management. These services would be provided under the direction of an Executive Director who would report to a board of directors comprised of the heads of the agencies to be serviced. Unfortunately, language in the fiscal year 2000 Appropriations Act prevented us from implementing our plans for the Support Services Bureau. I would ask you to take a look at that language and work with us to move our operations into the modern world. By poling resources in the administrative arena, each agency will be in a better position to provide greater program support.

Mr. Chairman, before I leave the area of administrative expenses, I would also like to advise the Committee that the Office of General Counsel is critical to our success in protecting the interest of the taxpayers . We consider the Office of General Counsel to be an integral part of our team, and they are particularly helpful to us in resolving the problems we encounter in our more complex lending programs, such as like the multi-family housing and the electric loan programs. They have my support and I believe they deserve the support of the Committee.

Mr. Chairman, I would also like to take just a moment to discuss consolidation of some of the administrative systems that serve the Natural Resources Conservation Service, the Farm Service Agency, and Rural Development. We should not get bogged down in terms such as "Support Services Bureau" that, in my opinion, may have confused the objective. Mr. Chairman, Members of the Committee, the Natural Resources Conservation Service, Farm Service Agency and Rural Development are, for the most part, located in the same offices, and we are going to share one information system. Does it not, therefore, make good sense that we have one personnel system, one travel administration system, and. one procurement system that serves all three?

I would ask you to take another look at the language included in the fiscal year 2000 Appropriations Act that prevents us from implementing the plans for administrative consolidation; work with us to improve our administrative operations and place us in a better position to enhance delivery of the programs and services that each of us are entrusted, by Congress, to provide to the residents of rural areas.

PROGRAM BUDGET REQUEST

Mr. Chairman, I shall now discuss the requests for the various programs administered by Rural Development.

RURAL HOUSING SERVICE

I was honored to attend the 50th anniversary of the single family housing loan program in December of last year in Georgia at the home built with the first loan issued under this program. The wife of the family with the first loan and the widower of the Farmers Home Administration employee making the first loan were also in attendance. While the ownership has changed, the home is still in immaculate condition. The story of how much this home, and hundreds of thousands like it, have meant to rural families, and rural communities, is something that should be told again and again. This country can be very proud of this home ownership program.

The budget request for the programs administered by the Rural Housing Service totals $6.7 billion, almost $900 million more than the level appropriated for fiscal year 2000, requiring almost $200 million more in budget authority. This increase reflects the Administration's commitment to improving housing conditions in rural areas and, in particular, improving homeownership opportunities, a key ingredient in building stable communities and economies. The request for single family housing, direct and guaranteed loans totals $5.0 billion and will support about 64,000 housing units and, in the process, provide nearly 44,000 jobs, primarily in the construction trades.

We are proposing a modest increase in the multi-family housing program which provides housing for some of our most vulnerable citizens. A significant portion of these units are occupied by female heads of household, generally elderly females or single mothers, with annual incomes of about $7,300. The budget request will provide for the construction of 1,400 units and the rehabilitation of over 4,000 existing units. Mr. Chairman, while there is a significant need for new multi-family housing throughout rural areas, we also have a significant problem in meeting the need for rehabilitation of an aging portfolio, and in maintaining the availability of these units for very low income tenants. The request for the multi-family housing guaranteed loan program will provide for the construction of about 6,400 units. The request for rental assistance is $680 million, $40 million higher than the level available for

2000. Most of the request is needed to renew contracts for 42,800 units. Without rental assistance, it would be impossible to provide affordable rental housing for very low income families, most of whom have no other housing alternative.

As I have told the Committee on many occasions, one of the great joys of this job is to see the satisfaction and absolute joy on the faces of families and their children when they have completed building their own homes with the help of new neighbors. The mutual and self help program is community building at the most basic level, neighbor helping neighbor in the construction of new homes. The Administration is requesting a significant increase in this grant program, $12 million which is used to provide the technical expertise and supervision during construction. Families participating in the program receive loans through the single family direct loan program.

We are also requesting modest increases in the farm labor housing loans and grants and we are proposing $5 million be appropriated for emergency assistance for migrant and seasonal farm workers. This program, although authorized in the 1990 Farm Bill, was not funded until last year's emergency supplemental appropriations act. The contribution of migrant and seasonal farmworkers to feeding our nation is often overlooked. The $20 million made available for the first time last year is equally important and a very small cost to pay, compared to the value these families contribute to this economy. The assistance was used to pay back rent and utilities, school fees, and a number of other obligations that could not be met, due to natural disasters destroying the crops these individuals and families would have harvested.

Mr. Chairman, I would also like to thank the Committee for having the foresight to provide $6 million in fiscal year 2000 for the Rural Community Development Initiative. These funds will be used by a wide variety of organizations to assist us in developing the capacity of rural communities to become more self-reliant. It is through these efforts that we endeavor to teach community leaders that dependence on the Federal government is not the answer to long-term economic problems. The communities, themselves, must develop the capacity to build local economies. It is also through efforts like this that we engage other organizations with resources to work with us in building homes for low income families. We are very proud of the number of funding partnerships we have established in the past couple of years. Through these efforts we are stretching the capacity of the tax dollars with which we are entrusted.

Mr. Chairman, we are also requesting a significant increase in the low income housing repair loan and grant program, This program provides the very basic improvements in owner occupied single family homes to make the house safe and livable. However, the most important contribution of the program may be that it allows elderly men and women to live the remainder of their lives in their own homes with a degree of dignity. It is also one of the most utilized programs we have in most disaster situations. It was used extensively in North Carolina following Hurricane Floyd.

The request for community facilities totals $484 million, $24 million of which is for grants, including $6 million to continue the Rural Community Development Initiative which is being implemented this year, and $5 million for the hazardous weather early warning alert system, the need for which has been recently demonstrated again in rural Georgia. Increasing the community facilities grant program is one of our highest needs. We can accomplish more with this program than almost any program in our portfolio. As Members of the Committee realize, this program finances rural health facilities, child care facilities, fire and safety facilities, jails, education facilities, and almost any other type of essential community needed in rural America. However, it is very difficult to reach many of the more impoverished communities that are unable to repay loans. Additional grant funds are needed to offset the cost of these loans.

RURAL BUSINESS-COOPERATIVE SERVICES

Mr. Chairman, the key to creating economic opportunity in rural areas is the development of new businesses and employment opportunities. This is primarily the role of the private sector. However, due to concentration and integration of the agriculture industry, and more recently the consolidation of the banking industry, local lending institutions frequently do not have the capacity or the capital needed to sustain local businesses and generate new growth. Further, something that should not be overlooked is that frequently, the Rural Business Service is only a partner, and sometimes a minor partner, in the loans made through these programs. We expend a lot of effort in every program, including housing and utilities, to leverage other monies into the projects we finance.

The programs, particularly the Business and Industry loan guarantee program, were enacted to supplement the efforts of local lending institutions in providing that capital. The program requested for the Rural Business-Cooperative Service is $1.5 billion with the majority of the request for the Business and Industry Loan Guarantee program, $1.2 billion, compared to $869 million in fiscal year 2000. We will also again establish a policy objective of $200 million of the total for the development or expansion of cooperative businesses. As you know, we have established similar priorities in other years, and while we have not yet achieved our objectives, the level used by cooperatives is increasing each year. For example, through the first quarter of fiscal year 2000, we almost matched the level used by cooperatives in fiscal year 1999.

I am particularly pleased that this budget request includes funding for a Cooperative Equity Capital Fund which will be used to assist producer's of livestock and other cooperatives to counter the effects of market concentration. This request is included in the Farm Safety Net proposal as a mandatory expenditure of the Commodity Credit Corporation. I have mentioned that the lack of capital is a major problem that rural areas face in economic growth. While not everyone agrees on the degree to which capital is lacking in rural areas, there is agreement on the lack of equity capital, and this need is greatest when crop and livestock prices are depressed. More and more producers are beginning to realize that the only means of gaining a greater share of the food dollar is to own the processing or manufacturing facilities. We intend to use this program to meet some of that demand and we will be submitting legislation for the consideration of Congress outlining how we intend to use the program.

Complementing this request is an increase in cooperative development grants which will be used to assist in the development of new cooperatives. These grants are made to cooperative development centers which augment our internal staff resources in providing technical, financial, and management assistance in the creation and maturation of new cooperative ventures. As provided in last year's Appropriations Act, a portion of these funds will be devoted to assistance to small and minority producers. It is these producers that more frequently, and more quickly, feel the effects of reductions in prices. The same producers can benefit more through the use of cooperatives to market or process their commodities. The Administration will also again be submitting legislation to authorize assistance to non-agriculturally related cooperatives. I believe such authority is important to the economic success of rural areas.

We are proposing that the Intermediary Relending Program be increased by almost 70 percent. The demand for this program is increasing significantly, and with part of the increase we wish to improve our ability to assist tribal governments establish revolving loan funds. We plan to do this in conjunction with the Small Business Administration and the Department of Treasury's Office of Community Development Financial Institutions. This would be a joint effort to aid tribal governments establish lending capacity, but also to aid private sector lenders in dealing with some of the obstacles they have encountered in lending to tribal organizations. The importance of these small revolving loan funds to rural communities is demonstrated not only in the successes of this program, but also in the fact that a significant portion of other grant programs are used to establish similar loan funds.

We are also proposing an $8 million level for the Rural Business Opportunity Grant program, a 100 percent increase over the level provided for fiscal year 2000. This program was authorized in the 1996 Farm Bill and funded for the first time for the current fiscal year. These funds can be used by a variety of organizations, such as the Empowerment Zones/Enterprise Communities, Rural Conservation and Development districts and others to develop economic development strategies.

The budget request also includes $3.5 million in budget authority for bio-mass demonstration projects. Specifically, $2 million will be available for firms that will use the Business and Industry loan guarantee program to develop, process, or market bio-based products; $1 million will be available for electric borrowers to demonstrate the value of generating electricity using bio-based products as the fuel, and $500,000 will be available for cooperative development grants for cooperatives that process or market bio-based products.

The National Sheep Industry Improvement Center has recently entered into an agreement with the Livestock Production Association to establish a revolving loan fund which will be used to improve the infrastructure of the sheep and goat industry. We are requesting $5 million of the remaining $30 million authorized for this program to augment that effort.

We are also requesting $15 million for the third year of the Empowerment Zones/Enterprise Communities designated in the 2nd round of this program.

RURAL UTILITIES SERVICE

The Rural Utilities Service provides financing for electric, telecommunications, and water and waste disposal services that are the backbone of economic development. Last fall we celebrated the 50th anniversary of the telecommunications program, and this year we will celebrate the 60th and 65th year of the water and waste disposal and electric programs, respectively. The successes of these programs and the benefits they have provided to rural America are unparalleled. Over $70 billion has been invested in rural America through these programs, and the economic growth they have generated has repaid the cost 100 fold. And even more remarkable is that less than one percent of the amount loaned has been lost through defaults. The capital investment generated by the program levels requested in the budget will generate about 100,000 jobs, but more important is the opportunities generated, particularly through the telecommunications programs. It has long been the policy of RUS that fiber optic cable be used for telecommunication rather than the copper wire that is found in most urban areas. However, much of the rural traffic still must be routed through other exchanges with less capacity. The "digital divide" is composed of issues such as this.

Mr. Chairman, when President Clinton announced the Digital Initiative in early February, he was criticized for constructing a political deal, and he responded that, "this is not a political deal. If I had waited for the market to solve universal telephone access, there would still be places in Arkansas where people wouldn't have a phone." Paraphrasing another comment in that regard, the bottom line of the President's proposal is a better bottom line for firms in the technology industry. The President knows how important these programs have been to rural America over the decades and he sees the opportunities they can bring in the future.

The level requested for the programs administered by the Rural Utilities Service is $4.3 billion, the same as is available for fiscal year 2000. For electric loans we are requesting $1.5 billion, requiring $26 million in budget authority. Again this year, we respectfully request that the budget authority be provided in a single amount, rather than by individual program. This additional flexibility permits us to more effectively manage demand for the four different programs.

Our request also includes $670 million for telecommunication loans, including those made by the Rural Telephone Bank, and an additional $325 million for the distance learning/telemedicine programs, which includes a significant increase for grant funds. One of the concerns that I have with the lack of opportunity in many rural areas is that unless we are able to reach the children in poverty stricken families and provide them the opportunity to expand their education, they will soon be left behind by the technology-driven economy and the rapidity with which knowledge is changing. Distance learning/telemedicine program is one of the best tools we have for ensuring that they are not left behind. We also request $102 million to finance a broadband internet access loan and grant pilot program.

The request for water and waste disposal programs is $1.6 billion which will require less budget authority than was available in fiscal year 1999, but a significant increase over fiscal year 2000. With this funding we estimate that we will build, improve, or expand 1,155 water and waste disposal systems serving 2.4 million people and create 42,000 jobs in the construction related fields. In addition, we will improve our leveraging of funds with State Revolving funds that are also used to finance water and waste disposal systems to ensure that each dollar provided by the taxpayers is used to its maximum. Our primary target is still those residents without safe, dependable water in their homes, especially those with the most serious quality or quantity problems—the systems classified as Water 2000 systems.

When we were challenged early in this Administration to provide every resident in rural America with safe, dependable water in their homes, we knew that we could not meet the ultimate objective. However, the challenge has led to the reduction in the number of rural residents without this basic necessity from 1.1 million in 1990 to under 700,000 now, and this is something we all should be proud of. We will continue to pursue that objective in fiscal year 2001, although we must be frank and tell you that the ultimate objective may not be reachable due to sparsity of population making affordable systems improbable or terrain that increases cost to the point that systems are not affordable.

Mr. Chairman, before I close, I must return to the issue of administrative expenses. These programs that all of us are so very proud of and that contribute so much to the economies and the quality of life in rural America cannot continue to be delivered without adequate support of the dedicated employees and the automated systems that are needed to ensure proper accounting of the taxpayers dollars. To continue down the path that we have been on in the past few years may be penny wise, but it is dollar foolish. I am very proud of our accomplishments in re-

ducing expenses. But, being economical and reducing expenses where one can is different than not providing the resources needed for our staff to operate successfully. Since I have held this position, the Rural Development Mission Area has met every streamlining target we have been given, but we have also been asked to absorb $80 million in pay raises and other inflationary items that also should be considered as reductions, but never are. Rural Development and other USDA entities have reached the breaking point and without some relief, all of us may face the embarrassment of a major failure. I do not want this on my record, and I, as a former Member of Congress, am sure that none of you want to be responsible for such a failure either.

The Congress and the Administration, as well as the taxpayer, have every right to be proud of the fact that we have eliminated the word "deficit" from policy discussions. Let us acknowledge the fact and move on to ensuring that every individual in this country has the opportunity to participate in a dynamic, growing economy, but do so with the recognition that delivering these programs wisely costs money. The economic growth we create with these investments in rural America more than pay for the cost of the programs and the associated administrative cost. It is time we started counting both sides of the ledger.

Mr. Chairman, Members of the Committee, this concludes my formal statement. The Administrators and I would be glad to answer any questions you may have. Thank you for the opportunity to appear before you to discuss the Rural Development budget request with you.

ADDITIONAL SUBMITTED QUESTIONS

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE

FEDERAL-STATE MARKETING IMPROVEMENT PROGRAM

Question. Please provide the budget baseline for the Federal-State Marketing Improvement Program. Please include a listing of fiscal year 2000 and 2001 grants and an estimate of the backlog of applications for this program for fiscal year 2001.

Answer. The fiscal year 2000 appropriation for the Federal State Marketing Improvement Program, or FSMIP, is $1.2 million. For fiscal year 2001, the Agricultural Marketing Service is requesting an additional $300,000. FSMIP grants for fiscal year 2000 will be awarded on the basis of two rounds of competition among proposals submitted by eligible State Agencies. Fund allocations for the first round will be announced in late April, 2000, and those for the second round will be announced in August, 2000. Applications for grants typically exceed available funds by a ratio of approximately three to one. While AMS does not maintain a backlog list, proposals that are not funded during a particular round of competition may be reconsidered during subsequent rounds at the request of the applying State agency.

NATIONAL ORGANIC PROGRAM

Question. Please explain why the $639,000 requested for consumer outreach in the National Organic Program cannot be offset from reduced costs in the program resulting in finalization of the rules to implement this program.

Answer. AMS is not proposing to finance the initial accreditation costs from current funding because there will be no reduction in organic program activities or expenditures after the rule is finalized. The program staff, whose efforts were previously focused on developing and issuing the final rule, must now change its focus to various related activities including:

—research on, and the possible development of, organic standards for aquatic animals, wildlife, honey production, hydroponic production and greenhouse production;
—conducting regulation review and amendment;
—reviewing substances petitioned to the National Organic Standards Board for addition to the National List;
—conducting day-to-day administration of the National Organic Standards Board;
—developing training materials and conducting training activities for producers, handlers and certifying agents on how to comply with the Act and regulations;
—reviewing documents and participating in the negotiation of organic program equivalency agreements between the United States and foreign governments;

—reviewing and recognizing foreign government organic accreditation programs for equivalency determinations;
—conducting program communication and education outreach to organic producers, organic handlers, and consumers of organic products;
—conducting program outreach to minority and limited resource farmers; and
—conducting continuing performance reviews of certifying agents and general enforcement of the Act and regulations after the initial accreditations (expected to begin 12 months after the final rule is published). Funding for these activities was not available during the development of the organic rule.

AMS is requesting $639,000 to fund the cost of initially accrediting, without charge, as many as 59 certifying agents over an 18-month period. As recommended by Congress in fiscal year 2000 appropriations, AMS constructed a national organic program that takes into consideration the needs of small farmers, handlers, and certification agents. The proposed rule includes a provision that the initial costs of accreditation services will be provided without charge so that small farmers, handlers, and certification agents are not excessively burdened by additional costs. If this funding is not provided, the proposed rule will require substantial changes and consequently, further delays in implementation.

Specifically, AMS anticipates that accreditation costs for fiscal year 2001 will amount to $450,680 and that accreditation costs for 6 months of fiscal year 2002 will amount to $188,320. In addition to accreditation services, these funds will allow the program to develop and issue a program manual, and develop and distribute some of the educational materials needed for consumers, producers, handlers, certifying agents, and trading partners. AMS is requesting that $639,000 be transferred to the Expenses and Refunds, Inspection and Grading of Farm Products fund account for the cost of the National Organic Program and that such funds remain available until expended. AMS does not anticipate requesting additional start-up funds beyond the existing request, which covers the anticipated 18-month implementation period.

Accreditation requires that AMS staff review certifier quality manuals for accuracy and completeness and perform at least one on-site audit evaluation. During an on-site audit, certifiers will be assessed for business capacity and competency in accordance with International Organization for Standardization Guide 65, as well as their ability to attest to the technical standards for organic production and handling.

ORGANIC SEAFOOD STANDARDS

Question. Please provide an update on activities regarding the organic seafood regulations.

Answer. The fiscal year 2000 appropriations Act included $75,000 to begin development of organic standards with respect to seafood. To initiate this process, AMS will hold two public meetings to discuss issues related to the organic production and handling of aquatic animals to be labeled as organic: on April 10, 2000, in Mobile, Alabama; and on April 12, 2000, in Anchorage, Alaska. AMS will hold a third public meeting on May 3, 2000, in Providence, Rhode Island. We will also participate in the April 10, 2000, Workshop on Organic Certification of Wild Aquatic Animals in Seattle, Washington, sponsored by Senator Ted Stevens from Alaska and Governor Tony Knowles from Alaska. AMS will be participating in the June 23–24, 2000, aquaculture production standards workshop at the University of Minnesota, St. Paul, Minnesota.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

LINE ITEM FUNDING

Question. In your budget justification notes, there is no line item for the following items. Please provide the fiscal year 2001 budget request for the following: Foot-and-mouth-disease; Tropical bont tick; Golden nematode; and Witchweed.

Answer. These items were not included on the Summary of Increases and Decreases because no change in funding was requested. The funding levels are included on the table on page 14–18. The fiscal year 2001 funding levels are:

[In thousands of dollars]

Line item	*Fiscal year 2001 request*
Foot-and-mouth disease	$3803
Tropical bont tick	407

Line item	*Fiscal year 2001 request*
Golden nematode	580
Witchweed	1,506

GRASSHOPPER/MORMON CRICKET

Question. Does the fiscal year 2001 budget request provide funding for the control of the grasshoppers/Mormon crickets?

Answer. The Animal and Plant Health Inspection Service (APHIS) is currently conducting spring predictive surveys to determine the needs for crop protection programs. Our effort is funded through contingency funds. In fiscal year 1999, we used $850,000 and in fiscal year 2000 we plan to use $404,000 for these activities. At this time, there is no clear indication of the funding level required for the crop protection programs in fiscal year 2000, but the need could be $1.3 million or higher.

The fiscal year 2001 funding needs for grasshopper and Mormon cricket control will depend on this year's weather conditions—lack of a cool, damp spring will promote the development of high grasshopper/Mormon cricket populations in areas where they previously existed. Dry weather conditions in the spring exacerbate higher grasshopper/Mormon cricket populations because there will be increased numbers of grasshopper/Mormon cricket eggs laid and less forage, increasing the competition between livestock and the pests for survival. While we can not predict at this time what our funding needs will be and did not request funding for fiscal year 2001, we do know that we will need to continue survey work to determine where grasshopper/Mormon cricket problems will potentially exist and how to address them.

EMERGENCY MANAGEMENT SYSTEM

Question. Please provide the amount of funding for each activity that will be funded from the fiscal year 2001 budget request increase of $5,241,000 for the emergency management systems program.

Answer. APHIS proposes to spend the $5.2 million increase on the following activities: $260,000 for an educational campaign aimed at providing information to Federal, State, and local governments, industry, stakeholders, and the public; $657,000 for specialized training for State and Federal emergency managers and private practitioners; $2 million for animal health emergency managers in the field to assist states with establishing animal health emergency management standards and to support the states during actual responses; $230,000 for a genetic fingerprinting library; $300,000 for the EpiInfo 2000 system, a geographical information system, and hand held units to record geographical data; $300,000 for preparing and updating 6 disease plans and conducting 1 National and 2 regional test exercises; and $1,494,000 for equipping the Emergency Management Operations Center.

KUDZU

Question. Does the fiscal year 2001 budget request for noxious weeds include funding the for Kudzu projects?

Answer. In fiscal year 2000, APHIS will continue to fund approximately $45,000 in a cooperative agreement with Mississippi State University for demonstration of Kudzu control techniques. Mississippi State University reported preliminary results from the Kudzu demonstration project at the 2000 Southern Weed Science Society meeting. Researchers are demonstrating and evaluating various control techniques. The project will continue in fiscal year 2000 at a new site. In fiscal year 2001, APHIS will reevaluate the Kudzu project to determine if the demonstration project control techniques can be effective in widespread eradication and if so, will continue to fund Kudzu activities in fiscal year 2001.

PINK BOLLWORM

Question. How much funding is needed to continue the pink bollworm eradication program in Arizona and to begin the program in New Mexico, Texas, and Mexico in fiscal year 2001? The fiscal year 2001 budget request proposes a decrease of $242,000 for this program. Which activities are continued and which are discontinued for fiscal year 2001?

Answer. Before a pink bollworm eradication program can begin in New Mexico, Texas, and Mexico, funding for larval cut out racks (where pink bollworm eggs feed on an artificial diet until they hatch into larvae), pupal maturation racks (where the larvae spin into cocoons and begin maturing into moths), and upgrades to the exist-

ing electrical utilities is still necessary. Our current estimate for these costs is $350,000.

With the fiscal year 2001 requested funds, we will continue to produce sterile insects for release in the San Joaquin Valley, California; however, we will not be in a position to move the eradication program to New Mexico, Texas and Mexico.

EMERGING PLANT PESTS

Question. The fiscal year 2001 budget request proposes an increase of $25,079,000 for the emerging plant pests program. In the past, APHIS has been able to use emergency funds for citrus canker and the Asian longhorned beetle eradication. Why has the Administration chosen to request appropriations for this work instead of using emergency funds?

Answer. The Secretary's emergency transfer authority is a vital tool in enabling APHIS to respond quickly and effectively to incursions of exotic pests and diseases. The difficult issue is trying to determine the best funding mechanism when a given pest or disease incursion requires a multi-year eradication effort. Because it became apparent that the citrus canker, Asian longhorned beetle, and Mediterranean fruit fly programs would take more than 2 years to complete, we did not feel it was appropriate to continue to rely on CCC emergency funding, and instead decided to request funds for these programs through the regular budget process where it can receive the benefit of Congressional scrutiny.

SCRAPIE

Question. Why has the Administration decided to put an emphasis on eradicating scrapie from the U.S. in the fiscal year 2001 proposed budget?

Answer. Scrapie is a fatal disease of sheep and goats that is one of a group of diseases called transmissible spongiform encephalopathies (TSEs), which also includes bovine spongiform encephalopathy (BSE). This disease could impact the American food supply and the public health. The sheep industry has asked APHIS to accelerate efforts to eradicate scrapie because the disease costs the U.S. sheep industry an estimated $20 million per year in direct losses and millions of dollars more in lost potential markets and flock productivity.

Currently, producers in scrapie-free countries have a significant competitive advantage over U.S. sheep producers for several reasons. First, as a result of scrapie, U.S. sheep producers are subject to higher production costs and lower revenues. Second, importing countries are demanding that imported sheep come from scrapie-free countries or regions, and U.S. producers are unable to make this certification. As a result, U.S. producers are locked out of the international market—a situation that is taking a financial toll on American sheep producers.

In addition, the presence of scrapie in the United States may jeopardize our ability to market a variety of ruminant products such as meat and bone meal internationally—due to elevated concerns about all TSEs resulting from the occurrence of BSE in Europe. APHIS has determined that it is necessary to accelerate efforts to eradicate scrapie from the United States to help the U.S. sheep industry become competitive again in the global market place and to protect existing U.S. markets for all ruminant products.

WILDLIFE SERVICES OPERATIONS

Question. The program fiscal year 2001 budget proposes a decrease of $2,711,000 for Wildlife Services Operations program. Which ongoing activities will be affected by this proposed decrease?

Answer. APHIS proposes that cooperators of Wildlife Services programs assume a greater share of the operations costs in fiscal year 2001. Producers, States, and local governments are responsible for a large portion of the costs of running programs where they are the beneficiaries. We will work with program cooperators to determine how to best make the program reductions if the cooperators are unable to assume a larger share of the costs in light of the proposed reduction in fiscal year 2001.

We have not placed into priority order how we would implement program reductions if necessary.

Question. How does APHIS propose to enforce that cooperating agencies and individuals take on a larger share of the costs for projects currently underway? Does the fiscal year 2001 budget assume receipts from these agencies? If so, how much?

Answer. The fiscal year 2001 budget reduction for Wildlife Services Operations assumes that cooperating agencies and individuals will contribute a greater share of the costs for the projects underway. Cooperators are already contributing more than 50 percent of program costs. It is the cooperators' discretion to take on a greater

share of the costs for the programs, assuming that they will prioritize funding for those projects which benefit them directly. If they choose not to raise their level of contributions, APHIS will be forced to reduce program activities.

NATIONAL POULTRY IMPROVEMENT PLAN

Question. How much funding does the fiscal year 2001 budget request propose for the National Poultry Improvement Plan?

Answer. APHIS has included approximately $616,000 in the fiscal year 2001 budget request to support the National Poultry Improvement Plan (NPIP). Of this amount, APHIS will use $236,000 for program coordination; $368,000 for diagnostic testing related to the NPIP; and $12,000 for the Advisory Committee on the NPIP. The Advisory Committee serves as a liaison between the poultry industry and the U.S. Department of Agriculture on matters pertaining to U.S. poultry health.

SUMMARY OF INCREASES AND DECREASES

Question. On page 14–17 of the Explanatory Notes, what is contained in the line item for "All Other"? Does the Contingency Fund stay at the fiscal year 2000 level for fiscal year 2001?

Answer. The entry for "All Other" comprises all APHIS line items for which we are not proposing any program changes for fiscal year 2001. This encompasses the following line items: FMD/Emerging Foreign Animal Diseases; Tropical bont tick; Golden nematode, Witchweed, and the Contingency Fund.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

ADVANCED SPATIAL TECH, MISSISSIPPI (PRECISION AGRICULTURE)

Question. Please provide a description of the research that has been funded under the Advanced Spatial Technology, Mississippi grant.

Answer. This research will evaluate the use of site-specific technology and assess the economics of its application. Cultural practices will be studied and integrated into management system using-site specific technology to monitor yield and variable rate application. This project will expand on work conducted under the Special Technology Special Research Grant funded at $350,000 in fiscal year 1997 and $600,000 in 1998.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to provide farmers with unbiased information on the application and economics of site specific technologies for cotton production in the mid-south.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to evaluate site specific technologies and develop recommendations for management decisions related to fertilization, pest control, and other cultural practices.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $350,000, for fiscal year 1998 it was $600,000, for 1999 it was $1,000,000 and for fiscal year 2000 $1,000,000 for a total of $2,950,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds provided for this grant are $620,300 in 1998, and $942,000 in 1999. These funds are State appropriations that support the salaries of scientists and their support staff.

Question. Where is this work being carried out?

Answer. The research is being conducted on various Mississippi Agricultural Experiment Station branch locations around the State.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigators anticipated the completion date for the original objective to be in fiscal year 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was subject to an initial evaluation at its start in fiscal year 1998. The last evaluation was in July of 1999. Progress so far has resulted in useful information already being applied at the farm level.

AFLATOXIN RESEARCH, ILLINOIS

Question. Please provide a description of the research that has been conducted under the Aflatoxin Research, Illinois grant.

Answer. This research is focused on development of strains of corn which will be highly resistant to infection with Aspergillus flavus and the production of aflatoxin under field conditions. Transfer of genetic material from resistant strains to other, usable, inbred strains of corn is underway and these new strains are being field tested to determine level of resistance to fungal infection.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for the research?

Answer. There is much national concern about the role of aflatoxins as carcinogens in the human population. The aflatoxin material is also toxic to animals and humans. The presence of the fungus in corn results in a lower value for the crop and the possible rejection of the corn by the grain elevator owners. Aflatoxin contamination continues to be a serious problem in the southern and southeastern United States, with additional outbreaks also occurring during severe drought conditions in the upper mid-west and other areas during the past few years.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the research was the reduction of infestation of corn with Aspergillus flavus and the consequent reduction of aflatoxin in the corn produced. The researchers have produced strains with resistance genes for both prevention of infection with A. flavus as well as the production of the aflatoxin itself. Field trials have been in progress to determine effectiveness of these resistance factors under normal growing conditions when exposed to the fungus. The work has now progressed to the stage where it seems likely that more than one gene will have to be transferred to produce strong resistance to the Aspergillus infection and production of aflatoxin.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1990, $87,000; fiscal year 1991, $131,000; fiscal years 1992–1993, $134,000 per year; fiscal year 1994, $126,000; fiscal years 1995 through 2000, $113,000 per year. A total of $1,290,000 has been appropriated.

Question. What is the source and amount of non-Federal funds by fiscal year?

Answer. The non-Federal funds have been from State appropriated dollars in the form of principal investigator and technical salaries, equipment usage, and experimental plot expenses. These have been at the level of $130,000 for fiscal years 1997 and 1998, and $24,747 for fiscal year 1999.

Question. Where is this work being performed?

Answer. The research is being performed in the Department of Crop Sciences at the University of Illinois.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives was 1995, but the project was revised last year to continue to fiscal year 2002. The primary reason for the extension of the work is that there appear to be multiple resistance genes which are necessary to prevent both the infection with the fungus and the synthesis of the aflatoxin compound. The investigators are very optimistic about the future success of this approach. This work was discussed at a meeting of Multi-State Research Project NC–129 on January 25-26, 1999 in New Orleans and the Principal Investigators are members of the Technical Committee of this project.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was evaluated on March 10, 2000. The investigators have made good progress on this project. They presently have identified that the key issue is to insert genes coding for two enzymes, chitinase and B glucanase, which will attack the fungus cell wall. They have many options on how to enhance the resistance level in the corn and several genetic transformations that can be tested. The resistance of plants to Aspergillus flavus does not carry over to resistance to Fusarium monoiliforme. A major impediment now is the ability to do field trials of sufficient scale to test the new varieties and the variation in environmental condi-

tions which often results in a growing season with a low incidence of aflatoxin production even in susceptible plants. The research team indicated that additional funds would be required in order to accelerate their current rate of progress.

AGRICULTURAL DIVERSIFICATION AND SPECIALTY CROPS GRANT

Question. Please provide a description of the research that has been funded under the Agricultural Diversification and Specialty Crops grant.

Answer. There are numerous outcomes from this grant over the past year:

—A book on plants for Hawaiian lei material is in the publications office for final work-up.

—Video conferences in June 1998 and September 1998 were held to discuss issues relating to food safety on the farm, and included USDA and FDA personnel in Washington and over 90 participants at each session. A food safety website was developed (http://www.hawaiiag.org/foodsafe/foodsaf.htm) and an article was written for the Hawaii Farm Bureau Federation newsletter covering on-farm food safety issues.

—In 1999 the project co-chaired a Hawaii transportation industry education task force and developed and wrote with 18 co-authors the "Preflight Checklist for Shipping Your Quality Hawaii Agricultural Product."

—The project worked with 32 co-authors to produce the handbook "Hawaiian Islands Air Cargo Resource Book 1999–2000," which lists information on 130 service providers and valuable information on how to ship a product in the most efficient ways.

—A talk was given at the 2nd Annual Hawaii Air Cargo Symposium in September 1999 on the progress of the transportation education task force.

—The project developed a fact sheet called, "Estimating the per-pound cost of a dried or condensed food based on process yield and farm-gate price," that helps entrepreneurs calculate processing loss and potential profits from food dehydration.

—Three tools for entrepreneurs will be completed in the first quarter of 2000: An extensive fact sheet on the "Costs and Considerations for Establishing an Entrepreneurial Community or Shared Use or Test Kitchen Incubator," a poster to help food product entrepreneurs quickly calculate their cost of production; and a fact sheet on the cost of establishing incubator kitchens for food processing entrepreneurs, including an emphasis on safe food processing.

—The project is advising the Hawaiian Commercial and Sugar Company on the possibility of starting a large-scale white taro production and processing operation in high pressure minimal processing for pineapple and other tropical fruits, the cause of premature fading of pineapple slices has been determined and the temperature, pressure and time relationship has been identified to achieve sterility.

—The project is collecting data and information on cultural practices for kava, a nutraceutical. Projects with other funding sources have been facilitated on the major disease of kava in Hawaii (cucumber mosaic virus dieback) and on the biosynthesis of kava lactones in a bioreactor. Cooperation with the private sector is being facilitated on the production and processing of stevia, a natural sweetener.

Question. According to the research proposal, or the principal investigator, what is the national, regional, or local need for this research?

Answer. Hawaii's economy continues to lag behind national averages where growth is concerned. The various projects under the umbrella of the Diversified Agriculture and Specialty Crop grant rely on information research to build decision-making tools. These tools help entrepreneurs make more informed decisions. When entrepreneurs make better decisions they have a higher chance of making a profit in business. The decision-making tools are being used in the Hawaii, the Pacific, and on the mainland.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the original proposal was to screen potential food and non-food crops for commercial development in Hawaii and then make earnest attempts to work with willing and able entrepreneurs to move the results of research to the private sector. The lei manual, in final preparation, will provide entrepreneurs with information on how to grow plants that they never had information about, and they will also be armed with a cost of production framework that is specific to nursery production. While the University of Hawaii continues to screen crops to help entrepreneurs pick the best ones for production and the market place, there are few decision making tools that can help entrepreneurs take their products more successfully

to market. Thus, there is an emphasis on information tools such as a transportation handbook and a cost of production poster. To help farmers prepare for increased food safety scrutiny, the University of Hawaii is working with Hawaii State agencies and other non-profits to reach out to farmers with critical information.

Question. How long has this work been underway and how much has been appropriated, by fiscal year, through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows, fiscal years 1988–1989, $156,000 per year; fiscal years 1990–1993, $154,000 per year; fiscal year 1994, $145,000; and fiscal years 1995–1999, $131,000 per year; and fiscal year 2000, $131,000. A total of $1,859,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The University of Hawaii provides in-kind support in the form of laboratory and office facilities, equipment and equipment maintenance, and administrative support services: $68,503 in fiscal year 1992; $75,165 in fiscal year 1993; and approximately $75,000/year in fiscal years 1994–96, approximately $20,000/year in fiscal years 1997–2000. Funds are also being leveraged from other private sector, State and Federal sources for the development of nutraceuticals.

Nearly $50,000 of in-kind support has come from private sector and State partners, including $8,000 from the Office of Hawaiian Affairs and $30,000 from the private sector on the high pressure minimal processing project. The value of community time on all the publications written in the past year or so is also well over $75,000.

Question. Where is this work being carried out?

Answer. Research is being conducted at the University of Hawaii's College of Tropical Agriculture and Human Resources on the island of Oahu, and other Hawaiian islands as necessary.

Question. What is the anticipated completion date for the original objectives of this project? Have those objectives been met? What is the anticipated completion date for additional or related objectives?

Answer. All taro work is completed. Lei plant manual will be out in the first quarter of 2000. Work is just starting on transportation and food safety issues and will continue through 2002. Work on business related information tools will continue through 2002. Work continues on high pressure processing of tropical fruits and will continue through 2002. Work on nutraceuticals, particularly cultural practices and disease management of kava and stevia, is continuing through 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Project PI's are in regular contact with project manager at USDA–CSREES. The USDA manager has seen outcomes on a regular basis and visits the project at least once per year to evaluate progress and help plan subsequent or related project objectives.

AGRICULTURAL DIVERSITY/RED RIVER, MN AND ND

Question. Please provide a description of the research that has been funded under the Agricultural Diversity Grant.

Answer. This multi-year, multi-phase project will have six specific components. They are: (1) vegetable growing research—especially field and glasshouse related research, (2) vegetable collection and storage research and/or related storage or distribution business development, (3) development of processing industries for the fresh market or research related to the fresh products for market, (4) development of marketing and/or supply associations among vegetable producers, (5) development of processing industries for the ready-to-eat salad market or research related to ready-to-eat products, and (6) development of processing industries for the frozen vegetable products market or research related to frozen products. This first phase of this multi-phase project will concentrate its industry development and research activities in three areas: vegetable growing research—especially field and glasshouse related research, development of marketing and/or supply associations among vegetable producers, and development of processing industries for the ready-to-eat salad market or research related to ready-to-eat products. The second phase of this multi-phase project will concentrate its activities in four areas: continued research on vegetable production, including commercial greenhouse production, field production using Missouri River water for irrigation; development of markets for fresh product; preparation of a business plan for a ready-to-eat delicatessen salad processing facility in the region; and analysis of the potential for adding higher value complementary crops to the rotation mix in vegetable producing areas.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Initially the growing of vegetables in the region was driven by an opportunity to meet increasing consumer demand for fresh vegetables and concerns over both the cost of water and the environmental impacts of the use of chemicals in the traditional vegetable producing regions of the southern United States. This industry currently raises three crops of vegetables a year. This requires extensive irrigation in the hot summer months. Population growth and increased domestic and industrial demands for water have created significant pressures to shift water usage away from agriculture and toward other domestic and industrial needs. Additionally, use of chemicals to fight soil bacteria has raised environmental concerns in these States. These issues created a need to identify other regions to produce vegetables, especially in the summer months. The northern plains States of Minnesota, North Dakota and South Dakota have been identified as one area that could meet this need. In addition, the opportunity to add a high-value crop to the rotation cycle for northern Great Plains farmers can help to decrease their dependence upon program crops. The shift in cropping patterns can have a positive effect on farm income and lessen the need for outside or Federal financial assistance. Interest in the potential for adding higher value crop to the rotation cycle, including vegetables, has increased significantly in the past year due to the poor farm economy. Research on the potential for adding new crops to the region's production base could help stabilize the farm economy in the region and lessen the need for outside financial assistance to farmers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The project objectives include: (1) Conduct three replicated field trials on growing of carrots; (2) Continue study of vegetable growing techniques in Europe and continue negotiations with vegetable growing research facilities/laboratories in Europe to transfer growing knowledge to the region; (3) Review current and future market opportunities for further development of the industry and identify strategies and partners for pursuing these opportunities and take appropriate organizing steps; (4) Develop and maintain a web page for this vegetable industry project; (5) Conduct market research for establishment of a ready-to-eat delicatessen salad processing facility in the region; (6) Conduct market research for establishment of a ready-to-eat fresh-bagged salad processing facility in the region; (7) Continue business development planning for establishment of a ready-to-eat delicatessen salad processing facility in the region; and, (8) Continue business development planning for establishment of a ready-to-eat fresh-bagged salad processing facility in the region. Funding for this project was received July 1, 1998 at which time work on the project began. The Red River Trade Council Vegetable Industry Task Force has a number of specific activities currently underway to help develop regional vegetable processing markets for vegetable production.

In the area of Deli-salad production the Vegetable Task Force continues to work on transferring state-of-the-art deli-salad and upstream processing technology that produces long-shelf-life, preservative-free wet salads to the region. Over the past several years, researchers have conducted market opportunity studies, taste-test evaluation, and are in the process of business planning and coordinating additional partners to capitalize construction of a new processing facilities in the region. The work conducted in this process has identified specific technology that is used by upstream suppliers of a deli-salad company. This technology produces the highest quality pre-processed vegetables that can be stored at room temperature for up to 90 days. This technology allows several different vegetables to be processed using the same equipment and requires little time to switch to different vegetables. A facility like this in the region that is capable of processing several different vegetables is critical to allow production and market diversification.

Significant research has been conducted to understand the market opportunities available in premium dehydrated products, especially dehydrated vegetables. This research has identified several different vegetables that provide opportunities depending on the processing yield that our products would provide. Initial vegetable production trials were conducted in the summer of 1999. Results from these trials were positive and additional research will be conducted to evaluate additional varieties and production and storage practices in the summer of 2000.

Greenhouse Production issues are being examined by the Red River Trade Council which is developing a greenhouse task force to evaluate the potential for controlled environment production in the region. The Red River Trade Council has worked with extension and industry in the Netherlands to understand issues facing the development of this industry in the region. The Greenhouse Task Force is working to

identify markets and feasibility for controlled environment production to provide year-round supply of high-quality vegetables to supply processed and fresh markets.

Market research conducted on high value products from alfalfa indicated that there is a potential for development of an alfalfa processing facility in our region. Additional work to coordinate research, identify potential industrial partners, and further evaluate the market feasibility is continuing.

Significant effort is being conducted to develop cooperative marketing systems that allow production to be focused on specific-quality traits. The Red River Trade Council is working to facilitate development of farmer alliances or next generation cooperatives to supply specific-quality products to the marketplace.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 with appropriations for fiscal year 1998, 1999 and 2000 of $250,000 each year for a total of $750,000 appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Efforts have been made to secure non-Federal funding from individual States and commodity groups. To date the States of North Dakota and Minnesota have been a source of approximately $65,000.

Question. Where is the work being carried out?

Answer. The work is being carried out in Minnesota, North Dakota and South Dakota.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Progress is being made on the original objectives. It is expected that this will be a multi-year, multi-phase project. Work is expected to continue until June 30, 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was evaluated by review of the proposal and is subject to annual project reports. An on-site review is scheduled for June of 2000.

AG-BASED INDUSTRIAL LUBRICANTS RESEARCH PROGRAM, IOWA

Question. Please provide a description of the research that has been funded under the agricultural-based industrial lubricants research program grant.

Answer. This project is a continuation of nine years of activity conducted to target specific applications, establish baseline performance data, develop formulations of additives and chemical modifications, administer laboratory and field tests, characterize, and build relationships for commercialization of industrial lubricants derived from U.S. grown vegetable-based oils. Baseline performance data will be compiled to establish fatty acid compositions, will serve as guide to develop strategies for genetic modifications, additive development, establish standards relative to toxicity and biodegradability, and characterize compatibility with specific metallic and nonmetallic components. The grant has been peer reviewed internally at the University of Northern Iowa.

Question. According to the research proposal, or the principal research, what is the national, regional, or local need for this research?

Answer. Primary local and regional need is related to expanding value-added applications of agricultural commodities in order to stimulate increased demand and raise crop prices paid to farmers. On a national level, the need is to provide renewable, safer, more environmentally sound alternatives to petroleum based industrial lubricants. The principal investigator believes this research to be of local, regional and national importance. Furthermore, there is a belief that there are international possibilities for the use of genetically modified soybean-based lubricants. Premium quality lubricants made of genetically modified domestic crops present a potential for use in a no-food area, i.e. industrial lubricants.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the program was sponsored by non-Federal funding to develop a soybean based hydraulic oil which was introduced to market in July of 1997, marketed by AGRI Industries of West Des Moines, Iowa as BioSOY hydraulic fluid. As of January 1999, and with the consensus of Agri Industries, the original license was transferred to West Central Cooperative of Ralston, Iowa, which is in a better position to market the product. Field testing of two grease formulations and a dielectric transformer coolant has begun, as well as development of a two-cycle

engine lubricant, and bar and chain oil. A large volume of technical data has been compiled specific to crop based oil and lubricants. This program has identified and has begun servicing a broad array of market development requirements, including demonstrating specific performance features, expanding awareness, and supporting government purchase initiatives. In September 1999, two new soybean-based lubricants were licensed to West Central Coop and are now commercial products. Those were a chain saw bar oil called SoyLINK and a fifth wheel grease call SoyTRUK.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Federal funding for this project began with a 1998 appropriation of $200,000. Fiscal years 1999 and 2000 appropriations are $250,000 each year for a total of $700,000 appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Since 1992, this research program has received cash grants from the Iowa Soybean Promotion Board, Carver Scientific Research Initiatives, in addition to several in-kind donations from industry to develop and coordinate commercialization of what has since become BioSOY hydraulic oil. Beginning in 1995, the State of Iowa began to support the program through its Wallace Technology Transfer Foundation. Beginning in 1996, State funding was provided by legislative appropriation through the Iowa Department of Economic Development. Additional funding has been provided by the Iowa Department of Agriculture and Land Stewardship. In fiscal year 1998 $150,000 was appropriated through the Iowa Department of Economic Development, $50,000 from the Iowa Soybean Promotion Board, $25,000 from Iowa Department of Agriculture and Land Stewardship, $32,500 from John Deere, and other awards and service revenues totaling approximately $60,000. State funding for fiscal year 2000 in amount of $400,000 has been requested through direct appropriation to the university.

Question. Where is the work being carried out?

Answer. Laboratory and literature studies are being carried out primarily at the Ag-based Industrial Lubricants Research Program facility in Waverly, Iowa, with minor portions of activity being conducted on the campus of the University of Northern Iowa in Cedar Falls, Iowa and the laboratories of various industrial affiliates located throughout the State and country. Field tests are being conducted at Sandia National Laboratories, U.S. Department of Army test sites, some municipalities, and in industrial equipment located throughout the nation. A short line Iowa-based railroad and a class I railroad have been testing soybean-based rail/flange grease with success and a new lubricant for railroad use is expected to be commercialized this year.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives have been met, in part, with the optimization, demonstration, and commercialization of the soy-based hydraulic fluid. Data collection, additive and modification research, characterization, and supplier development objectives of the first year are ongoing. The development of the dielectric transformer coolant is an added objective and has been expedited through to field testing. Activities to expand public awareness and support government purchase initiatives have been added to the original objectives. Field testing of some products is expected to be completed within a year and additional lubricant applications are anticipated to be targeted for development and field testing within two years.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The cognizant staff scientist reviews quarterly reports and has determined that this research is technically sound and directly addresses the goal of the agency to expand markets for agricultural materials.

AGRICULTURE TELECOMMUNICATIONS, NY

Question. Please provide a description of the research that has been funded under this grant.

Answer. This program encourages the development and utilization of an agricultural communications network to facilitate and strengthen agricultural extension, resident education, and research, and domestic and international marketing of United States commodities and products through a partnership between eligible institutions and the Department of Agriculture.

Question. According to the research proposal or the principal researcher, what is the national, regional, or local need for this research?

Answer. The following needs will be addressed by this program:

—Make optimal use of available resources for agricultural extension, resident education, and research by sharing resources between participating institutions;

—Improve the competitive position of United States agriculture in international markets by disseminating information to producers, processors, and researchers;

—Train students for careers in agriculture, natural resource management, environmental science, human sciences, and the food industries;

—Facilitate interaction among leading agricultural scientists;

—Enhance the ability of United States agriculture to respond to environmental and food safety concerns; and

—Identify new uses for farm commodities and increase the demand for United States agricultural products in both domestic and foreign markets.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this program is to encourage the development and utilization of an agricultural communications network to facilitate and strengthen agricultural extension, resident education, and research, and domestic and international marketing of United States commodities and products through a partnership between eligible institutions and the Department of Agriculture. Various educational, extension, and technology transfer projects have been funded through the program in fulfillment of this goal.

Question. How long has this work been underway and how much has been appropriated, by fiscal year, through fiscal year 2000?

Answer. The project began in fiscal year 2000, and is funded for $425,000.

Question. What is the source and amount of non-Federal funds provided, by fiscal year?

Answer. Prior to fiscal year 2000 it was a one hundred percent match of funds from non-Federal sources. However, beginning in fiscal year 2000, it became a special research grant and does not require a match of funds from non-Federal sources.

Question. Where is this work being carried out?

Answer. Cornell University will award grants competitively throughout the United States.

Question. When do the principal researchers carrying out this work anticipate that the work will be completed?

Answer. Projects funded through this grant are two-year projects.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Due to the changing nature of technology and the continuing need for information in the agricultural community, the objectives of this project cannot be considered of a terminal nature. Individual projects being funded address ongoing needs for information dissemination and technology transfer. As each project is completed the results are evaluated to determine the success of meeting the program's objectives.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted?

Answer. The agency evaluates this project each year via a report from institutions funded. In summary, the following highlight the programs funded:

—Dollars provided by the Agricultural Telecommunications Program resulted in the Tri-State Agricultural Distance Delivery Alliance (TADDA), which includes Washington State University, Oregon State University, and the University of Idaho. Six courses reach learners at any location, and nearly fifty more are in the development stage.

—Texas A&M University collaborated with Utah State University and the University of Kentucky to develop a nationally recognized program in international agribusiness marketing. It reaches food marketing firms, food processors, and other extension audiences.

—New Mexico State University successfully implemented a multimedia program called "Marketing from a Rural Environment," which focuses on place-bound minority learners.

—The University of Arizona developed a comprehensive and dynamic Internet-based resource on rangeland management.

—Mississippi State University extended the reach of the Web to all State and county offices.

—Ohio State University developed an internationally recognized system for quickly targeting and accessing appropriate horticulture information.

AGRICULTURE WATER USAGE, GEORGIA

Question. Please provide a description of the research that has been funded under the Agriculture Water Usage, Georgia grant.

Answer. The project will determine agricultural water use in Georgia using a 2 percent statistical sample of water sources. Equipment has been purchased and personnel hired to conduct the project.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Water has become a major issue in the southeast. The tri-state water "issue" between Florida, Georgia, and Alabama is seeking to allocate interstate waters in the primary river basins which begin in the Atlanta area. These allocation formulas are completed and ready for use. The salt water intrusion problem associated with coastal Georgia and South Carolina is also a major issue. Both these problems suffer from the lack of data on agricultural water use across the State. This program seeks to develop a monitoring and modeling strategy to determine how much water is used by agricultural irrigation. The program is designed to begin with Georgia and then allow expansion into neighboring States for a better estimate of agricultural water use.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The project has begun by hiring of strategic personnel for the monitoring program, and development of the equipment and the data base to be used for obtaining volunteers for the monitoring phase. This integrated project will involve the development of computer based models to take a monitoring sample and extrapolate that information for the entire State.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999. The appropriation for fiscal year 1999 and 2000 is $300,000 giving a total of $600,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The State of Georgia through the Georgia Department of Natural Resources, Environmental Protection Division has appropriated $289,000 for fiscal year 1998–1999 and is expected to appropriate $250,000 per year for an additional 4 years to help support this project.

Question. Where is the work being carried out?

Answer. Research will be conducted from the University of Georgia, College of Agricultural and Environmental Sciences. The primary coordination of the program will be centered in the Biological and Agricultural Engineering Unit at Tifton, Georgia, but the program will involve input from personnel in Griffin and Athens, and researchers outside the University of Georgia.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This project, within the overall agricultural water use program, is anticipated to be completed within the original 5-year time frame. Since this project is new, objectives have not been completed to date.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project is new and has not been through an agency evaluation; however, the investigators prepare quarterly reports for the State. The procedures used to conduct the project have been peer reviewed and all publications developed by the project will be peer reviewed. One product has been produced, "Irrigation Conservation Practices for the Southeast U.S.", a 60-page report.

ALLIANCE FOR FOOD PROTECTION, NE, GA

Question. Please provide a description of the research that has been funded under the Alliance for Food Protection grant.

Answer. The fiscal year 2000 appropriation supports the continuation of a collaborative alliance between the University of Georgia Center for Food Safety and Quality Enhancement and the University of Nebraska Department of Food Science and Technology. Fiscal year 1999 funds supported research at the University of Nebraska on the detection, identification and characterization of food allergens, the effects of processing on peanut allergens, and investigation of the efficacy of using various types of thermal processes to reduce or destroy the toxicity and mutagenicity of certain Fusarium metabolites in corn and corn products. Research at the University of Georgia is directed toward determining the foodborne significance of

Helicobacter pylori, developing a competitive exclusion bacterial culture to reduce carriage of Camplylobacter jejuni in poultry, developing methods to differentiate Shiga toxin-producing E.coli that are pathogenic for humans from nonpathogenic strains, and developing methods to detect parasites in produce.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the proposed research addresses emerging issues in food safety which have national, regional and local significance. Specifically, research will address bacterial pathogens that can cause ulcers, cancer and diarrheal illness, toxic fungal metabolites in corn products, and allergens in foods that cause serious reactions, including death, in sensitive people. These emerging issues affect consumers, the food industry, and food producers at all levels, national, State, and local.

Question. What was the original goal of the research and what has been accomplished to date?

Answer. The original goal of this research was to: (1) facilitate the development and modification of food processing and preservation technologies to enhance the microbiological and chemical safety of products as they reach the consumer and (2) develop new rapid and sensitive techniques for detecting pathogens and their toxins as well as toxic chemicals and allergens in foods. The University of Nebraska developed assays for detection of peanut, milk, egg, and almond residues in processed foods, produced high-quality antibodies for these assays, identified a soybean allergen and two sunflower seed allergens, discovered clues as to the reason why Brazil nuts cause severe allergic reactions, discovered that certain types of Fusarium fungi do not produce mutagenic substances, developed a simple liquid chromatographic procedure for determination of moniliformin toxin, found that the corn flake manufacturing process can reduce levels of fungal toxins such as aflatoxin and fumonisins, and also found that low levels of carcinogenic aflatoxins in corn grits might be reduced to less than regulatory actions levels by the corn flake manufacturing process. The University of Georgia developed methods to culture Helicobacter pylori and to detect the pathogen in water by advanced genetic-based techniques. It was found that Arcobacter is easily killed by heat treatment, exposure of E.coli 0157:H7 to acid increases the bacterium's tolerance to heat and that the pathogen could survive for many weeks in refrigerated dry foods, and it was determined that extrusion cooking can greatly reduce allergens in peanuts.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1996, and $300,000 was appropriated in each fiscal year 1996 through 2000, for a total appropriation of $1,500,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. The non-Federal funds and sources provided for this grant were $117,000 State funds and $250,000 industry and miscellaneous in fiscal year 1996 and were estimated to be a minimum of $111,000 State funds and $305,000 industry and miscellaneous in fiscal year 1997. In fiscal year 1998, $70,000 came from State funds and $295,000 from the food processing industry and miscellaneous funds. The amount of State funds provided in fiscal year 1999 was $30,000 and $100,000 were provided by the industry. A minimum of $25,000 State funds and $25,000 industry funds will be provided in fiscal year 2000.

Question. Where is this work being carried out?

Answer. Research is being conducted at the University of Georgia Center for Food Safety and Quality Enhancement in Griffin, Georgia and at the University of Nebraska Department of Food Science and Technology in Lincoln, Nebraska.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The original objectives have not yet been met. The researchers anticipate that work will be completed on the original objectives in 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposals submitted in support of the project on an annual basis. A review of the proposal from the University of Nebraska was conducted on March 29, 1999, and good progress was demonstrated on the objectives undertaken in 1998. For example, research performed at Nebraska has shown that extrusion cooking reduces allergenicity of peanut flour. At the University of Georgia a review was conducted on April 14, 1999, and good progress was demonstrated on the objectives under-

taken in 1998. Researchers there have developed a medium to enhance the growth of gastric ulcer-causing bacteria.

ALTERNATIVE CROPS, NORTH DAKOTA

Question. Please provide a description of the research that has been funded under the Alternative Crops, North Dakota program.

Answer. The alternative crops project has two main thrusts, development and utilization of alternative or novel crops and utilization of traditional crops. The goals of the project are to diversify income at the farm gate, reduce reliance on monoculture to help alleviate pest problems, while providing new agricultural and industrial products to society. Some of the new areas under investigation include feeding of co-products to livestock; development of white wheat as an alternative crop, production of certified dried bean seed, and borage. Previous work continues with oilseed crops such as crambe, rapeseed and safflower as a renewable supply of industrial oil, products from food crops for novel new uses in paints, coatings, food ingredients, and the development of new biochemical and enzymatic processes to refine oils for industrial uses. The projects funded in this appropriation are evaluated by a peer-panel chosen by the Associate Dean of Research at North Dakota State University. The internal peer review was conducted on the following criteria: (1) probability and extent of generating value-added agricultural products, (2) technical and financial feasibility, (3) scientific merit, (4) innovation, (5) probability of rapid commercialization and (6) interdisciplinary research efforts.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Regionally, the temperate areas of the Midwest have the potential to grow a great number of different crops but are in need of publicly-sponsored research efforts to reveal the most practical, efficient, and economical crops and products to pursue. Growers in surrounding States are currently utilizing the information generated by research conducted through this grant. The principal researcher believes that nationally, developing new crops and new markets for agricultural products is critical for both environmental and economic reasons. Enhanced biodiversity that comes from the successful commercialization of new crops aids farmers in dealing with pests and reducing the dependency upon pesticides. New markets are needed to provide more economic stability for agricultural products, especially as Federal price supports are gradually withdrawn.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was and still is to introduce, evaluate and test new crops which will broaden the economic diversity of crops grown in North Dakota. The primary emphasis is to find new crops, new uses and create value added products, such as crambe, lupin, canola, safflower, cool-season grain legumes, buckwheat, amaranth, field pea production and utilization, transgenic sugar beets to produce levan, utilization and processing lupin flower, confectionery sunflower production, growing and marketing of carrots, crop-derived red food dye and high quality pectin as food ingredients, innovative biochemical means of splitting crop oils, and other new uses of oilseed crops, development of markets for new crops as livestock and fish feeds. These efforts have forged a strong link with the private sector, and successfully spawned several crops and products into profitable private sector businesses

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Appropriations by fiscal year are as follows: 1990, $494,000; 1991, $497,000; 1992 and 1993, $700,000 per year; 1994, $658,000; 1995, $592,000; and in 1996 through 2000, $550,000 per year. A total of $6,391,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. In fiscal year 1991, $10,170 was provided by State appropriations. In fiscal year 1992, $29,158, was also provided by State appropriations and self-generated funds. In fiscal year 1993,$30,084, was provided by State appropriations. In fiscal year 1994, $161,628 was provided by State funds, $3,189 provided by industry and $9,020 provided by other sources, totaling $173,837. In fiscal year 1995, $370,618 was provided by State appropriations, $1,496 provided by self-generated funds, $1,581 provided by industry and $5,970 was provided in other non-Federal funds, totaling $379,665 for fiscal year 95. In fiscal year 1996 $285,042 was provided by State appropriation, $4742 provided by industry, $14,247 provided from other non-Federal funds totaling $304,031 for 1996. In fiscal year 1997, $462,012 was provided

by State appropriations, $8,080 was provided by self-generated funds, $8,217 was provided by industry and $103,063 was provided from other non-Federal funds totaling $581,372 for fiscal year 1997. In fiscal year 1999, $984,251 was provided through State appropriations, $40,198 provided through self-generated funds, $13,010 provided by industry and $87,942 from other non-Federal sources.

Question. Where is this work being carried out?

Answer. The work is conducted on the campus of North Dakota State University and at six different research extension centers in North Dakota. Work is also done in eastern Montana.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Fiscal year 2000 is the eleventh year of activity under this grant. The primary emphasis has been to find new crops with non-food uses and create value added products. The original objectives have been met, and continue to expand.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The cognizant staff scientist annually reviews the project and has determined that the research is conducted in accordance with the mission of this agency to expand agricultural markets.

ALTERNATIVE CROPS FOR ARID LANDS, TEXAS

Question. Please provide a description of the research that has been funded under the Alternative Crops for Arid Lands, Texas grant.

Answer. This grant is to develop the two most abundant plants in southwestern United States, i.e. mesquite and cactus, into commercial crops through a combination of applied research and market development. In Texas, New Mexico, Arizona and California these plants occupy 72 million acres. This grant is peer reviewed internally and external reviewers include a private sector cactus breeder, the Texas Agricultural Extension Service and a specialist in wood products marketing.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this goal?

Answer. The semi-arid regions of the United States that border with Mexico in Texas, New Mexico, Arizona, and California have some of the highest unemployment rates, lowest economic returns per acre, and lowest incomes in the United States. The two most abundant plant species in this region are prickly pear cactus and mesquite. By working with Mexican researchers, this grant will help to stabilize the economic situation of rural poor in Mexico and the United States. There are few crops capable of being grown sustainably in these regions. Due to the nitrogen fixing capability, and thus soil improving properties, of mesquite and high water use efficiency of cactus, these plants contribute to sustainable agriculture, and will diversify southwestern agriculture. This research group is the only center in the United States developing these plants as crops.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to dramatically improve the economic returns, and year-to-year economic stability in the southwestern United States from arid and semi-arid lands. For cactus, the goal has been to provide improved varieties that can be harvested and processed into food and forage. A collection of more than 130 varieties of cacti serves as a resource for full scale breeding program. Chromosome analysis began in fiscal year 1999 to improve breeding success. One hundred additional hybridizations are being tested. Especially significant is the start of a production trial for the top eight fruit and top two nopalito selections. The size of the production trial will be large enough to provide planting stock in quantities suitable to many growers. For mesquite, the goal is to increase its value as a result of better tree form. A genetic screening trial has been initiated to evaluate the growth and form of 20 native Texas mesquite seed sources. This research seeks to identify superior genetic material for further breeding and to maintain some of these trees as seed producers for further silvicultural research. Mesquite accomplishments include demonstrations of mesquite products at the World Trade Fair in Chicago, presentations to architects in all major cities in Texas, and providing research information that helped a new manufacturing plant license their mesquite products. Further economic development depends on good relations and cooperation of landowners willing to sell mesquite trees from their property. In return, landowners need relevant information to formulate plans for a sustainable harvest that can incorporate considerations for grazing, wildlife, and soil improvement.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994 and the appropriation for fiscal year 1994 was $94,000. For fiscal years 1995 through 1997 the appropriation was $85,000 per year and for fiscal years 1999 and 2000 is $100,000 per year. A total of $549,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. In fiscal year 1994, $43,215 was provided by the Texas legislature.

Question. Where is the work being carried out?

Answer. The work is being conducted by Texas A&M University, Kingsville, Texas.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. For cactus, the original objective of the project was to provide improved varieties of cactus for fruit and napolitos marketing. The fiscal year 1999 production trial represents a partial completion of the original objective by examining the yield and financial benefits of larger scale cactus cultivation. Researchers anticipate that improved varieties should be available in two to four years. Currently, a small Texas and California cactus industry exists and more economic growth can be achieved with the introduction of new varieties. For mesquite, the objective to improve the economic return largely has been met, since markets for mesquite lumber, flooring, furniture, and barbecue work products continue to improve. However, other related objectives such as growth and form, genetic screening and breeding will take longer to complete. Initial data collection for growth and form will begin in two years.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Evaluation of this project is conducted annually based on the annual progress report and discussions with the principal investigator, as appropriate. The review is conducted by the cognizant staff scientist who has determined that this research is in accordance with the mission of the agency.

ALTERNATIVE SALMON PRODUCTS PROGRAM, ALASKA

Question. Please provide a description of the research that has been funded under the Alternative Salmon Products grant.

Answer. The initial project funded under this program is the Pinbone Removal Machine Project. This project was aimed at developing a high capacity commercial pin-bone removal machine to take pinbones out of salmon fillets. The machine promises to lower production costs for making boneless salmon fillets and provide new products like frozen skinless boneless salmon fillet portions that will open new markets for salmon fillet in shatter packs. Subsequent to initial funds provided in fiscal year 1998, additional appropriations to the Alternative Salmon Product Program have allowed other projects to be supported. These include the Marketing Competition Project and the Salmon Quality Project.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The Alaska salmon industry has lost considerable market share worldwide to farmed salmon production. In 1994, the farmed salmon market share surpassed Alaska's market share of the world's salmon supply and has continued to climb every year since. In 1997, Norwegian farmed salmon production exceeded Alaska wild stock harvests. Also in 1997, Chilean coho salmon exports to Japan exceeded North American sockeye salmon exports to Japan. Japan has traditionally been Alaska's strongest and most lucrative export market. The current situation is an example of foreign competition undermining a traditional American industry. Though the product is harvested in Alaska, the benefits of this research are shared with fishermen residents in Washington State, Oregon, California and throughout the nation. There is still room for optimism in that worldwide salmon consumption is up and new markets for high quality affordable salmon exist.

Question. What was the original goal of the research and what has been accomplished to date?

Answer. The broad research goal of the Alternative Salmon Product Program is the development of market-desired salmon products using wild-caught salmon. In 1998 and continuing, researchers involved in the Pinbone Removal Machine Project are addressing the problem of deboning wild-caught fish in appropriate volumes, so that they can be marketed as frozen skinless boneless fillet portions rather than

simply as H&G frozen fish or canned salmon. New products such as this would allow Alaskan wild caught salmon to compete more effectively with pen-reared salmon. The researchers have designed, built and tested 4 prototype pinbone removal machines, making sequential improvements in design as new problems surfaced. Their latest iteration will be tested in processing plants during the 2000 salmon season.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The initial funding of the Alternative Salmon Product Program was $400,000 in fiscal years 1998 and 1999, and in fiscal year 2000 it is $552,500. A total of $1,352,500 has been appropriated.

The fiscal year 1999 appropriations have gone to two other projects, both under the Alternative Salmon Product Program. These are the Marketing Competition Project and the Salmon Quality Project.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. Industry will contribute approximately $50,000, based on an estimated cost of $50,000 per plant, for commercial testing of the beta prototypes.

Question. Where is this work being carried out?

Answer. The work on the Pinbone removal Machine Project has been and will continue to be conducted at both the University of Alaska Fairbanks—Fishery Industrial Technology Center in Kodiak, Alaska and at the Geophysical Institute of the University of Alaska Fairbanks, in Fairbanks, Alaska.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The Pinbone Machine Project under the Alternative Salmon Product Program, including original and related objectives, will be completed with fiscal year 2000 funding. Other projects, like the Alternative Salmon Management Program will take about five years to complete their goals.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The proposal received in support of the fiscal year 1999 appropriation was reviewed for merit on August 18, 1999. At that time, the agency science specialist determined that the projects addressed needs and interests of the Alaskan salmon industry.

ANIMAL SCIENCE FOOD SAFETY CONSORTIUM

Question. Please provide a description of the research that has been funded under the animal science food safety consortium program.

Answer. The Food Safety Consortium is focused on accomplishing six objectives: (1) to develop techniques for rapid detection of infectious agents and toxins in meat and poultry; (2) to develop a statistical approach for evaluating potential health risks; (3) to identify effective intervention points to control microbiological or chemical hazards; (4) to develop monitoring methodologies to detect these hazards in the distribution chain; (5) to develop technologies to complement the development of Hazard Analysis and Critical Control Point programs by USDA; and (6) to estimate costs and benefits associated with intervention alternatives.

Question. According to the research proposal, or the principal researchers, what is the national, regional, or local need for this research?

Answer. The Consortium's participation in technology transfer to health departments and trade associations are helping on a regional and local level to educate consumers and food handlers on safe handling procedures. Scientific-based testing that is being developed will help provide food that will be more readily accepted in international markets and increase exports and sustainable rural economies at home. On a regional and local level, each of the institutions are involved in Hazard Analysis Critical Control Point program training for industry and are holding seminars for industry to discuss food safety research findings. In addition, the University of Arkansas is teaching food safe programs to children in State elementary schools.

Question. What was the original goal of this research, and what has been accomplished to date?

Answer. The original goal was to bring together research and expertise of institutions in three States in order to best address the areas of poultry, beef, and pork meat production from the farm to the consumer's table. In coordination with each other, they seek to develop detection, monitoring, and prevention techniques to control or prevent the presence of infectious agents and chemical toxins in the food sup-

ply. Each year advisory and technical committees provide guidance and expertise in research planning.

In 1999, research at the University of Arkansas emphasized detection and control of pathogens from pre- through post-harvest raw and thermal processing, molecular surveillance of pathogens, predictive microbial modeling and risk assessment, a variety of rapid detection methods and education and outreach programs for children in grades K–12 and for food processors. At Iowa State University, research concentrated on swine production, irradiation, methodology and risk assessment. Work performed at Kansas State University emphasized intervention strategies, methods development, risk assessment and technology/information transfer.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $1,400,000; fiscal year 1990, $1,678,000; fiscal year 1991, $1,845,000; fiscal years 1992–11993, $1,942,000; fiscal year 1994, $1,825,000; fiscal years 1995–1996, $1,743,000 each year; fiscal year 1997, $1,690,000; fiscal years 1998–1999, $1,521,000 each year; and fiscal year 2000, $1,521,000. A total of $20,371,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. The non-Federal funds are provided primarily by State and private organizations. These funds provided for this grant are as follows: $1,611,947 in 1991; $1,639,050 in 1992; $1,726,153 in 1993; $2,304,223 in 1994; $2,075,145 in 1995; $2,796,097 in 1996; $2,600,545 in 1997; $1,850,899 in 1998; $3,421,866 in 1999. Thus, from 1991 through 1999 a total of $20,025,934 in non-Federal funds was provided.

Question. Where is this work being carried out?

Answer. Research is being conducted at Iowa State University, Kansas State University, and University of Arkansas at Fayetteville, University of Arkansas for Medical Sciences at Little Rock, and Arkansas Children's Hospital.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The research projects from the Consortium continue to evolve and build on the original objectives first set out in 1989. Additional objectives are revised on an annual basis to enhance the original six objectives. Recently, the Consortium has participated in research projects that have made significant contributions to the establishment of scientific parameters used in Hazard Analysis and Critical Control Point programs. The principal investigators have developed patented tests that have significantly reduced the time necessary to detect pathogens in the processing plants.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. There has never been a formal evaluation of the Food Safety Consortium but instead, an annual conference is organized at which a designated representative from CSREES attends. Along with other invited agency representatives such as FSIS, ARS, and ERS, CSREES participates in a steering committee meeting which critiques projects and discusses research priorities. CSREES representatives were considered part of the Technical Advisory Committee as well as members of the Food Safety Consortium Steering Committee and fully participated in meetings and conference calls. Peer reviews are conducted by expert scientists who are not members of the Consortium and determine those projects selected for funding.

APPLE FIRE BLIGHT, MICHIGAN AND NEW YORK

Question. Please provide a description of the research that has been funded under the Michigan and New York, Apple Fire Blight grant.

Answer. This project studies fire blight in apple trees, which is a bacterial disease that can kill spurs, branches, and whole trees. The management of this disease is difficult because only one antibiotic treatment is available. The objectives of this research are to develop fire blight resistance varieties, evaluate biological and chemical control methodologies for disease management, and develop an education and extension component for disease management.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Fire blight is a destructive disease of apple trees that can kill the trees. This disease is caused by bacteria and affects apple trees in all apple growing areas of the nation. In the northeast, the disease is more prevalent because of humid

weather conditions. Because there are significant needs for research in high priority national interest topics such as improved pest management systems, funds are not proposed in fiscal year 2001 to continue this Special Research Grant. At the discretion of the State, Hatch Act or other funding could be use to support this research.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goals of this research are to develop transgenic apple trees through various molecular technologies, to develop new approaches to antibiotic treatments of disease, to develop an early screening technique for tree sensitivity to the disease, to evaluate biological and cultural controls and to develop and improve education and extension components of disease management. The last objective involves using disease prediction models.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Fiscal year 1977 was the first year funds were appropriated for this grant at $325,000. For fiscal year 1998–2000, $500,000 was appropriated per year. A total of $1,825,000 has been appropriated.

Question. What are the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds provided for 1997 were $40,127 for Michigan and $104,166 for New York State. In 1998 the State of Michigan appropriated $25,071 and the Michigan Apple Research Committee provided $15,000 for a total of $40,071 from Michigan. New York provided State appropriated funds of $104,166 for 1998. The State appropriated funds provided for 1999 were $49,771 for Michigan and $106,689 for New York. The State appropriated funds provided for 2000 are $46,178 for Michigan and $43,200 for New York.

Question. Where is this work being carried out?

Answer. Research is being conducted at Michigan State University and Cornell University, New York Experiment Station.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated date of completion for the original objectives was 2000. The objectives have not been met. It is estimated by the researchers that three to five years is needed to complete this project.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last merit review of this project was in January, 1999. A site visit was made to Michigan State University in March 1999 and to Cornell University, Geneva and Ithaca, New York in April 1999. Both principal investigators were visited as well as the field sites. In summary, in surveys of established apple orchard and new planting in New York there were losses of up to 255 of trees filled by fire blight infections of rootstocks. Several new materials for control of fire blight on susceptible varieties gave promising results in field trails. Improved techniques to transfer genes into apple and to obtain flowering on the trasgenci trees have been developed so that transgenic fruits can be examined within two years. In research in Michigan a total of 50 phage isolated from fire blight were characterized with the potential of using these to control the disease. A new plant growth regulator that controls vegetative growth in apple appeared to make trees less susceptible to fire blight. A detailed study of the role of the hrpA gene in fire blight virulence has been completed with a better understanding of its involvement in virulence in the disease.

AQUACULTURE, LOUISIANA

Question. Please provide a description of the research that has been funded under the Aquaculture, Louisiana grant.

Answer. The agency requested that the university submit a grant proposal for fiscal year 2000 that has not been received to date. Research under this program has addressed critical problems in the commercial aquaculture industry including crawfish, catfish, and other emerging species. The university has completed studies in the area of fish nutrition, fish health, fish genetics, production management strategies, alternative species, seafood processing, product quality, and broodstock development.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal investigator indicates that information generated from the funded research will have broad application for local, regional, and national aqua-

culture industries. Specific projects have addressed priorities identified in the crawfish industry including water quality management, harvesting strategies, and nutrition for the production of large crawfish and development of value-added crawfish products. Problems addressed in the channel catfish industry include off-flavor, viral and bacterial diseases, gene mapping, nutrition, and an improved production system technology. Additionally, genetic studies on both hybrid-striped bass and tilapia are currently underway.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the research was to provide science-based information through a basic and applied research base that specifically addressed the needs of the aquaculture industry in Louisiana and the southern region. The overall goals of the research are to improve production efficiency of important aquaculture species through enhancement of nutrient utilization, improvements in genetics, and development of new and alternative production management systems; to develop new technologies for preventing and treating prevalent diseases of important aquacultural species; and to develop new food products and new techniques and processes that improve aquacultural-food product quality. Research has led to improved channel catfish and hybrid striped bass feed formulations, production of new channel catfish vaccines, improved extraction and detection methods for off-flavor compounds, production of genetically-improved channel catfish, procedures for the production of gene maps for channel catfish, improved harvesting and production strategies for crawfish, and improved processing technologies for crawfish and other aquaculture products. Research continues to be directed at important opportunities to enhance production efficiency and commercial viability of sustainable aquaculture systems in Louisiana and the southern region.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Research to be conducted under this program continue as initiated under the Aquaculture General program in fiscal years 1988 through 1991. The work supported by this program began in fiscal year 1992 and the appropriation for fiscal years 1992–1993 was $390,000 per year, $367,000 in fiscal year 1994, and $330,000 each year in fiscal years 1995–2000, for a total of $3,127,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university estimates that non-Federal funding for this program is as follows: in fiscal year 1991, $310,051; in fiscal year 1992, $266,857; in fiscal year 1993, $249,320; in fiscal year 1994, $188,816; in fiscal year 1995, $159,810; in fiscal year 1996, $150,104; in fiscal year 1997, $158,808; and in fiscal years 1998 and 1999, $110,101. The primary source of this funding was from State sources and self-generated funds with minor contributions from industry and other non-Federal sources.

Question. Where is this work being carried out?

Answer. Research is being conducted at Louisiana State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original specific objectives were to be completed in 1990. These specific research objectives have been met, however, research required for long-term growth of the aquaculture industry in Louisiana and the southern region continues to be addressed. The specific research outlined in the current proposal will be completed in fiscal year 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Grants are awarded to scientists within the university on a competitive peer-review basis. The entire proposal is reviewed by agency Program Managers on an annual basis. The university is required to provide an accomplishment report each year when the new grant proposal is submitted to the agency for funding. In addition, the Program Manager conducted site visits in 1996 and 1997 to meet with the scientists involved in the project and review the progress of the research. The 1999 review concluded that the proposed research is addressing important research needs of the aquaculture industry throughout the southern region, that the facilities are excellent, that the principal investigators are well-qualified, that the experimental design is sound, that the proposed research builds upon research previously funded through this program, and that the progress on previous research funded under this program is well documented. Research results from this program have had a significant impact on the aquaculture industry in Louisiana and the region.

AQUACULTURE RESEARCH, STONEVILLE, MISSISSIPPI

Question. Please provide a description of the research funded under the Aquaculture Research Stoneville, Mississippi grant.

Answer. The agency has requested that the university submit a grant proposal that has yet to be received. Past projects funded by this grant have addressed critical problems in the farm-raised channel catfish industry including practical feeding and nutrition strategies and acoustical in-pond monitoring technologies.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal investigator indicates that results from this project will continue to have a significant impact on the competitiveness of a significant segment of the domestic aquaculture industry, namely channel catfish. The farmed-raised channel catfish industry accounts for over 70 percent of total domestic aquaculture production. Research funded by this program is directed towards improving feeds and feeding strategies and acoustical monitoring and inventory of catfish in pond production systems. These findings will have long-term impacts on the competitiveness of the farm-raised channel catfish industries in several southern States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to address the research needs of the farm-raised channel catfish industry in the areas of water quality and nutrition. Results from this research has led to improved water quality management practices in commercial catfish ponds and improved diet formulation and feeding strategies that have been widely adopted by the industry. Research findings from this program have had a direct impact on reducing the cost of catfish feed without reducing performance and productivity. Additionally, sonar hardware and software technologies are being developed and evaluated for use in stock assessment of channel catfish ponds.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal years 1980–81, $150,000 per year; fiscal year 1982, $240,000; fiscal year 1983–84, $270,000 per year; fiscal year 1985, $420,000; fiscal years 1986–87, $400,000 per year; fiscal year 1988, $500,000; fiscal year 1989, $588,000; fiscal year 1990, $581,000; fiscal year 1991, $600,000; fiscal years 1992–1993, $700,000 per year; fiscal year 1994, $658,000; fiscal years 1995–1997, $592,000 each year, $642,000 in fiscal year 1998, and $592,000 per year in fiscal years 1999 and 2000. A total of $10,229,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university estimates a total of $2,101,508 in non-Federal funding to support this research for fiscal years 1991–1994; $1,128,451 in fiscal year 1995; $601,473 in fiscal year 1996; $463,990 in fiscal year 1997, $464,266 in year 1998, and approximately $740,000 in fiscal year 1999. Non-Federal funding is primarily provided by State funds. Additional funding is also provided from product sales, industry contributions, and other miscellaneous sources.

Question. Where is this work being carried out?

Answer. The grants have been awarded to the Mississippi State University Agricultural and Forestry Experiment Station. All nutrition research is conducted at the Delta Branch Experiment Station, Stoneville, Mississippi. The acoustical research is conducted in cooperation with the National Center for Physical Acoustics at the University of Mississippi.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the specific original research objectives was 1984. The original objectives have been met, however, projects funded by subsequent grants continue to address the research needs of the domestic channel catfish industry as problems arise. The specific research outlined in the current proposal will be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency's Program Managers and Program Specialist evaluate the progress of this project on an annual basis. The university is required to provide an accomplishment report when the new proposal is submitted to the agency for funding. Proposed new projects undergo internal review by the Mississippi State University Agricultural and Forestry Experiment Station and are reviewed exter-

nally by agency personnel consistent with United States Department of Agriculture guidelines. The Program Manager conducted a site visit in 1999. The 1998 review indicated that the research addresses key problems faced by the farm-raised channel catfish industry. Significant progress has been reported on past research and the experimental and scientific design of the new project are sound. Scientists involved in the project are leading authorities in this area of research and linkages between the researchers and the catfish industry has lead to accelerated adoption of research findings. Adoption of improved feeds and feeding strategies developed through this program by the catfish industry has led to improved production efficiency in commercial catfish operations. The agency is planning a site visit in fiscal year 2000.

AQUACULTURE, NORTH CAROLINA

Question. Please provide a description of the research that has been funded under the Aquaculture, North Carolina grant.

Answer. The agency has requested that the university submit a grant proposal that has yet to be received. The researchers indicate that the research will focus on improving husbandry methodologies for striped bass and rainbow trout.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal investigator indicates that the project will address specific research needs of the domestic trout and hybrid striped bass industries. Studies addressing vaccine administration and disease resistance, broodstock maintenance, and feeding strategies will result in improved culture technologies for these species in the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the project was targeted at resolving specific, industry-recognized impediments to aquaculture efficiency, profitability, and growth. The specific objectives include: improved vaccine administration methods for rainbow trout; improved broodstock maintenance methodologies for striped bass; and reduction of environmental impacts by improving system technologies and feeding strategies in hybrid striped bass production ponds.

Question. How long has the work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $150,000. The project was not funded in fiscal years 1998 and 1999. The current fiscal year 2000 appropriation is $255,000. The total amount appropriated is $405,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university reports a total of $94,000 of non-Federal funding to support research carried under this program for fiscal year 1997. The primary source of the non-Federal funding was from State sources.

Question. Where is the work being carried out?

Answer. Research is being conducted at North Carolina State University and their aquaculture research field station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This project was initiated in fiscal year 1997 and was funded for one year. Funding was not appropriated in fiscal years 1998 and 1999.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency will conduct the initial review of this proposal when it is submitted to the agency for funding. The proposal will be externally peer reviewed as part of the agency's evaluation.

AQUACULTURE, VIRGINIA

Question. Please provide a description of the research that has been funded under the Aquaculture, Virginia grant.

Answer. The agency requested that the university submit a grant proposal that has yet to be received. The proposed research will document and develop fish production culture methodologies and analyze economic management and marketing strategies for a recirculating aquaculture system-based industry.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The investigators indicate that there is a need to develop a highly competitive, sustainable aquaculture industry predicated upon land-based recirculating-water system technologies in order to meet consumer demand for cultivated aquatic foods that are of high quality, safe, competitively priced, nutritious, and are produced in an environmentally responsible manner. Research refining culture system technologies have the potential of significantly enhancing domestic aquaculture production.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to identify commercially-viable aquaculture species utilizing recirculating aquaculture system technology, verifying production and culture management protocols utilizing this technology, analyze production budgets providing information upon which to build business plans, investigate marketing development strategies, and prepare scientific, technical, and popular publications to disseminate the results of this research. Research was initiated in fiscal year 1999. Initial production trials are underway, but have not yet been completed.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This was a new research initiative in fiscal year 1999. $100,000 per year was appropriated for fiscal years 1999 and 2000. The total appropriation for this grant is $200,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university estimates a minimum of $90,000 of non-Federal funding in fiscal year 1999 and $34,853 in fiscal year 2000 coming primarily from State sources.

Question. Where is this work being carried out?

Answer. The research will be conducted through the Virginia Agricultural Experiment Station, Virginia Polytechnic Institute and State University, Blacksburg, Virginia and in collaboration with private aquaculture firms in Virginia.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This proposal seeks funding for year two of a proposed three year project. The anticipated completion date for the fiscal year 2000 component of the project is July 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency evaluates the progress of this project on an annual basis. The university is required to submit an accomplishment report each year when the new proposal is submitted to the agency for funding. The objectives described in the proposal are relevant to State, regional, and national goals and address an important opportunity within the regional aquaculture industry. The specific objectives, methodology, and experimental design are clearly presented and experimentally sound. Personnel and facilities are appropriate for the stated objectives and objectives should be attained within budgetary and time constraints. Appropriate literature review and justifications for research were provided.

AQUACULTURE PRODUCT AND MARKETING DEVELOPMENT, W.V.

Question. Please provide a description of the research that has been funded under the Aquaculture Product and Marketing Development, West Virginia.

Answer. The agency requested that the university submit a grant proposal that has yet to be received. The research program is aimed at developing a viable and competitive aquaculture industry in West Virginia and the Appalachian region. The specific objectives of the project address State and regional needs by improving the short-term viability and long-term sustainability of aquaculture production and processing firms in West Virginia and similar areas of Appalachia. Specific research strategies include the development of marketing strategies for trout producers and processors, increasing the economic efficiency and profitability of trout-based enterprises, improving the consistency and quality of fresh trout fillets and value-added smoked trout products, and to implement a technology transfer component to disseminate information generated by this project to the aquaculture industry in Appalachia.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The researchers indicate that there is a regional and national need to evaluate marketing and product development for small scale aquaculture systems in rural communities. In addition, there is a need to improve the efficiency and sustainability of these systems.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The research proposes to develop sound marketing strategies for aquaculture products, improve the economic efficiency of aquaculture production systems, and improve the quality and variety of aquaculture products in West Virginia and the Appalachian region.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. A grant has been awarded from funds appropriated as follows: fiscal year 1998, $600,000 and $750,000 for each of fiscal years 1999 and 2000. A total of $2,100,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university indicated that there were no non-Federal funds provided in fiscal years 1998 and 1999 for this project.

Question. Where is this work being carried out?

Answer. The research is being conducted at the University of West Virginia in Morgantown and at off campus sites with a variety of potential cooperators.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initiated in fiscal year 1998. Research addressing the original objectives is currently underway and the anticipated completion date for these objectives is fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency conducted an external and internal peer review of the original proposal. The proposal was peer reviewed by 10 external reviewers and the agency's National Program Leaders for Aquaculture, and the Aquaculture Program Specialist. Although the proposal was aimed at important issues facing the aquaculture industry in the region, a number of significant concerns were expressed by both external and agency reviewers. These concerns with recommendations were presented to the university and a revised fiscal year 1998 proposal was submitted and approved. The Agricultural Experiment Station requested that a planning review be held to provide recommendations to the University to assist in developing and refining the direction and focus of the aquaculture program at West Virginia University. An external planning review was held in August, 1999, facilitated by the National Program Leaders and Program Specialist. The agency and West Virginia University agreed that additional time would be needed to develop a complete, detailed proposal for the fiscal year 1999 funding. West Virginia University requested, in their fiscal year 1999 proposal submission, that the funds be obligated but restricted until a detailed proposal was submitted and approved by the agency. The agency is currently awaiting receipt of the revised fiscal year 1999 proposal.

BABCOCK INSTITUTE FOR INTERNATIONAL DAIRY RESEARCH AND DEVELOPMENT

Question. Please provide a description of the research that has been funded under the Babcock Institute grant.

Answer. The Babcock Institute for International Dairy Research and Development was established with participation of the University of Wisconsin-Madison College of Agriculture and Life Sciences, School of Veterinary Medicine and the Cooperative Extension Division. The objective of the Babcock Institute is to link the U.S. dairy industry with the dairy industry in the rest of the world through degree training, continuing education, technology transfer, adaptive research, scientific collaboration and market analysis.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the need is to strengthen dairy industries around the world, to enhance international commercial and scientific collaborative opportunities for the U.S. dairy industry, and to draw upon global perspectives to build insight into the strategic planning of the U.S. dairy industry.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the Institute remains the linkage of the U.S. dairy industry with the rest of the world through training, continuing education and outreach, technology transfer, adaptive research, scientific collaboration and market analysis. Initial efforts were focused on planning and staffing. An initial activity was, and continues to be, the development of multi language extension materials about basic management techniques essential to optimize performance of U.S. dairy cattle overseas. This activity has grown to include manuals on Breeding and Genetics, Lactation and Milking, and Basic Dairy Farm Financial Management published in English, Spanish, French, Russian, and Chinese. Research on potential implications of NAFTA and GATT on the U.S. dairy industry was completed. A technical workshop on dairy grazing in New Zealand and the Midwest was organized and held in Madison during the fall of 1993. A technical workshop on Nutrient Management, Manure and the Dairy Industry: European Perspectives and Wisconsin's Challenges was held in Madison, Wisconsin during September 1994. A round table was held in January 1995 addressing "World Dairy Markets in the Post-GATT Era." Sponsored the Great Lakes Dairy Sheep Symposium in 1995 and 1996. Created a World Wide Web site in 1996 for distribution of Babcock Institute technical dairy fact sheets in four languages. The first International Dairy Short Course for a group of producers and technicians from Argentina has been organized on the University of Wisconsin Campus. Scientists' are being supported in collaborative research with New Zealand primarily to gain a better understanding of grazing systems as related to dairy management. An analysis of the impact of changes in European dairy policies has been completed. The Institute sponsored a Minnesota-Wisconsin Dairy Policy Conference to provide insights into current agricultural programs and policy issues in the dairy sector of the U.S. economy.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal years' 1992 and 1993, $75,000 per year; fiscal year 1994, $250,000; and fiscal years' 1995–1998, $312,000 per year; fiscal year 1999, $400,000; and fiscal year 2000, $510,000. A total of $2,648,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. During fiscal year 1992, $13,145 of State funds were used to support this program and $19,745 of State funds in fiscal year 1993 for a total of $32,890 during the first two years of this research. Information is not available for fiscal years 1994–1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at the University of Wisconsin-Madison College of Agriculture and Life Sciences.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Babcock Institute's overarching mission has been to link the U.S. dairy industry and its trade potential with overseas dairy industries and markets. The original objectives of this project have remained consistent over the years. However, each year specific objectives were proposed to further the mission of the Institute and to build on previous accomplishments. The Institute has accomplished specific objectives each year in a timely manner. The Babcock Institute has remained true to its original objective of linking Wisconsin and the U.S. to dairy industries around the world. This objective remains increasingly important with continued development of international markets for dairy products and technologies. The University researchers anticipate that work currently in progress will be completed by September 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Babcock Institute undergoes two independent review processes each year. The first is done by a committee of university and industry representatives who review the annual research proposal and amend it prior to submission to the agency. The annual proposal is reviewed by agency technical staff prior to approval for fund release. In addition, the institute was included in a comprehensive review of the programs of the Department of Dairy Science at the University of Wisconsin in May 1995. The agency project officer has conducted two on site reviews of the institute since its formation in 1992. The most recent review has found that the approach proposed by the researchers is appropriate and that the researchers are well qualified to perform the objectives as stated. The objectives of the proposal are within the mission of the United States Department of Agriculture and the Cooperative State Research, Education, and Extension Service.

BIODIESEL RESEARCH, MISSOURI

Question. Please provide a description of the research that has been funded under the biodiesel research grant.

Answer. Research on biodiesel involves examining the feasibility of producing biodiesel and other higher value products from oilseed crops including soybeans, canola, sunflower and industrial rapeseed. The project is also evaluating local processing plants whereby farmers could produce crops, process the crops locally and use the fuel and high protein feed coproducts on their farms or locally. This project undergoes merit review at the College of Agriculture.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The initial work is being conducted in Missouri. The results may provide the agricultural community with alternative crops and more diverse markets, additional marketable products and a locally grown source of fuel. This will result in increased investment in local communities, additional jobs, and increased value added in the farm and rural community sectors.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The ultimate goal of this project was to conduct research and development in an effort to help commercialize biodiesel as an important alternative fuel that could be used in fleets throughout the country. This would help to attain the objectives of the comprehensive Energy Policy Act of 1992, also known as EPACT. Success would increase the use of agricultural products as well as diversifying product markets, both of which would be beneficial to American farmers. This is especially important during periods of large commodity surpluses and extremely depressed prices such as we are currently experiencing. An important part of the ongoing research has been to identify potential markets where biodiesel can compete on an economic basis with other alternative fuels. An important part of the research this past year is to compare the cost of using a biodiesel blend, 20 percent biodiesel/80 percent petroleum diesel, as an alternative fuel in the St. Louis Metropolitan Fleet with other alternative fuels. Results indicate that the incremental cost of biodiesel over conventional diesel fuel is $1,013 per EPACT credit. The incremental cost of the other options investigated was $4,000 for compressed natural gas and $3,281 for E–85 per credit. Thus, from an incremental cost perspective, biodiesel is the least cost option for helping the City of St. Louis meet the clean air requirements of Energy Policy Act.

Question. How long has this work been underway, and how much has been appropriated, by fiscal year, through fiscal year 2000?

Answer. The work for this program began in fiscal 1993, and the appropriation for that year was $50,000. The appropriation for fiscal year 1994 was $141,000; and for fiscal years 1995–2000, $152,000 annually. A total of $1,103,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The source of non-Federal funds is State appropriated funds. The level in 1994 was $7,310. The funding level for 1995 was $74,854. Cost sharing by the University of Missouri each year for fiscal year 96 and fiscal year 97 was $80,000 and $86,000 respectively. Total cost sharing for the project by the University of Missouri has been $242,224. Matching funding for fiscal years 1998 and 1999 was $77,431 and $79,730. Total matching for the entire period has been $399,385. Additionally, some work funded by this grant has been conducted in cooperation with the National Biodiesel Board, plus the Missouri Soybean Merchandising Council.

Question. Where is this work being carried out?

Answer. The work is being carried out at the University of Missouri-Columbia.

Question. What was the anticipated completion date for the original objectives of the project Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigator believes that the work will be completed at the end of fiscal year 2000. Research and development completed by the end of that period will provide private industry with the information needed to successfully commercialize biodiesel.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The evaluation of using biodiesel as a complete fuel and in a blend has been met. This project is evaluated on an annual basis based on the annual progress report, discussions with the principal investigator as appropriate, and agency participation in collaborative activities related to this project. The review is conducted

by the cognizant staff scientist and it has been determined that the research is performed in accordance with the mission of this agency.

BLOCKING ANHYDROUS METHAMPHETAMINE PRODUCTION IOWA

Question. Please provide a description of the research that has been done under the Blocking Anhydrous Methamphetamine Production Grant, Iowa.

Answer. The Agency has requested Iowa State University to submit a grant proposal that has not yet been received. This is a new special grant for which there have been no previous awards.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher has indicated that anhydrous ammonia, a commonly used agricultural fertilizer, can be used as an ingredient for making methamphetamine, an illegal and highly addictive drug which has posed a drug enforcement problem for Iowa and other Midwestern States in recent years. At the discretion of the State, Hatch Act or other formula funding could be used to support this research. The National Research Initiative is another possible funding source for this project.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research is to discover a chemical procedure that will render anhydrous ammonia ineffective in producing methamphetamine while keeping the anhydrous ammonia cost-efficient and effective as a fertilizer. Preliminary results suggest that certain metal salts in catalytic amounts can be effective at inactivating the drug-producing reaction.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000 ?

Answer. Preliminary work funded by the State has been underway for approximately five months. This is a new special grant and $212,500 has been appropriated for fiscal year 2000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. State funds in an amount less than $5,000 were used to get the project started in fiscal year 1999. The State plans to cost-share the salaries of the principal investigator and a faculty collaborator in the amounts of $20,000 and $25,000 per year, respectively.

Question. Where is this work being carried out?

Answer. The research is being conducted in the Chemistry Department at Iowa State University, Ames, Iowa.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigator anticipates completing the original objectives of the project in two or three years. Additional or related objectives have not been specifically identified at this time.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. As a new special grant for which a proposal has not yet been received, this project has not yet been evaluated. A merit review panel will be convened to evaluate the project upon receipt of a proposal for fiscal year 2000.

BOVINE TUBERCULOSIS, MICHIGAN

Question. Please provide a description of the research that has been conducted under the Bovine Tuberculosis, Michigan grant.

Answer. The agency has requested the university to submit a grant proposal that has not yet been received.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for the research?

Answer. The need for this research relates to the critical problem of bovine tuberculosis which has now been discovered to have spread into the white-tailed deer population in the State of Michigan. If information on the scope of this disease in deer and methodologies to monitor and reduce this problem is not available rather soon, this could cause significant problems for the plans to eradicate tuberculosis from cattle in the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the research is to develop information about the spread of the bovine tuberculosis organism, Mycobacterium bovis, within the deer population of Michigan. Appropriate control programs can not be devised until the epidemiologic information is available.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $170,000.

Question. What is the source and amount of non-Federal funds by fiscal year?

Answer. Because this project is just being initiated in this fiscal year, 2000, there is no information available about other funding for the project.

Question. Where is this work being performed?

Answer. The research is being performed in the College of Veterinary Medicine, Michigan State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Because this project is just being started in fiscal year 2000, no evaluation has been done at this time.

BRUCELLOSIS VACCINE, MONTANA

Question. Please provide a description of the research that has been conducted under the Brucellosis Vaccine, Montana grant.

Answer. This project will study the immune response of bison to Brucella abortus antigen which has been incorporated into an organism that can be given orally to the animals. The objective is to produce an oral vaccine that can be easily administered to the bison without subjecting them to intensive handling procedures.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for the research?

Answer. The research project is intended to develop a strategy for vaccinating or immunizing cattle against brucellosis by incorporation of Brucella abortus genes into an orally administered system.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the project was to accomplish incorporation of Brucella genes which code for specific antigens into Salmonella species of bacteria and test the efficacy of oral administration of this material in developing systemic immunity in bison.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work was started in fiscal year 1999. The appropriation for fiscal year 1999 was $150,000, and for fiscal year 2000 was $425,000 for a total of $575,000.

Question. What is the source and amount of non-Federal funds by fiscal year?

Answer. The source and amount of non-Federal funds for fiscal year 1999 was $67,401 from State sources.

Question. Where is this work being performed?

Answer. The work is being performed at Montana State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives was May, 2002 or three years from the initiation of the project.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. As the project was started in the summer of 1999, there has not yet been an agency evaluation.

CENTER FOR ANIMAL HEALTH AND PRODUCTIVITY, PENNSYLVANIA

Question. Please provide a description of the research that has been funded under the Center for Animal Health and Productivity grant.

Answer. This research is designed to reduce nutrient transfer to the environment surrounding dairy farms in the Chesapeake Bay watershed. Progress to date includes the development of an individual dairy cow model which will predict ab-

sorbed amino acids and the loss of nitrogen in manure. This model has been developed into a user friendly software so that trained farm advisors can evaluate herd nutrient management status while on a farm site. A whole farm model has been developed which integrates feeding and agronomic practices to predict utilization of nitrogen and farm surpluses. Using these tools, a survey of dairy farms in the region has been done to assess nitrogen status on dairy farms and potential management practices to reduce nitrogen excesses on dairy farms. Refinement of the model tools and research to refine estimates of the environmental fate of excess nitrogen from dairy farms is in progress. During the last year, researchers have discovered that significant nitrogen is lost from the animal housing facility in the form of ammonia volatilization to the atmosphere. Preliminary estimates indicate that as much as 50 percent of the nitrogen consumed by dairy cows is lost as ammonia to the atmosphere and never reaches the manure storage and management system. Two on-site reviews of the program have been conducted by the CSREES Project Officer and a third is planned during 2000. The animal and farm models have been published in a peer reviewed scientific journals.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that reducing non-point pollution of ground and surface water by nitrogen from intensive livestock production units are of concern nationally, and especially in sensitive ecosystems like the Chesapeake Bay. This research is designed to find alternative feeding, cropping and management systems which will reduce net nutrient flux on Pennsylvania dairy farms to near zero. The principal researcher believes this research to be of national, regional, and local need. Members of the research team have applied for funding through both the National Research Initiative and the Fund for Rural America. The Initiative for Future Agriculture and Food Systems should provide additional opportunity for funding of this research.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals of this research remains the development of whole farm management systems which will reduce nutrient losses to the external environment to near zero. To date the researchers have developed their own models to more accurately formulate rations for individual dairy cows which permit the comparison of alternative feeding programs based upon both maximal animal performance and minimal nutrient losses in animal waste. This model is being tested on select commercial dairy farms to evaluate the extent to which total nitrogen losses in manure can be reduced without impacting economic performance of the farm. At the same time, whole farm nutrient models have been developed to evaluate alternative cropping systems which will make maximum use of nutrients from animal waste and minimize nutrient flux from the total farm system. These tools are currently being used to survey the current status of nutrient balance on farms in the area and efforts to fine tune the tools are in progress. The recent discovery of the quantitative significance of nitrogen loss as ammonia to the atmosphere and potential transport from the farm and redeposition to the earth's surface raises a whole new aspect of nutrient management.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. A grant has been awarded from funds appropriated in fiscal year 1993 for $134,000 and in fiscal year 1994 for $126,000. In fiscal years 1995–2000, $113,000 has been appropriated each year. A total of $938,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This information is not available at the present time.

Question. Where is this work being carried out?

Answer. Research is being conducted at the University of Pennsylvania, College of Veterinary Medicine at New Bolton Center, Pennsylvania.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The University researchers anticipate that work currently underway will be completed by September 2000. This will complete the original objectives of the research. The principal researcher indicates that consideration has been given to the broadening of objectives to include additional nutrients in the model system, but this has been dropped because technical expertise required is currently not readily available.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Center for Animal Health and Productivity Project was last reviewed in June 1997. An on site review by agency technical staff was conducted in June 1995. It was concluded that project objectives are within the goals of the program, are within the mission of both the USDA and CSREES, and the institution is well equipped and qualified to carry out the research project. The institution has made excellent progress toward the completion of the original goals of the project, but still must evaluate the effectiveness of the use of the new tools developed in reducing nutrient runoff from commercial dairy farms in the watershed of the Chesapeake Bay.

CENTER FOR RURAL STUDIES, VERMONT

Question. Please provide a description of the program that has been funded under the Center for Rural Studies Project in Vermont.

Answer. The Center for Rural Studies Project involves applied research focused on developing and refining social and economic indicators used to evaluate the impact of economic development programming and activities. They are perfecting a delivery format for technical assistance for community and small business development. A major component of current research relates to utilization of the world wide web as a delivery vehicle. Project proposal undergoes a merit review within the agency.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This is an on-going pilot to demonstrate the effective development and implementation of applied research, training, education, and technical assistance related to rural development. The grant has addressed methodology and strategies for assessing rural development program impacts.

Question. What was the original goal of this research and what has been accomplished?

Answer. The original goal was to create a database and analytical capability for rural development programming in Vermont. Examples of past accomplishments include maps presented to target child hunger programs, targeted areas for other types of rural development program intervention, analytical reports to guide the development of retail shopping areas, an "Economic Handbook for Vermont Counties", and strategies for using the world wide web to disseminate information.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The grant was initiated in fiscal year 1992. Appropriated amounts are: fiscal years 1992–93, $37,000 per year; fiscal year 1994, $35,000; fiscal years 1995–98, $32,000 per year; fiscal year 1999–2000, $200,000 for total appropriations of $637,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Fiscal year 1991 included $91,130 in State matching funds. Fiscal years 1993, $143,124; 1994–96, $3,547 State matching funds. Fiscal years 1997–98 State dollars were $2,931 plus researcher's salary. No non-Federal dollars were provided for fiscal year 1999–2000.

Question. Where is this work being carried out?

Answer. Applied research and outreach is being carried out through the University of Vermont.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original completion date was September 30, 1993. The original objectives of this research have been met. The additional objectives being presented for the current year will be completed by September 30, 2002. Proposal for current year has not been received to date.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency evaluates the merit of research proposals as they are submitted. No formal evaluation of this project has been conducted. The principal investigators and project managers submit annual reports to the agency to document impact of the project. Agency evaluation of the project includes peer review of accomplishments and proposal objectives and targeted outcomes.

CHESAPEAKE BAY AGROECOLOGY, MD

Question. Please provide a description of the research that has been funded under the Chesapeake Bay Agroecology, MD special grant.

Answer. The Chesapeake Bay Agroecology grant focuses on increasing our understanding of nutrient cycling, retention and utilization by vital agricultural industries located within vulnerable Chesapeake Bay watershed ecosystems that have been impacted by outbreaks of the toxic microorganisms Pfiesteria. There is a specific focus on Maryland's Eastern Shore.

This research focus has been identified as a priority by the State of Maryland's Blue Ribbon Pfiesteria Action Commission Report (1997), and by a Research, Education, and Economics (REE) strategic plan emphasis, Greater Harmony Between Agriculture and the Environment, that calls for a better understanding of the linkages between agricultural production, water and soil quality, range and forest land health, and habitat protection.

Since the projects were initiated last year, investigators spent the first year designing and implementing their research. While some preliminary results are available, quantitative conclusions will require more time.

Requested funds in fiscal year 2000 will support interdisciplinary projects that bring together the expertise of numerous scientists located at institutions throughout the University System of Maryland. These scientists continue to generate technical and scientific advances that guide Federal, State and local policy responses to Pfiesteria outbreaks.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research.

Answer. The continued viability of Maryland's important coastal agricultural economy, and the protection of Chesapeake Bay and Atlantic Coastal aquatic and agricultural resources from future Pfiesteria outbreaks, depends upon our ability to prevent future toxic algal blooms by stemming the flow of nitrogen, phosphorus, and other agricultural nutrients into estuarine waterways.

Maryland is an acknowledged leader in implementing agricultural nutrient management, soil conservation, conservation reserve, Chesapeake Bay tributary team and other cooperative planning strategies. However, non-point sources of nutrients remain a major source of pollution into Atlantic Coastal waterways, and farmland remains the largest controllable source of non-point nutrient loading into Chesapeake Bay. Thus, it is essential that we continue to increase our efforts to stem nutrient losses into waterways while preserving and enhancing important agricultural industries.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research is to increase our understanding of nutrient (nitrogen and phosphorus) cycling, retention and utilization by vital agricultural industries located in coastal regions of Chesapeake Bay, and to develop new technologies and strategies that limit nutrient losses while enhancing vital agricultural industries. This project was initiated in fiscal year 1999.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This project was initiated in fiscal year 1999, and has received $150,000 in fiscal years 1999 and 2000. A total of $300,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The project is in its first year. The State of Maryland has pledged to match 100 percent of the Federal funds provided in fiscal year 2000 and in future years for the Chesapeake Bay Agroecology Project.

Question. Where is the work being carried out?

Answer. This research will be conducted at University System of Maryland institutions and field research stations located throughout the State, with an emphasis on the Eastern Shore of Maryland which experienced significant Pfiesteria outbreaks.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Major progress has been made towards meeting specific projects as well as regional objectives. However, the issues being addressed are complex and solutions will require a long-term approach.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project has not yet been reviewed by the agency. However, the projects supported by this special grant are peer reviewed by an independent, external scientific panel and before competitive awards are made to qualified scientists located throughout the University System of Maryland.

CHESAPEAKE BAY AQUACULTURE, MARYLAND

Question. Please provide a description of the research funded under the Chesapeake Bay Aquaculture grant.

Answer. The agency requested that the university submit a grant proposal that has yet to be received. The objective of the Chesapeake Bay Aquaculture project is to improve the culture of striped bass and its hybrids through genetic improvement, reproductive biology, nutrition, health management, waste management, and product quality. The research is aimed at enhancing production efficiency, product safety, and provides a good balance between basic and applied research.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal investigator indicates that the Mid-Atlantic region of the country continues to play a significant role in the overall expansion of the domestic aquaculture industry. Research supported through this program will assist in enhancing the culture of striped bass and its hybrids in the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original research goal was to generate new knowledge that can be utilized to address serious problems limiting the expansion of the aquaculture industry in Maryland and the Mid-Atlantic region. The program concentrates on closing the life cycle, enhancing production efficiency, decreasing effluents, and improving product quality under aquaculture conditions of striped bass and its hybrids. Research is conducted in the areas of growth, reproduction and development, nutrition, aquacultural systems, product quality, and aquatic animal health. Progress has been made in developing controlled artificial spawning techniques, cryopreservation of sperm, and refining the nutritional requirements.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported under this grant began in fiscal year 1990 and the appropriation for fiscal year 1990 was $370,000. The fiscal years 1991–1993 was $437,000 per year; fiscal year 1994, $411,000; fiscal years 1995–1998, $370,000 each year, and for each of fiscal years 1999 and 2000, $385,000. A total of $4,342,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university reports the amount of non-Federal funding for this program is as follows: in fiscal years 1991 and 1992, $200,000; in fiscal years 1993 and 1994, $175,000; in fiscal year 1995 $400,000; in fiscal year 1996 $536,000; in fiscal year 1997 approximately $400,000; in fiscal year 1998, $360,000; and in fiscal year 1999, approximately $360,000. These funds are from direct State appropriations and other non-Federal funding sources.

Question. Where is the work being carried out?

Answer. Research is being conducted at the University of Maryland.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original specific research objectives were to be completed in 1993. The original specific research objectives have been met, however, research funded through this grant continues to address problems faced by the hybrid-striped bass industry in Maryland and throughout the country. The specific research outlined in the current proposal will be completed in fiscal year 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency's Program Managers and Program Specialist evaluate the progress of this project on an annual basis. The researchers are asked to the develop a research proposal consistent with the National Science and Technology Council's Strategic Plan for Aquaculture Research and Development. The university awards grants consistent with United States Department of Agriculture guidelines based upon internal competitive peer review. The 1999 review concluded that the proposal was well written with objectives clearly stated; that excellent progress is reported on previous work; that scientific and technical expertise is excellent; and that the proposal addresses high-priority research needs. The proposal does address high pri-

ority research needs for the aquaculture industry at the State, regional, and national level and is consistent with the National Science and Technology Council's Joint Subcommittee on Aquaculture Strategic Plan for Aquaculture Research and Development.

CITRUS TRISTEZA

Question. Please provide a description of the research that has been funded under the citrus tristeza research program grant.

Answer. Nine projects were selected for funding through a CSREES competitive grants program. Some of the research included survey information on distribution of the brown citrus aphid and Citrus Tristeza Virus in Louisiana and Arizona, the develop of resistant citrus varieties to the virus, better understanding of virus strains and the disease complex and biological control efforts on the brown citrus aphid in Florida.

Question. According to this research proposal, or the principal investigator, what is the national, regional, or local need for this research?

Answer. Citrus Tristeza virus is a problem in all citrus growing areas of the United States and Puerto Rico. The recent introduction of a new vector, the brown citrus aphid, into Florida has allowed for another pathotype of the virus to be introduced. This is a more destructive pathotype of the virus that causes more damage than those pathotypes already established in the citrus producing areas.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research is to reduce losses in citrus through research the characterization and detection of citrus tristeza virus strains, biology and control of the brown citrus aphid; host plant resistance; epidemiology and crop loss assessment; development of cross-protecting citrus tristeza virus strains, and research to enhance virus free budwood programs.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999 at the appropriation level of $500,000 and for fiscal year 2000, the appropriation is $595,000. A total of $1,095,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. There are no non-Federal funds provided for this grant.

Question. Where is this work being carried out?

Answer. Research is being carried out at land grant universities and research centers in the Florida, Louisiana, California, and Arizona.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This is the second year of this funding. An anticipated completion has not been determined as the original objectives have not been met at this time.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. All projects underwent a peer review at the University level, a scientific peer review and an agency merit review in August, 1999.

COASTAL CULTIVARS, GA

Question. Please provide a description of the research that has been funded under the Coastal Cultivars grant.

Answer. The Cooperative State Research, Education, and Extension Service has requested the university to submit a grant proposal that has not yet been received. The research will address new plant crops and sustainable production systems.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The research need to which this grant is directed is to potential new crop plants for the South Eastern United States Coastal zone and develop sustainable production systems. The results will have application throughout the region. Farmers currently have few options.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to improve rural income by identifying new crop cultivars for production in this area that now has few options.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1997 and the appropriations for fiscal year 1997 was $200,000, for fiscal year 1998, $250,000 for fiscal year 1999 was—0. The appropriations for fiscal year 2000 is $170,000. The total is $411,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were estimated to be $97,400 in 1997 and $146,200 in 1998.

Question. Where is this work being carried out?

Answer. The work is being carried out at the University of Georgia Coastal Garden research facility.

Question. When was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is fiscal year 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Project proposals for this program were reviewed and evaluated in fiscal years 1997 and 1998.

COMPETITIVENESS OF AGRICULTURE PRODUCTS, WASHINGTON

Question. Please provide a description of the research that has been done under the Competitiveness of Agriculture Products research grant?

Answer. This research identifies international marketing opportunities for Northwest firms in the forest products and food products sectors.

Question. According to the research proposal, or the principal researchers, what is the national, regional, or local need for this research?

Answer. Most food processing firms are small. Their export sales are made in many widely scattered markets with different languages, customs, institutions, and market structures. These markets have also been subjected to wrenching changes. University researchers provide a central and stable core of knowledgeable experts who can guide small export businesses in navigating these markets successfully.

Forest products from the Pacific Northwest can be shipped to Asian markets for less than shipping them to the eastern population centers in the United States. Research has opened Asian markets to U.S. light frame construction building technology, providing good opportunities to export higher valued secondary manufactured products to Japan and China. Research has also been focused on forest management alternatives that can better satisfy environmental goals with less negative impacts on timber-dependent communities. The Northwest agricultural economy is highly dependent upon being able to export given that food production in the region greatly exceeds food consumption.

Northwest wood products companies that could export are generally small and are not able to provide their own research. Construction technologies used in Asian markets are inferior to U.S. technology, yet there is a long history of use and cultural appreciation of traditional methods. Deregulation and change in these markets has required extensive research on comparability of alternative product and building standards, quality and service needs, training in the U.S. technology, and customization to foreign consumer values. The Pacific Northwest can grow more wood with higher quality using more advanced technologies while reducing the impact on timber-dependent communities from harvest constraints to protect certain species.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to provide the information on markets and product technologies that can open higher-valued international markets to U.S. exporters. Foreign purchasers need information on the advantages of U.S. products, and U.S. exporters need information on the substantially different quality and service requirements for serving foreign markets. If the United States can remain competitive and retain its presence in these markets in the face of a stronger dollar, exports should return to a high growth path once Asian economies recover. Evidence to date suggests that this is indeed happening.

The food production research has focused on finding new market opportunities for Pacific Northwest producers, solving technical impediments to exports and developing new products and new processes that will enhance exports. It has pinpointed emerging market opportunities in Southeast Asia, China, Mexico, and Latin America. It has improved the export quality of diverse products, such as asparagus, ap-

ples, grass-seed, and wheat. It has helped commercialize high-value products, such as Wagyu beef, azuki beans, wasabi radish and burdock, and pioneered new food processing technologies that produce fresh-like, shelf-stable products and that save energy and reduce waste.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work began in fiscal year 1992. The appropriation for fiscal years 1992–1993 was $800,000 each year; fiscal year 1994, $752,000; fiscal years 1995–1998, $677,000 each year; and $680,000 in fiscal years 1999 and 2000. A total of $4,420,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are as follows: $716,986 State appropriations, $209,622 product sales, $114,000 industry, and $661,119 miscellaneous, for a total of $1,701,727 in 1991; $727,345 State appropriations, $114,81 product sales, $299,000 industry, and $347,425 miscellaneous for a total of $1,488,351 in 1992; $1,259,437 State appropriations, $55,089 product sales, $131,000 industry, and $3,000 miscellaneous, for a total of $1,448,526 in 1993; $801,000 State appropriations, $1,055,000 product sales, $1,040,000 industry, and $244,000 miscellaneous, for a total of $3,140,000 in 1994; $810,000 State appropriations, $42,970 product sales, $785,000 industry, and $2,000,000 gift of a ranch due to the International Marketing Program for Agricultural commodities and Trade Center's research on Wagyu cattle, for a total of $3,637,970 in 1995; $844,000 State appropriations, $45,000 product sales $900,000 industry, and $45,000 miscellaneous, for a total of $1,834,000 in 1996; $876,000 State appropriations, $1,606,000 industry, for a total of $2,482,000 in 1997, $1,180,000 State appropriations, $604,000 industry, for a total of $1,784,000 in 1998, and $1,551,000 State appropriations, $1,006,400 industry, $62,000 product sales, and $30,096 miscellaneous, for a total of $2,649,496 in 1999.

Question. Where is the work being carried out?

Answer. The food research is being carried out by the International Marketing Program for Agricultural Commodities and Trade (IMPACT) at Washington State University, Pullman, and the forest products research is carried out at the Center for International Trade in Forest Products (CINTRAFOR) at the University of Washington, Seattle.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was projected for 3 years duration to be completed following fiscal year 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Two evaluations of the Washington State University component of the project were conducted in 1992 by the U.S. Department of Agriculture. The State of Washington Legislative Budget Committee gave the Washington State Center exemplary marks for meeting its objectives. On-site reviews are conducted annually of the University of Washington component of the project through annual meetings of the project's executive board attended by the agency's staff. Both components are reviewed annually by the agency. The project is meeting the key objective of trade expansion through innovative research. The University of Washington project was formally reviewed by the agency in 1991. State reviews were completed in 1992 and 1994. A formal review by the University was completed in 1997. A broad survey of constituents impacted by the research was completed, resulting in a very favorable review of the Center's activities and a recommendation to continue this research. In 1998, State of Washington legislation eliminated the requirement for State reviews of the center, including one scheduled for 1999, based on hearings that focused on the other favorable reviews and the continuous oversight by the Executive Board.

COOL SEASON LEGUME RESEARCH

Question. Please provide a description of the research that has been funded under the Cool Season Legume Research grant.

Answer. The Cool Season Legume Research Program involves projects to improve efficiency and sustainability of pea, lentil, chickpea, and fava bean cropping systems collaborative research. Scientists from seven States where these crops are grown have developed cooperative research projects directed toward crop improvement, crop protection, crop management, and human nutrition/product development.

Question. According to the research proposal, or principal researcher, what is the national, regional or local need for this research?

Answer. The multi-state region covered by this program represents most of the nation's production of cool season food legumes. These minor crops are very important economically to the region, are the primary source of these important food items, and contribute significantly to U.S. agricultural exports. The growers face a number of production problems that need research if this industry is to compete with international competition. In addition, use of these crops in rotation with wheat is critical to the production of wheat, the major cash crop for the region. National research in the area of crop genetics could potentially be supported by competitive grants awarded under the National Research Initiative and the Initiative for Future Food and Agricultural Systems.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The principal researcher believes the original goal of this project was to improve efficiency and sustainability of cool season food legumes through an integrated collaborative research program and genetic resistance to important virus diseases in peas and lentils. Evaluation studies of biocontrol agents for root disease organisms on peas are underway. Other studies are evaluating integration of genetic resistance and chemical control. Considerable progress has been made using biotechnology to facilitate gene identification and transfer. Management system studies have addressed tillage and weed control issues.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 with appropriations for fiscal year 1991 of $375,000; fiscal year 1992 and 1993 $387,000 per year; fiscal year 1994, $364,000; fiscal year 1995, $103,000; fiscal years 1996 and 1999, $329,000, fiscal year 2000 $329,000. A total of $3,261,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds provided for this grant were as follows: 1991, $304,761 State appropriations, $14,000 industry, and $18,071 other non-Federal; 1992, $364,851 State appropriations, $15,000 industry, and $14,000 other non-Federal; 1993, $400,191 State appropriations, $19,725 industry, and $10,063, other non-Federal; and 1994, $147,607 non-Federal support. Non-Federal support for 1995 was $150,607; for 1996 it was $386,887; for 1998, $392,000 and for 1999 $557,000.

Question. Where is this work being carried out?

Answer. Research has been conducted at agricultural experiment stations in Idaho, Oregon, Washington, Wisconsin, Minnesota, New York and New Hampshire. The funds have been awarded competitively among participating States and not all States receive funds each year.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The projected duration of the initial project was five years. Revised objectives are expected to be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation?

Answer. The project is evaluated annually by a university/industry advisory panel. Proposals are peer reviewed at the universities and by the agency National Program Leaders. This research has provided vital information which is already being used to improve production management. However, a number of critical issues related to insect and disease control as well as crop quality remain to be addressed. Breeding for insect and disease resistance is given the highest priority, while crop management alternatives to help reduce disease and insect pest problems will continue to be studied.

CRANBERRY AND BLUEBERRY, MASSACHUSETTS

Question. Please provide a description of the research that has been funded under the cranberry/blueberry research program grant.

Answer. CSREES has requested the university to submit a grant proposal that has not yet been received.

Question. According to this research proposal, or the principal investigator, what is the national, regional, or local need for this research?

Answer. The research is a new approach to managing pests associated with cranberries and blueberries in Massachusetts. The program is focusing on the use of mo-

lecular genetics to reduce pesticide dependency in cranberry production. The research will be applicable to all cranberry research in States where cranberries are produced.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goals of this research are to determine whether early emerging and late emerging dodder populations can be differentiated using molecular markers; to determine the relationships among several isolates of a fungus which might be used in biological control; to screen various plant pathogen fungi isolates for infectivity and virulence and determine the presence of genes in these isolates; and develop an in vitro assay system for root rot and induce resistance in cranberry plants caused by different isotypes of the fungus.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999 and the appropriation for fiscal year 1999 and 2000 was $150,000. A total of $300,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. There were no non-Federal funds provided for this grant in 1999 or 2000.

Question. Where is this work being carried out?

Answer. Research is being carried out at the University of Massachusetts Cranberry Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Since this began in fiscal year 1999, the original objectives have not yet been met.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project underwent a merit review at the agency level in January, 1999. Due to delayed funding of this project until July of 1999, research is just now starting on these objectives.

CRANBERRY-BLUEBERRY DISEASE AND BREEDING, NEW JERSEY

Question. Please provide a description of the research that has been funded under the Cranberry-Blueberry Disease and Breeding, New Jersey grant.

Answer. The work has focused on identification and monitoring of insect pests on blueberries and cranberries, the identification, breeding, and incorporation of superior germplasm into horticulturally-desirable genotypes, identification and determination of several fungal fruit-rotting species, and identification of root-rot resistant cranberry genotypes. Overall, research has focused on the attainment of cultural management methods that are environmentally compatible, while reducing blueberry and cranberry crop losses.

Question. According to the research proposal, or the principal investigator, what is the national, regional, or local need for this research?

Answer. This project involves diseases having major impacts on New Jersey's cranberry and blueberry industries, but the findings here are being shared with experts in Wisconsin, Michigan, and New England.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was the development of cranberry and blueberry cultivars compatible with new disease and production management strategies. Over 75 blueberry selections with wild blueberry accessions resistant to secondary mummy berry infections have been moved into advanced testing identified. The biology and seasonal life history of spotted fireworm on cranberries has been determined. A pheromone trap-based monitoring system for cranberry fruitworm was developed and further refined for commercialization. Blueberry fruit volatiles attractive to blueberry maggots were identified and tested in the field. Researchers have planted over 4500 cranberry progeny for evaluation. Seven major fruit-rotting fungal species were identified, and their incidence in 10 major cultivars of blueberry and cranberry were determined. It is likely that resistance to fruit rot is specific to fungal species.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1985, $100,000; fiscal year 1986–1987, $95,000 per year; fiscal year 1988–1989,

$260,000 per year; fiscal year 1990, $275,000; fiscal years 1991–1993, $260,000 per year; fiscal year 1994, $244,000; and fiscal years 1995–1999, $220,000 each year. A total of $3,209,000 has been appropriated

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. State and non-Federal sources are providing funds in the amount of 250,000 each year.

Question. Where is this work being carried out?

Answer. This research is being conducted at the New Jersey Agricultural Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The completion date for the original objectives was 1995. Those objectives have not been met. To complete the breeding, disease and insect management and provision of new management guidelines for extension and crop consultants, it estimated that an additional five to nine years will be required.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted?

Answer. The last agency evaluation of this project occurred in January, 1999. In summary, the evaluation stated that the effort has continued to be highly productive, with various improved management strategies, plant materials and environmentally-balanced pesticides being areas of major impact. Some specific accomplishments included continued evaluation of blueberry and cranberry germplasm for yield, color, fruit rot, and flavor; and development of an efficient plant regeneration system for cranberry for genetic transformation. Other research includes trap and lure development for monitoring the cranberry fruitworm and evaluation of several aphicides in blueberries. The discovery of an antisporulant in a registered fungicide provide for a novel use patent for blueberry anthracnose control.

CRITICAL ISSUES

Question. Please provide a description of the research that has been funded under the grant.

Answer. These funds support research on critical issues related to new or emerging pests and diseases of animals and plants. The program is expected to initiate research in a short time period until other resources can be secured to address the issue. The program began in fiscal year 1996 when potato late blight and vesicular stomatitis in animals were the two targeted emerging problems chosen for funding. Funding for these two projects was continued with fiscal year 1997 funds to permit orderly conclusion of work leading to integrated pest management efforts for the potato late blight and for further surveys on wildlife reservoirs of the vesicular stomatitis virus. During fiscal year 1998 these funds were used for support of a project on a newly emerging corona virus strain that is a probable cause of severe outbreaks of shipping fever or pneumonia in transported beef cattle. For plant diseases, fiscal year 1998 funds were used to support two major research projects on a new disease of sorghum, Sorghum Ergot. The two projects were Epidemiology and Life History of Ergot and Development of Integrated Control of Sorghum Ergot. In fiscal year 1999, Johne's Disease of cattle was identified by both veterinary researchers and APHIS animal disease control staff as a major issue. For plants in fiscal year 1999, research was supported on the insect vectored disease, Tomato Yellow Leaf Curl virus.

Question. What is the national, regional or local need for this research?

Answer. Vesicular stomatitis was of national impact due to its similarity to foot and mouth disease and the negative effect on movement of horses, cattle and swine during an outbreak. Since 1992 new, highly virulent strains of the potato late blight fungus Phytophthora infestans caused severe losses in potato and tomato production throughout the United States, resulting in what some experts term a national crisis. From 1993 to 1995, a series of meetings involving growers, consultants, industry, academia and government assessed the growing problem and participants concluded that extraordinary steps were needed to mobilize research efforts that would help address the problem in the near term. Bovine shipping fever causes heavy economic losses to the beef industry in cattle being shipped to feedlots and vaccines for currently recognized viruses seem to be ineffective in certain settings in preventing outbreaks. The isolation of a probable new virus, bovine respiratory corona virus represents an opportunity to contribute to the reduction of this disease complex in cattle. Sorghum Ergot is a serious disease of sorghum which was first detected in Texas in March, 1997. It rapidly spread to almost all sorghum growing regions of

the U.S. by September 1997. Johne's Disease has been identified by several commodity and animal health organizations as the leading problem for dairy cattle owners and also a serious issue for beef producers. Decisions on specific research needs and focus of research projects is decided after consultation with a variety of commodity stakeholders, other USDA agencies, especially the Animal and Plant Health Inspection Service, scientists in the land grant system, and other public input. Tomato Yellow Leaf Curl virus is a newly introduced disease into Florida that has caused considerable crop loss. The disease moved rapidly over the entire State and now has moved into Georgia. This disease is vectored by the silver leaf whitefly and affects tomatoes, beans, and other vegetables. The disease symptoms are severe stunting, distortion, and high rates of flower loss.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research supported by this program is to focus on specific questions or issues which are considered to be most important in developing control or prevention programs for the disease agent under investigation, whether in plants or animals. Thus, for the animal studies, the focus has been on identifying natural reservoirs of the vesicular stomatitis virus and insects which are capable of transmitting the disease among animals; determining the precise significance of the apparent new corona virus in shipping fever pneumonia of beef cattle; and developing a sub-unit vaccine for Johne's Disease in cattle and determining the significance of a linkage between Johne's Disease and Crohn's disease of humans. In spite of a very large research effort, the natural reservoir for vesicular stomatitis virus is still unknown. The bovine respiratory disease work on the apparently new respiratory corona virus is expected to validate the role of this virus in outbreaks of pneumonia in cattle vaccinated for other known causes of shipping fever. Confirmation of such a fact will provide a basis for development of control measures including vaccine development. Research was initiated to provide growers with the knowledge and technologies they need to reduce economic losses resulting from potato late blight with less reliance on pesticides. Research initiated with fiscal year 1996 funds is making progress in developing modeling tools and management approaches that are an important step towards reducing the devastating effects of late blight. The National Late Blight Fungicide Trial provided important information on the efficacy of an array of fungicide programs. A World Wide Web site was established to provide growers, researchers and industry with the latest information on management of potato late blight. The research projects on Sorghum Ergot were intended to develop information about the history and epidemiology of the disease which would lead to studies on development of integrated control programs for this fungus. Research on Tomato Yellow Leaf Curl Virus has aided in the understanding of which field crops other than tomato serve as a source of virus infection. Weed reservoirs were also studied as potential whitefly infection sites. These results will help in the development of field management strategies for this virus. Another research project tested transformed tomatoes that had been selected for resistance to Tomato Yellow Leaf Curl virus. This approach was successful in developing resistant tomatoes to another similar virus and is expected to produce highly resistant tomato varieties to Tomato Yellow Leaf Curl virus.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. $200,000 were appropriated in fiscal years 1996–2000 for a total appropriation of $1,000,000 to date. The fiscal year 2001 budget proposes an increase of $267,000 for a total of $467,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This information should be available within 30 days.

Question. Where is this work being carried out?

Answer. From 1996 to 1997, the vesicular stomatitis work was conducted at the University of Arizona and Colorado State University. The potato late blight work has been conducted at Washington State University, Oregon State University, University of Idaho, University of Wisconsin, and Pennsylvania State University, and North Carolina State University. In 1998 the bovine respiratory disease work was performed at Louisiana State University. The Sorghum Ergot work is being done at the University of Nebraska and Texas A&M University. In 1999 the research on Johne's Disease has been performed at Iowa State University and the University of Iowa. The research on Tomato Yellow Leaf Curl Virus was carried out at the Gulf Coast Research and Education Center, University of Florida, Bradenton, FL and the Tropical Research and Education Center, University of Florida, Homestead, FL.

Question. What was the anticipated date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Critical Issues funds are intended to support the initiation of research on issues requiring immediate attention until other, longer-term resources are available. The objectives of the projects are short-term and are expected to be completed within a 1-2 year period. This has been true for the vesicular stomatitis and potato late blight work. These projects have been reviewed to ensure compliance with the original goals during fiscal year 1997.

The subsequent project grants for potato blight in 1997 and for Sorghum Ergot and bovine respiratory disease in 1998 had short term goals and are expected to be completed by the end of their project years which will occur in late spring 1999. Similarly, the objectives of the research funded with fiscal year 1999 funds are expected to be completed by the summer of 2000. For the Johne's Disease work, the emphasis is on determining the likelihood of a link between this disease of cattle and Crohn's Disease in the human and also developing a vaccine to prevent further spread within the cattle population. For Tomato Yellow Leaf Curl Virus, the emphasis is on field management of the disease and the development of virus resistant varieties of tomato.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. All projects were reviewed for scientific merit before funding decisions were made. Also, scientists being supported with these funds are in close contact with CSREES' National Program Leaders in these areas so that the agency is kept abreast of developments as they occur. Each investigator is required to submit a detailed report at the end of the funding period to document their accomplishments with these funds. In addition, site visits are arranged when convenient to include as part of other official travel to that State. The vesicular stomatitis research had a site visit review in early 1998 and was reviewed as a completed project in March, 1999 during a program review at the University of Arizona. The final results of the bovine respiratory work were submitted to CSREES for review in early fall, 1999. The plant related projects have received similar reviews as the projects have moved forward, and the results are being reported at regional and national meetings.

DAIRY AND MEAT GOAT RESEARCH, PRAIRIE VIEW A&M, TEXAS

Question. Please provide a description of the research that has been funded under the dairy goat research grant?

Answer. The program has addressed a range of issues associated with goat production. Research by scientists at the International Dairy Goat Center, Prairie View A&M University focuses on problems affecting goat production in the United States. Issues included are the study of nutritional requirements of goats, disease problems, methods to improve reproductive efficiency in the doe, the use of gene transfer to improve caprine genetics and the evaluation of breeding schemes to improve meat and milk production. Currently, research is in progress to assess the economics of alternative breeding and rearing systems for goats in the southeastern region of the U.S., to study the incidence and impact of intestinal parasites, and to develop least-cost health management strategies for parasite control.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that nationally, most of the farm enterprises that include goats are diverse and maintain a relatively small number of animals. Responding to disease, nutrition, breeding and management problems will improve efficiency of production and economic returns to the enterprise.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to conduct research that will lead to improvement in goat production among the many small producers in the United States. Research has been conducted to develop and improve nutritional standards, improve genetic lines for meat and milk production and to define mechanisms that impede reproductive efficiency in goats. Current efforts focus on the development of enterprise budget management tools for goat producers in the Texas gulf coast region.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded through appropriated funds as follows: $100,000 per year for fiscal years 1983–85; $95,000 per year for fiscal years 1986–88; no funds were appropriated in fiscal year 1989; $74,000 for fiscal year 1990;

$75,000 per year for fiscal years 1991–1993; $70,000 for fiscal year 1994; and $63,000 per year for fiscal years 1995–2000. A total of $1,332,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The University reports no non-Federal funds expended on this program.

Question. Where is this work being carried out?

Answer. Research is being conducted at Prairie View A&M University in Texas.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The overall objective of this research is to support the needs of small farms engaged in the production of meat and milk from goats along the Texas Gulf Coast. The University researchers continue to address those needs on an annual basis and anticipate that work currently in progress will be completed by the end of fiscal year 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Dairy/Meat Goat Research grant was reviewed last in June 1997. The project objectives are within the goals of the program, are within the mission of both USDA and CSREES, and the institution is well equipped and qualified to carry out the research project.

DELTA RURAL REVITALIZATION, MISSISSIPPI

Question. Please provide a description of the program that has been funded under the Delta Rural Revitalization, Mississippi Project?

Answer: The Delta Rural Revitalization, Mississippi Project involves applied research and outreach focused on creating new and expanded economic development opportunities for the Mississippi Delta region. The project has gone through several phases in the delineation of a strategy for long range development within the region. Phase I was completed with the delivery of a baseline assessment of the economic, social, and political factors that enhance or impede the advancement of the region. Phase II of the project evaluated the potential for entrepreneurship and small business creation as mechanisms to improve economic conditions. Phase III is now focusing on technical assistance to Delta region manufacturing firms to strengthen their ability to provide employment and incomes and includes the development and refinement of data bases and development statistics. The proposals are submitted for internal review and evaluation within the agency. Recommendations are presented to enhance impact on regional and national agendas and provide greater impact on targeted region.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This is an on-going pilot to demonstrate the effective development and implementation of applied research, training, education, and technical assistance related to job and business development as a development strategy. The principal researcher believes that the databases, technical assistance, and analytical capability will increase the effectiveness of economic development and entrepreneurial activity in the region.

Question. What was the original goal of this research and what has been accomplished?

Answer. The applied research and outreach project was designed to increase the ability to guide economic development strategically through target industry attraction. They developed an analytical baseline for the Delta region to benchmark economic development progress and to profile potential arenas of opportunity. An entrepreneurial forum was established to help new business ventures with start-up advice and assistance. A venture capital association was formed to help both inventors and businessmen find capital resources to carry out development initiatives. The emphasis of the project is now shifted to technical assistance for existing industries.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from appropriated funds in the following amounts per year: fiscal year 1989, $175,000; fiscal year 1990, $173,000; fiscal years 1991–93, $175,000 per year; fiscal year 1994, $164,000; fiscal years 1995–2000, $148,000 per year. A total of $1,925,000 has been appropriated and awarded.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Total non-Federal funds from the State of Mississippi directed to this project, as reported by Mississippi State University, are: fiscal year 1991, $117,866; fiscal year 1992, $84,402; fiscal year 1993, $68,961; fiscal year 1998, $57,404. Reports for other years indicate no non-Federal funds.

Question. Where is this work being carried out?

Answer. Applied research and outreach is being carried out through Mississippi State University and sub-contractors.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original completion date was September 30, 1990. The original objectives of this research have been met. The additional objectives being presented for the current year should be completed by September 30, 2000. The current year proposal has not been submitted to date.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency evaluates the merit of research proposals as they are submitted. No formal evaluation of this project has been conducted. The principal investigators and project managers submit periodic reports to the agency to document the impact of the project. Significant suggestions have been offered to improve the relevance and impact of this project. Time lines tend to lag on targeted accomplishments. An assessment of the project was conducted by the Social Science Research Center at Mississippi State University and a report compiled in November, 1996. A site review was conducted in April, 1999, to assess the merits of research efforts underway. A review and evaluation by an outside consultant is currently underway.

DESIGNING FOODS FOR HEALTH, TEXAS

Question. Please provide a description of the research that has been funded under the Designing Foods for Health, Texas grant.

Answer. Designing fruits and vegetables for improved health and nutrition is the overall goal. Health scientists have documented that naturally occurring compounds such as flavonoids, carotenoids, and antioxidants, have health benefits to prevent heart disease, stroke, and some forms of cancer. The research objective is to develop fruits and vegetables that have uniform, high levels of these compounds so all consumers can prevent chronic diseases through their diet. The fiscal year 1999 grant supports research through June 2000. CSREES requested the university submit a grant proposal for fiscal year 2000 that has not yet been received.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to improve the quality and health-related benefits of fruits and vegetables. Health scientists have documented that fruits and vegetables have naturally occurring compounds that promote health and prevent disease. The medical community advocates that preventing disease is more advantageous than trying to cure it. For example, a large effort of Texas health science centers is to develop improved diets that can aid in prevention of colon, esophagus, and prostate cancers. Improved fruits and vegetables for health will provide an enormous benefit for consumers worldwide.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to design fruits and vegetables that assist in preventing diseases through diet. The most exciting accomplishment has been the development of the new carrot, BetaSweet. It was designed to be attractive, crisp in texture, have excellent sweet carrot flavor, and to contain a higher content of beta-carotene than most orange carrots in the marketplace. Beta-carotene is a major source of Vitamin A and is thought to play additional roles in preventing certain forms of cancer, especially oral cancer. This carrot also contains high levels of anthocyanins that are normally found in fruits. They are known to be excellent antioxidants that prevent blood clotting, aid in the prevention of some cancers, heart disease, and strokes. The researchers are also improving health promoting aspects of the BetaSweet carrot by adding lycopene, which is found in tomatoes. All these improvements are being done using conventional breeding.

Question. How long has this work been underway and how much has been appropriated by fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999, and the appropriation for fiscal year 1999 was $250,000 and fiscal year 2000 was $318,750. A total of $568,750 has been appropriated.

Question. What are the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were $206,500 from university funds and $165,000 from an endowment fund in 1999.

Question. Where is this work being carried out?

Answer. Research will be conducted at the Vegetable and Fruit Improvement Center and other locations within the Texas A&M University System.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original overall objective of developing fruits and vegetables that contain high levels of naturally occurring compounds that have health benefits continues to be addressed. The specific objective of improving the carrot by increasing the carotenoid and anthocyanin content while maintaining superior flavor and textural properties will be completed in 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project director conducted a review by peer scientists at Texas A&M prior to submitting the proposal for fiscal year 1999. The Vegetable and Fruit Improvement Center has a very active advisory board which reviews the Center's research programs annually.

DIAPREPES/ROOTWEEVIL, FLORIDA

Question. Please provide a description of the research that has been funded under the Diaprepes/Rootweevil grant.

Answer. The funds are requested to address objectives established by an interagency/industry task force, as follows:

—Assessment of the plant injury and economic damage caused by the root weevil on horticultural, agronomic and ornamental plants in the affected area, and the potential for the pest to spread beyond its current range;

—Development and use of monitoring tools to evaluate population levels, regions infested, and to predict where economic damage is likely to occur. Since the pest's most damaging stages, the larvae, feed on roots, damage is not evident, and thus monitoring for the presence of the weevil and assessing population levels is most difficult;

—Development, field evaluation and implementation of management tools that individually will assist in reducing populations or the impact of their presence, and collectively, will serve as the basis for inclusion of weevil management into existing pest management programs in citrus and other affected crops. These tools also are being suggested as strategies important to management of containerized plant material, ornamentals and fruit trees, so that the weevil is not moved beyond its current area of infestation into other States and regions. Included in the tools to be developed are chemical, biological, cultural and mechanical methods.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Diaprepes abbreviatus is a pest introduced into Florida from its native Caribbean Islands in the late 1960's, but remained very localized in few citrus groves until the late 1980's when for unknown reasons, the pest began to spread, helped by movement of potted plant material and other mechanical spread methods. Known as a serious pest of a wide range of plants, from grasses, including Bermuda grass, to legumes, fruit trees and a large number of ornamental plants, this pest has the potential to not only affect traditional agricultural environments, but also native plants and can cause enormous economic losses in the home landscape, a multi-billion dollar industry in Florida and the Southeast. Further movement could expand the impact of this pest to other areas of the United States, and could invoke regulatory concerns between trading partners and commerce. Currently, there is no known tool or collection of tools that effectively limits population growth of the pest, and thus, there is no remedy for this pest at present. Development and evaluation of methods to locate and reduce larval populations must rely on a combination of treatments that are effective, safe, and economical. At present, those infested with the pest must stand by and watch the trees decline.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to develop and deliver strategies to eliminate further spread and maintain viable plant health in the presence of the

pest. Since it was first funded in 1999 progress towards attainment of the goal is still being assessed.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Fiscal year 2000 is the first year of the grant and $297,500 has been appropriated for fiscal year 2000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Numerous investments will continue to be made in this research. University of Florida has several programs who have focused their efforts on Diaprepes research, including the entomologists, pathologists and plant improvement teams. Internal funds as well as effort have been redirected to address this problem. Likewise, United States Department of Agriculture, Agricultural Research Service scientists at several locations in the Southeast have been assigned to this research and internal funding is being utilized to address this problem. The citrus growers of Florida have dedicated considerable grant dollars from a self-tax for research, and more recently, other commodity groups are contributing to fund research. In-kind support through cooperation, shared equipment and other means are being offered to address the issue. However, the speed with which the pest has spread and the increasing economic impact has outpaced the current allocation of resources, and the economic losses are rising.

Question. Where is the work being carried out?

Answer. The work is being carried out at the University of Florida at Gainesville.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The plan for the work will be submitted with the research proposal.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This is a new project for which an evaluation has not been conducted

DROUGHT MITIGATION, NEBRASKA

Question. Please provide a description of the research that has been funded under the Drought Mitigation grant.

Answer. The National Drought Mitigation Center in the School of Natural Resource Sciences at the University of Nebraska has a comprehensive program aimed at lessening societal vulnerability to drought. Activities of the Center include promoting and conducting research on drought mitigation and preparedness technologies, improving coordination of drought-related activities and actions within and between levels of government, and assisting in the development, dissemination, and implementation of appropriate mitigation and preparedness technologies in the public and private sectors. Emphasis is directed toward research, outreach projects and mitigation/management strategies that stress risk minimization.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The Federal Emergency Management Agency has recently estimated that annual losses attributable to drought in the United States are between $6-8 billion. Drought impacts are escalating in response to increasing demands for water and other natural resources, increasing and shifting population, new technologies, and social behavior. These impacts are diverse and affect the economic, environmental, and social sectors of society. This fact was reinforced dramatically in 1996 in the Southwestern United States. Impacts in Texas alone were estimated to be more than $5 billion.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to create a National Drought Mitigation Center and develop a comprehensive program aimed at lessening societal water shortages and vulnerability to drought. The Center has created an information clearinghouse and is delivering information to a diverse audience of users through its home page. Over 50,000 users now access the Center's home page each month. The Center's award winning home page was used extensively by State and Federal agencies during the 1999 drought to assist in the evaluation and response process. This home page networks users of drought-related information in the United States and elsewhere with information that would otherwise be unavailable or inaccessible to users.

The National Drought Mitigation Center played an important role in the response of Federal and State Government to the 1996 severe drought in the Southwest and

southern Great Plains States. In addition to providing timely and relevant information on drought severity and alternative response, mitigation, and planning measures, the Center participated in the Multi-state Drought Task Force workshop organized at the request of President Clinton and helped formulate long-term recommendations to improve the way this Nation prepares for and responds to drought. The Center is also a member of the Western Governors' Association

Drought Task Force. This Task Force made recommendations to Reduce the risks associated with drought in the western United States.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant received an appropriation of $200,000 in fiscal years 1995 through 2000, for a total appropriation of $1,200,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The University of Nebraska contributed $75,737 of non-Federal funds in support of this research in fiscal year 1995, $58,977 in fiscal year 1996, and $61,545 in fiscal year 1997. The University of Nebraska contributed $67,819 in fiscal year 1998, and $74,887 in fiscal year 1999.

Question. Where is this work being carried out?

Answer. The research is being conducted at the University of Nebraska-Lincoln.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The research conducted under this project is being undertaken within a series of nine tasks. Significant progress on each of these tasks has been made, but these activities are ongoing. The information clearinghouse has been created, but new information and documents are continuously added to the home page in response to users' needs and requests. In addition, the drought watch section is updated monthly to assist users in evaluating current climate and water supply conditions. Research on new climatic indices to monitor drought and water supply conditions are being tested and mitigation technologies and existing State drought plans are continuously evaluated. New activities are also being initiated in response to the growing interest and awareness in drought mitigation in the United States and elsewhere. The activities of the Western Drought Coordination Council provides the Center with a broadening range of research needs on an annual basis.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was peer-reviewed at the time the proposal was prepared in 1998. Each year when the new proposal is prepared, the proposal is reviewed on the campus and again at CSREES. The project is evaluated for progress toward completion of objectives, new activities proposed and accomplishments.

ECOSYSTEMS, ALABAMA

Question. Please provide a description of the research that has been funded under the Ecosystems, Alabama, grant.

Answer. In 1998, CSREES approved a proposal from Auburn University to support projects at two Community Colleges in Alabama-Faulkner State Community College and Alabama Southern Community College. The Faulkner State Community College's project is intended to: (1) fund the development of distance education classrooms for estuarine- and marine-related education, and (2) to establish an aquaculture-related veterinary technician education program. The Alabama Southern Community College project will purchase and install laboratory equipment to further the education capacity of the Center for Excellence in Forestry, Paper, and Chemical technology.

Question. According to the research proposal, or the principal researcher, what is the local, regional, or national need for this project?

Answer. Faulkner State Community College asserts that their veterinary technician program will be the only such program in the country, providing the first two years of the degree program leading to an A.A. degree at Faulkner State, and the second two years leading to a bachelor's degree at Auburn University. The distance education capacity is intended to better integrate marine and estuary research into education activities.

The Center for Excellence in Forestry, Paper, and Chemical Technology at Alabama Southern Community College is believed to be a unique educational opportunity in the Southeastern United States due to the merging of four individual technology training programs. These programs are: (1) Industrial Maintenance, (2) Electronics and Instrumentation, (3) Paper Process, and (4) Chemical Process training.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goals for these projects include the development of a veterinary technician training program and integration of marine and estuary research into classrooms at Faulkner State Community College; and to establish a state-of-the-art wood paper process and chemical process laboratory at Alabama Southern Community College.

The fiscal year 1998 objectives for Faulkner State College were to establish a distance education web to enhance integration of marine and estuarine environmental research and to establish a 2+2 veterinary technician program with an emphasis on marine/aquaculture. The distance education web is in place and has been tested. In addition, classrooms have been tested and some faculty have been trained in the use of the media/hardware. After further assessment, it was decided that the proposed Veterinary Technician Program would not be cost effective. With the fiscal year 1999 proposal, Faulkner proposed instead, to establish a 2+2 Environmental Science degree program.

The fiscal year 1998 objectives for Alabama Southern Community College was to have completed, tested, and placed into operation the chemical, pulp, and paper process laboratories in the areas of (1) Process Control, (2) Crystallization, (3) Batch Reactor, and (4) Digester by June, 2000. The Process Controls laboratory is nearly complete. The others are under design and the project is on-line for completion as originally proposed.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Funds were appropriated for this grant beginning in fiscal year 1998. In fiscal years 1998, 1999 and 2000, $500,000 was appropriated each year. A total of $1,500,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided to support this project?

Answer. No non-Federal funds have been identified to support this project.

Question. Where is this work to be carried out?

Answer. The project will be conducted at the Faulkner State Community College Aquaculture Center in Alabama and at the Alabama Southern Community College Center for Forestry, Paper, and Chemical Technology.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Alabama Southern Community College project proposal indicates a two year budget for project completion. The Faulkner State Community College proposal was for one year only. The objectives have not yet been met but are well underway.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project had a merit review before it began in fiscal year 1998. Subsequent projects were peer reviewed by the respective institutions for the fiscal year 1999 allocation.

ENVIRONMENTAL RESEARCH, NEW YORK

Question. Please provide a description of the research that has been funded under the environmental research grant.

Answer. The environmental research in New York has several major goals. These are: (1) to better understand the impacts of nutrient flows, principally nitrogen, from agriculture on non-agricultural ecosystems, forests, wetlands, and water resources in mixed ecosystem landscapes; (2) to improve knowledge of agricultural contributions to greenhouse gas emissions and effects of projected climate change on crop production; and (3) to develop innovative approaches and technologies for improving the efficiency of agricultural production. New thrusts include: (1) to improve understanding of the impacts of land application of biosolids on the sustainability of New York agriculture and on water quality, and to develop management practices and guidelines for sustainable use of biosolids in New York agriculture; and (2) to evaluate spatial and temporal variability of crop yields within fields and to develop management practices that increase productivity, increase the efficiency of use of inputs, and reduce environmental impacts of agriculture.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Programs supported by the special grant are multidisciplinary in nature, involving technical scientists from a range of disciplines, together with social sci-

entists and economists. Due to the complexity of agriculture and environmental interactions at all levels, the needed research is complex and requires much time. Additionally, translation of knowledge from plot or field studies to larger scales, such as landscape to regional and global, is needed to provide information that is useful to policy makers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. One goal of the program is to identify impacts of nitrogen flows from agricultural lands on adjacent natural ecosystems, forests and wetlands, and water resources, and to devise management strategies to minimize these impacts. Leaching of nitrogen from maize based cropping systems has been shown to be higher when organic sources of nitrogen, manures and plow-down alfalfa, are used as nitrogen sources for crop growth compared to use of inorganic fertilizers. A computer-based nitrogen decision support system to improve recommendations for on-farm nitrogen management is being used in New York.

A second goal of the program is to investigate several interactions between agriculture and climate change. Studies of methane fluxes to/from soils showed that northern hardwood forests are both a source and a sink for this powerful greenhouse gas and overall may be a net source of methane. In contrast, upland agricultural systems were consistently found to be a sink for methane. Use of legume green manures to supply nitrogen in an organic production system increased methane emissions two-fold, creating a conflict between a sustainable agriculture practice and the environment.

No-tillage agriculture was shown to increase preservation of existing soil organic carbon but accumulation of carbon derived from crop inputs was higher with conventional tillage. Inputs of carbon to soils from root exudates and residues were found to be more important to carbon sequestration in soils than were residues from the tops of plants.

Soil quality assessments at the Chesapeake farms sustainable agriculture project on Maryland's Eastern shore, where various cropping systems are being compared with the conventional corn-soybean rotation, have shown that soil quality improves as the cropping system becomes more complex, involves less tillage, and has more organic inputs.

Question. this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 with an appropriation of $297,000. The fiscal years 1992–1993 appropriation was $575,000 per year; $540,000 in fiscal year 1994; and fiscal years 1995 through 1999, $486,000 each year. The appropriation for fiscal year 2000 is $400,000. A total of $4,817,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. In fiscal year 1991, Cornell University provided $27,893 and the State of New York provided $118,014. In fiscal year 1992, Cornell University provided $37,476 and the State of New York $188,915. In fiscal year 1993, Cornell University provided $13,650 and the State of New York $243,251. In fiscal year 1994, the State of New York provided $214,989. In fiscal year 1995, the State of New York provided $233,085. In fiscal year 1996, the State of New York provided $388,301. In fiscal year 1999, the State of New York provided in excess of $400,000 to support this research.

Question. Where is this work being carried out?

Answer. This research is being conducted at Cornell University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original estimate was for a 5-year program and many of the initial objectives in the nitrogen and climate change areas have been met. New objectives evolved from the original work and the program was also oriented to consider broader dimensions of environmental management, particularly strategies for community-based watershed management, involving linkage of technical knowledge with social and local governmental perspectives and needs. Estimated completion dates for current program elements are:

—Watershed science and management

—Effects of elevated carbon dioxide on crop yield potential

—Remington farms sustainable agriculture project—a 10-year project

—Carbon storage in soils

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was peer reviewed in 1997 and 1998. Overall, the project was rated very high. Specific ratings included the following:

—Outstanding scientific merit.
—Appropriate methodology.
—Excellent previous accomplishments.
—The project has potential for significant impact concerning the relationship of agriculture to global change.
—The proposal is well conceived and well written.

ENVIRONMENTAL RISK FACTORS/CANCER, NEW YORK

Question. Please provide a description of the work that has been funded under the Environmental Risk Factors/Cancer, New York, grant.

Answer. The agency has requested the University to submit a renewal grant proposal.

Question. According to the research proposal, or the principal researcher, what is the national, regional, and local need for this research?

Answer. The American Cancer Society estimated that approximately 175,000 women in the United States will be newly diagnosed with breast cancer during 1999 and that 43,000 will die from this disease. The role of environmental risk factors, such as pesticides, is of concern to women, the agricultural community, and policymakers. This project, emphasizing risk reduction information, will work at filling that void.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original and continuing goals of this research are:

—To establish and expand the database of Critical Evaluations on the current scientific evidence of carcinogenicity for selected agricultural chemicals. This will include writing Critical Evaluations on the breast cancer risk of chemicals used in agricultural settings and the role of selected agrochemicals in childhood cancer.
—To communicate effectively information in the database to a variety of audiences, including the scientific community, Federal agencies, public health professionals, the agricultural community aid the public, using printed materials and electronic formats on the internet.
—To ensure that the public will have access to science-based information written in non-technical language about environmental factors and the risk of breast cancer and childhood cancers.
—To increase the knowledge and use of practical strategies aimed at breast cancer risk reduction for residents in rural areas. Efforts to address this objective will include: (1) simple, attractive, printed educational materials tailored for families in rural areas; (2) videotape-based educational workshops for use with groups of rural women.
—To effectively incorporate breast cancer risk reduction messages into health care and health screening settings in rural areas. This will include enhancement and adaptation of the BCERF interactive computer display, developed in this current project year, for use in health care settings and at cancer screening events in rural areas.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1997, and in fiscal years 1997, 1998 and 1999 $100,000 was appropriated per year, and in fiscal year 2000 $170,000 was appropriated for a total of $470,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows:

—$150,000 New York State appropriations for fiscal year 1996.
—$250,000 per year in New York State funds was provided for fiscal years 1977 and 1998.
—$350,000 in New York State funds for 1999 and the same requested for fiscal year 2000.

Question. Where is the work being carried out?

Answer. This research and outreach is conducted at Cornell University. Ithaca, NY.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date or additional or related objectives?

Answer. This was a new project which began in April 1997. Because of the success of meeting the original objectives in NYS, BCERF efforts are being continued and directed toward regional efforts. The anticipated completion date is June 30, 2001.

Objectives met:

—The bibliographic database was established during year one and is updated and expanded each year. It currently has over 4,000 entries with over 250 added each quarter. Also, it includes full bibliographies of all pesticide and dietary/lifestyle scientific critical reviews.

—Critical Evaluations: the breast cancer risk of seven pesticides—four in fiscal year 1997, three in fiscal year 1998—have been completed. The completion of two additional Critical Evaluations is anticipated by the end of the current fiscal year.

—Science-based information material—fact sheets—have been developed for the seven pesticides and for four pesticide-related issues. Also, four fact sheets were developed on diet/lifestyle breast cancer risk factors, and three on general information on breast cancer. Eight additional fact sheets are to be developed in the current fiscal year.

—Two video teleconferences and an in-service have been held and evaluated. Follow-up telephone surveys of 1997 facilitators at BCERF satellite video conference downlink sites and participants at the June 1997 on-campus training program was completed, and an analysis of response data was initiated.

—The interactive computer Rural Exhibit was completed in 1999 and evaluated during Summer/Fall 1999.

—Tile BCERF website was revamped in 1997–1998 and relaunched in September 1998. The number of browsers accessing tile BCERF home page rose from 380 to 450 hits per month during the summer of 1998 to 1,053 hits in November 1998 and 3,490 hits in December 1998. Hits remain high with an average of about 3,000 per month.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. As a relatively new project, a complete evaluation has not been conducted, although the proposal is currently under review. Periodic progress reports have been made throughout the year. The project is moving towards achieving its desired goals. A final evaluation will be made after June 30, 2001. BCERF has evaluated most components of the program, with further evaluation planned. To date, BCERF has done an evaluation of the video teleconferences and in-service and has had the pesticide fact sheets reviewed by focus group—breast cancer survivors and women not having breast cancer. The participants brought a variety of perspectives to the discussion, providing BCERF with a wealth of important feedback on fact sheets and educational approach. Some of the conclusions drawn from this evaluation have already resulted in simple changes made in the preparation of current fact sheets. Other feedback from this evaluation will inform planning efforts for the education component in general.

Evaluation played a key role in the development of the interactive computer rural exhibit. To develop the exhibit, qualitative and quantitative information was gathered about the knowledge, attitudes and beliefs of rural women regarding environmental risk factors and breast cancer. In addition, BCERF conducted brief surveys of rural women attending several rural conferences and events. The complete exhibit was tested at two farm shows and the New York State Fair in Fall 1999, partnering with professionals and organizations, such as those providing mobile mammography.

To evaluate the value of Critical Evaluations to scientists and Federal agency personnel, a fax-back survey has been sent. The majority of respondents 88 percent so far have found the Critical Evaluations to be relevant to their work.

ENVIRONMENTALLY SAFE PRODUCTS, VERMONT

Question. Please provide a description of the research that has been funded under the grant.

Answer. Cooperative State Research, Education, and Extension Service has requested the university to submit a grant proposal that has not yet been received. The research will address the development of an environmentally friendly wood finish formulated with whey, a protein-based biopolymer that can replace standard polymer finishes that emit volatile organic compounds.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research addresses a national need to find alternative wood finishing products that are nontoxic and environmentally preferable.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This grant is new and the research will build upon existing expertise to offer new products with good performance for use in the furniture and toy manufacturing industries.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $170,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This is a new grant and since the proposal has not yet been received, the source and amount of non-Federal funds for this research is not known.

Question. Where is this work being carried out?

Answer. This work will be carried at the University of Vermont.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met: What is the anticipated date of additional or related objectives?

Answer. This project is expected to be completed in three years.

Question. When was the last agency evaluation of this project? Provide a summary of the evaluation conducted.

Answer. Since this is a new grant, no evaluation has been conducted.

EXPANDED WHEAT PASTURE, OKLAHOMA

Question. Please provide a description of the research that has been funded under the Expanded Wheat Pasture, Oklahoma grant.

Answer. This project was designed to develop improved supplementation programs and new systems for technology delivery to reduce production risk of raising cattle on wheat pasture. The work involves evaluation of grazing termination date on grain and beef production, assess the impact of wheat cultural practices, and develop an economic model to evaluate alternative decisions on grain/beef production. Additional effort is directed toward development of cool season perennial forage grasses to complement wheat pasture. The proposal for fiscal year 2000 has been requested.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that this work addresses the needs of wheat/cattle producers of Oklahoma as a primary focus. However, it would appear to have application regionally in adjacent wheat growing States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to develop economically-viable management systems for use of wheat for supplemental pasture for beef cattle before the crop starts making grain. This work has already shown how the use of feed supplements can increase net profit from cattle grazing on wheat pasture. The study has identified management practices, e.g. date of planting, cultivar selection, grazing intensity, and date of cattle removal that produce the optimum grain yield and cattle gain. A Wheat/Stocker Management Model has been developed as a decision aid to help producers assess income risk in the operation. Work is underway on a Wheat Grazing Systems simulation model.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1989 and appropriations were as follows: fiscal year 1989, $400,000; fiscal year 1990, $148,000; fiscal year 1991, $275,000; fiscal years 1992–1993, $337,000 per year; fiscal year 1994, $317,000, and fiscal years 1995 to 2000, $285,000 each year. A total of $3,524,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $175,796 State appropriations in 1991; $174,074 State appropriations in 1992; and $236,584 State appropriations in 1993. The non-Federal support for 1994 was $238,058 for State appropriations. Funds for 1995 were $275,426, for 1996 were $120,000, for 1997 were $190,510, for 1998 were $224,500, and for 1999, $222,650.

Question. Where is this work being carried out?

Answer. The research is being done at Oklahoma State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This project started in 1989 with a projection of 10 years to complete the research objectives. Some objectives are nearing completion while others will require further study. A number of wheat cultivars have been identified which will tolerate grazing and still produce economic grain yields. The grazing cut off date for grain production has been established. However year to year variation need additional study in order to develop a reliable decision support system. The revised projected completion date is 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This program is reviewed annually. Each year's funding cycle is peer reviewed internally and by the agency National Program Leaders for scientific merit and relevance. Results from this project are currently being used by ranchers to help with management decisions concerning stocker cattle grazed on wheat that will be harvested for grain. Current work is designed to refine the current information and identify wheat cultivars and grazing management for optimum economic return.

EXPERT IPM DECISION SUPPORT SYSTEM

Question. Please provide a description of the research that has been funded under the Expert Integrated Pest Management Decision Support System grant.

Answer. A prototype information and decision support system was developed in collaboration with Purdue University and the Department of Energy's Argonne National Laboratory that integrates and manages information from multiple data sources. Development of this system now continues with the National Science Foundation Center for Integrated Pest Management at North Carolina State University. Components of the Pest Management Information Decision Support System include information on the United States Environmental Protection Agency review status of pesticides, crop losses caused by pests, status of minor use registrations, current research in progress, and priorities of integrated pest management implementation teams.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The Pest Management Information Decision Support System is fully operational and serves national, regional, and local needs for research and extension activities. The Food Quality Protection Act has been the driving force for the development and usage of this software program. At the national level, the system provides rapid access for the United States Department of Agriculture, and Environmental Protection Agency helping to address pest management concerns and information to support the regulatory decision making process. It provides a mechanism for decision transparency and for all stakeholders to interact with the priority setting process. The ultimate result will be to help insure that farmers have adequate alternatives for managing pests at the specific local level.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the Pest Management Information Decision Support System was to refine the process of identification for Integrated Pest Management needs of the United States Department of Agriculture, the Environmental Protection Agency, and States. This goal reinforces the State and Federal partnerships to disseminate important pest management information for improved decision making and environmental quality, and to address future needs. In 1996 and 1997, the program addressed and responded to the Memorandum of Understanding and supplemental Memorandum of Understanding between the United States Department of Agriculture and Environmental Protection Agency. The supplemental Memorandum of Understanding was signed in April, 1996, at which time there were 58 pesticides and 374 uses identified and prioritized. Twenty-five minor use crops were identified in the 1997 Pest Management Alternatives Request For Proposals as crops-at-risk due to regulatory actions. Results were also used to establish priority work identified for support by the regional Integrated Pest Management grants program Request For Proposal.

The Pest Management Alternatives Program Work-Bench of the Pest Management Information Decision Support System was beta tested in 1999 and has been delivered to the public domain and the present product (data base access) is available on the world wide web at <http://dsslab.cs.gmu.edu/PMIDSS>. Pest Management Information Decision Support System had undergone a complete rewrite during this last year. It has now been rewritten, using Java and Cold Fusion Struc-

tured Query Language queries, with all data now stored on a Structured Query Language Windows NT server. This means that no software other than the standard browser is required to access the information.

The Pest Management Information Decision Support System user interface has also been completely rewritten. It is a much friendlier interface, that allows users to search a multitude of specific pest management databases, either concurrently or separately, by crop, pest and/or tactic and retrieve data summaries or the entire record from all of the databases included. Each database now has a specific explanation of its source, the information contained within, and when last updated. Finally an automated update retrieval from many of the database sites such as the Inter-regional Project-4, Pipeline, Crop Profiles, and National Center for Food and Agricultural Policy Pesticide Use Database has been developed.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This work began in 1994 with development of the concept and design, and has proceeded through steps including database identification and specific development of a prototype and software. Current development have brought the product to the web and provides multiple database search capabilities for ease of data access. In fiscal year 1994, we expended $40,000 of Cooperative State Research, Education and Extension Service administrative funds and $90,000 from Science and Education Evaluation Funds to initiate collaborative work with the Argonne National Laboratory. In fiscal year 1995, we expended $172,000 as a Cooperative Agreement with Purdue University and Argonne National Laboratory from the Pest Management Alternative Special Grant Funds and $5,000 from Pesticide Impact Assessment Program funds. In fiscal year 1996, we expended $177,000 in a cooperative agreement with Purdue University and Argonne National Laboratory from Pest Management Alternative Special Grant Funds, $21,000 from Research, Education and Economics Mission area Evaluation Funds, and $40,000 from Pesticide Impact Assessment Program. In fiscal year 1997–1998 we expended $165,425 and $177,000 to Purdue University and Argonne National Laboratory. In fiscal years 1999 and 2000, we are expending $177,000 to North Carolina State University center for Integrated Pest Management to implement, enhance and maintain the web-based system and provide access to multiple databases.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. It is difficult for us to estimate the amount of non-Federal funds supporting the Pest Management Information Decision Support System. Purdue University, Cornell University and North Carolina State University have contributed non-Federal resources in the form of dollars and personnel time. The National Science Foundation Center for Integrated Pest Management at North Carolina State University is supported in large part by corporate funds, part of which have underwritten Center personnel salaries. The informational data bases, which are accessed by the Pest Management Information Decision Support System, have been developed and generated by States and universities and represent considerable investments in time and resources.

Question. Where is this work being carried out?

Answer. Presently, the bulk of the work is carried out in Washington, D.C. and in Raleigh, North Carolina. Cooperative State Research, Education and Extension Service has National Program Leaders in Integrated Pest Management, Pesticide Impact Assessment Program, and Inter-regional Project-4 program areas working on the Pest Management Information Decision Support System. The Center for Integrated Pest Management at North Carolina State University manages the web server where the pest management information system is located and is developing the multiple concurrent database search and decision support capability. Interaction and information is provided by every State in our system. We are in the process of strengthening the role of Land Grant partners in this program and additional database access is being developed through the Center for Integrated Pest Management, at North Carolina State University and through a sub-contract with George Mason University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Our original estimate in 1994 was two-to-three years with adequate resources to complete developmental work. However, the design considerations became more complex with the 1996 passage of the Food Quality Protection Act requiring an expansion and change in information data bases. In addition, advances in web technology has greatly expanded the potential and use of the system to all people wanting information on pesticide use and pest management alternatives. Additional

databases have been added to both the data access and decision support aspects of the project. The Pest Management Information Decision Support System team is now working directly with many data providers and users, including Inter-regional project 4, National Agriculture Statistics Service, the Cooperative State Research, Education and Extension Service, Office of Pest Management Policy, Environmental Protection Agency, commodity groups, and agribusiness to assure that needed data are available, consistent, current, and searchable. The Pest Management Information Decision Support System program is a key component in providing USDA, EPA, Congress, and the Office of Pest Management Policy with finger-tip access to new and rapidly changing data bases, making research information accessible to assist the regulatory decision making process.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation.

Answer. The Pest Management Information Decision Support System underwent two reviews in 1997. The first was a formal review of the entire program in June, 1997 which recommended: (1) focusing the system on the needs of the Pest Management Alternatives Program, (2) the timely delivery of a software product to USDA, and (3) the development of a plan to sustain the system in a user-friendly, widely available formal. A second review which was conducted in November, 1997, focused strictly on the Pest Management Alternatives Program Work-Bench surfaced the following recommendations: (1) to expand the WorkBench linkages to additional relevant databases, (2) investigate the potential of placing the system on the World Wide Web for greater access and utility, (3) market the system to potential users, and (4) link to high quality databases to support and enhance data integrity of the WorkBench. In August, 1998 a progress review was conducted to evaluate the engineered software product and it was determined that a web accessible multiple database search capability was essential for the system. A concept review conducted in September, 1998, and at this review the functionality of a web-based decision support system was first demonstrated.

FARM AND RURAL FINANCE, ILLINOIS AND ARKANSAS

Question. Please provide a description of the research that has been funded under the farm and rural business finance program.

Answer. The Center for Farm and Rural Business Finance at the University of Illinois and the University of Arkansas is supported, in part, by the Federal funding for this project. The Center conducts a program of research and information on the financing of farms and rural businesses in the United States. The plan of work focuses on the financial management performance of farm and rural businesses, evaluation of financial markets and credit institutions serving rural America, and the impacts of public policies and regulations on the structure and performance of rural financial markets. During the past year, 17 projects have been conducted through the Center. They address financial issues facing farmers and rural businesses that range from financial risks faced by hog producers to farmland turnover rates to lending trends among large commercial banks. Professional staff at the two institutions are engaged in both joint and separate projects.

Question. What is the national, regional, or local need for this research?

Answer. The current financial stress in various regions and sectors of the farm economy, the changing structure within the agricultural sector, and financial implications of risk management strategies and technical change have created a national need for this research. The level of financial stress varies across commodities and with regional variation in yields and product mix. Analyses are needed to assess the financial impacts of agricultural policies and programs that provide various dimensions of the "safety net." Changes to the Federal income tax, capital gains tax and estate tax provisions can have significant impacts on owners of agricultural assets. Research is needed to identify impacts on individuals and those that may affect local institutions.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal is to assist farmers, ranchers and rural businesses with research-based information on financial management as they deal with increasingly complex financial decisions. During this past year the program has conducted projects on the relationship between financial risk and farm size, financial aspects of various production technologies and management practices of small and medium-sized pork producers, the effect of technical change on rural commercial bank delivery systems, and regulatory costs in rural lending. Projects are being completed on the post-acquisition performance of banks resulting from recent mergers, levels and trends in small farm and small business lending across different types of commer-

cial banks, and the measurement and classification of the financial performance of agribusiness firms. Additional projects have developed a model of working capital management applicable to a wide variety of selected agribusiness firms and have identified primary risks associated with lending to integrated farm production units. Other projects are measuring the longer term impacts of changes in the Federal tax laws on the financial performance of Illinois farms, evaluating the financial characteristics of rural banks and assessing their competitiveness in rural financial markets, and identifying the financial characteristics of high performing agricultural banks. A project at the University of Arkansas has analyzed the effects of financing in accelerating the cattle cycle.

Question. How long has the work been underway, and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work has been underway since 1992. Appropriations were $125,000 in fiscal year 1992, $125,000 in fiscal year 1993, $118,000 in fiscal year 1994, $106,000 per year in fiscal year 1995 through fiscal year 1997, $87,000 per year in fiscal year 1998, fiscal year 1999 and fiscal year 2000. Appropriations through fiscal year 2000 total $947,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal sources and funds provided for this program in fiscal year 1992 totaled $259,427 with $58,427 in State appropriations, $189,000 from industry and $12,000 from miscellaneous sources. In fiscal year 1993, the total was $287,890 with $94,588 in State appropriations,$133,000 from industry and $25,000 from miscellaneous sources. In fiscal year 1994, the total was $391,000 with $221,000 coming from State appropriations, $45,000 from industry and $125,000 from the National Research Initiative competitive grants programs. In fiscal year 1995 the total was $185,000 where $46,000 came from State appropriations, $62,500 from industry and $76,500 from miscellaneous sources. In fiscal year 1996, the total was $344,000 where $294,000 was appropriated from State sources and $50,000 from private sources. In fiscal year 1997, $125,000 was appropriated from State sources, $103,000 was received through a National Research Initiative grant, and $130,876 was received from the Council on Food and Agricultural Research. In fiscal year 1998, $176,250 was received from a Fund for Rural America grant, $65,000 from a CSREES Special Research Grant, and $20,000 from miscellaneous sources. In fiscal year 1999, $133,500 was received from the Illinois Agricultural Experiment Station in the form of faculty-researcher salaries; the Arkansas Agricultural Experiment Station was providing $49,500 in similar support; and the Illinois Farm Development Authority provided $125,000. Non-Federal support for fiscal year 2000 has not been identified.

Question. Where is the work being carried out?

Answer. Researchers and professional staff conducting this program are located at the University of Illinois and the University of Arkansas.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives of the program, as amended with additional funding and new termination dates now extend to fiscal year 2000. Initial objectives have been met; however changing financial conditions in the farm and rural business environment continue to add new dimensions to these original objectives. Anticipated completion dates of these amended objectives extend through fiscal year 2000.

Question. When was the last agency evaluation of this project. Provide a summary of the latest evaluation conducted.

Answer. In addition to the scientific and peer reviews conducted at the institutions, the program is evaluated periodically within the agency through direct contact with the Director of the Center and the project leaders, as reports are received, and annually when proposals are submitted. The latest evaluation occurred in March, 1999 when the most recent comprehensive report was received. Agency criteria are used to evaluate the program in terms of whether objectives are relevant and consistent, appropriate methods are being used, time lines are being met to a reasonable extent, and results are being disseminated through reports and scientific publications. The major objectives of the program are being met and results from specific projects are being shared through regional research committees and other outlets as they evolve. The latest evaluation shows 18 separate projects underway with many nearing completion. Results are applicable to issues within the rural finance community. A National Symposium for Agricultural Finance Executives provides a valuable service and visibility for the Center. The program has produced an impres-

sive number of publications. Articles have been published in leading U.S. agricultural and finance journals and in international outlets.

FEED BARLEY FOR RANGELAND CATTLE, MONTANA

Question. Please provide a description of the research that has been funded under the Feed Barley for Rangeland Cattle grant.

Answer. This project supports research on the nutritional value of barley cultivars as feed for beef cattle. This research will assist the breeding and selection of superior barley types that can be more competitive with other feed grains and improve farmer income from barley crops grown in rotational systems in the Northern Great Plains. The project was subjected to a merit review.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Barley is grown extensively as a feed grain in the United States. Based both upon chemical analysis and the experience of some cattle feeders, the principal investigator believes barley should have a feed value on a par with corn or wheat. However, currently barley is listed as inferior to both corn and wheat in feed hand books and is, therefore, discounted in the feed market. Comprehensive feeding studies of various barley types will be conducted to document the value as a feed grain for beef cattle.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to determine the true relative feeding value of barley for feeder cattle, and thereby improve the economic return to barley producers.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1996 with an appropriation of $250,000; for fiscal year 1997, $500,000; for fiscal years 1998 and 1999, $600,000 each year; and for fiscal year 2000, $637,500. The total appropriation is $2,587,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Non-Federal funds for this project were $160,000 in 1996, $174,500 in 1997, and $168,000 in 1998. No information is available for 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at Montana State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Completion of the original objectives is anticipated in fiscal year 2001. Integrating of findings into management systems is expected by fiscal year 2005 with outreach and information dissemination completed by fiscal year 2010.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project is evaluated annually. It undergoes a scientific merit review by two Department Heads and three peer faculty members. It is reviewed again by a CSREES National Program Leader upon submission to the agency.

FLORICULTURE, HAWAII

Question. Please provide a description of the research that has been funded under the floriculture program grant.

Answer. The research carried out with these funds involves wholesale and retail U.S. and Japan market research, development of new varieties for aesthetic values and pest resistance, and pest management strategies to meet quarantine needs and consumer expectations.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The researcher believes the tropical cut flower and foliage industry in Hawaii, which includes anthurium, orchids, flowering gingers, bird of paradise, heliconia, protea, and cut foliage is worth over $50 million primarily in out-of-state sales. Development of disease resistant cultivars and quarantine pest management strategies that reduce pesticide usage are high priority issues at the national level.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the research was to develop superior Hawaii anthuriums, orchids, protea, and exotic tropical flower varieties with disease resist-

ance, particularly to anthurium blight which devastated the Hawaii anthurium industry through the mid-1980's and reduced Hawaii's market share. Additionally, research focused on development of post-harvest handling practices and quarantine pest control. To date, a new anthurium cultivar has been patented and released. Additional blight resistant cultivars are being propagated and tested by the anthurium industry. Disease resistant protea germplasm has been obtained from South Africa and is being used in the protea breeding program. A post-harvest hot water dip treatment has been developed and is being used commercially on tolerant cut-flower species to meet quarantine requirements.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $300,000; fiscal years 1990–1993, $296,000 per year; fiscal year 1994, $278,000; and fiscal years 1995–2000 $250,000 each year. A total of $3,262,000 has been appropriated since 1989.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: State appropriations of $87,937 in 1995, approximately $77,000 in 1996, $56,680 in 1997, and $62,600 in 1998 for a total of $207,217 since 1995.

Question. Where is this work being carried out?

Answer. Research is being conducted by the University of Hawaii at Manoa and Hilo.

Question. When was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The objectives in the original project were to maintain Hawaii floricultural industry competitive. This objective continues to be the principal direction for the projects. Because the industry and the markets are changing pests are becoming either resistant or newer strains. And quarantines are changing with technology the objective remains valid.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The individual projects funded under this Special Research Grant are evaluated through merit review to ensure that good science is being used. This evaluation is the major tool used to award funds to the projects.

FOOD AND AGRICULTURE POLICY INSTITUTE, IOWA AND MISSOURI

Question. Please provide a description of the research that has been done at the food and agriculture policy institute program.

Answer. The Food and Agriculture Policy Research Institute—FAPRI—was established by Iowa State University and the University of Missouri, Columbia, in 1984. The purpose of the institute is to conduct comprehensive analysis and disseminate results about the economic impacts of U.S. food, farm, and trade policies to agricultural producers, agribusinesses, and public policymakers. Iowa State conducts research on the economic interrelationships within and between domestic and foreign food and agricultural markets from the farm gate to market destinations; develops and maintains databases and analytical support systems to facilitate the analysis of agricultural and trade policy issues; and evaluates the impacts of U.S. and foreign commodity supply, demand, and public policy programs on agricultural trade. The University of Missouri maintains models of the domestic agricultural economy and directs its efforts primarily to the analysis of domestic policy issues. The two universities maintain linkages with a number of other universities who provide data and analytical support to the system. The universities maintain a comprehensive analytical modeling system of the U.S. and international food and agricultural sectors to evaluate near- and long-term economic implications of alternative farm policies for the basic commodities. Each year, and more often if conditions require, the system is used to provide economic information on potential impacts out to 10 years in the future of farm policies on farm prices, income, output, government program costs and means to enhance the management of farm programs at the national level.

Question. According to the research proposal, or the principal researchers, what is the national, regional, or local need for this research?

Answer. The Nation's agricultural sector and its components are subject to numerous Federal policies and programs. FAPRI is the only publicly supported, non-Federal organization with the analytical capability to assess and evaluate the numerous public policies and programs affecting the agricultural sector and report results to

a broad constituency including farmers, agribusinesses, and Federal and State policymakers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was to develop the analytical capability to assess and evaluate U.S. farm policies on the U.S. agricultural sector and disseminate this information to farmers, farm and other agricultural organizations and public policymakers. The mission has been expanded to include assessment of trade and environmental policy impacts and their interaction with the agricultural sector at national, regional, and farm levels. The models in place are also used to assess fiscal and monetary policy implications and impacts of new technologies such as biotechnological innovations on the agricultural sector.

Both institutions maintain large econometric models and data sets which are regularly updated to analyze farm and trade policy alternatives and the impacts of various programs on the several sub sectors of the agricultural economy. This update was especially valuable for conducting analysis to assess policy options for the 1996 farm bill. During the past year, the FAPRI completed 35-40 studies addressing policy issues such as assessments of the 1996 Farm Bill, alternative ethanol programs, USDA's proposed milk market order reform, U.S.-Canada agricultural trade, the importance of fast track to U.S. agriculture economic recession in the Middle East and the economic meltdown in Russia. Numerous studies were completed addressing improvements made to the empirical modeling system to improve domestic and international policy capabilities. The FAPRI staff has made numerous public appearances throughout the U.S. to agricultural groups and Congressional committees and Executive branch groups addressing policy issues.

Question. How long has the work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal years 1984–1985, $450,000 per year; fiscal years 1986–1987, $357,000 per year; fiscal year 1988, $425,000; fiscal year 1989, $463,000; fiscal year 1990, $714,000; fiscal years 1991–1993, $750,000 per year; fiscal year 1994, $705,000; fiscal years 1995–1996, $850,000 each year, and fiscal year 1997–2000, $800,000. The total amount appropriated is $11,171.000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are as follows: $260,355 State appropriations, $113,565 industry, and $37,913 miscellaneous for a total of $411,833 in 1991; $321,074 State appropriations, $51,500 industry, and $35,100 miscellaneous for a total of $407,674 in 1992; $234,796 State appropriations and $70,378 industry for a total of $305,174 in 1993; $78,286 State appropriations, $43,925 industry, and $29,750 miscellaneous in 1994 for a total of $151,961 in 1994; $80,155 State appropriations, $37,128 industry, and $42,236 miscellaneous for a total of $159,519 for 1995; $124,123 in State appropriations with no other funding for 1996; $79,000 in State appropriations, $50,000 industry and $25,000 miscellaneous for a total of $154,000 in 1997; and $88,800 State appropriations, $75,200 industry, and $34,687 miscellaneous for a total of $198,687 in 1998.

Question. Where is this work being carried out?

Answer. The program is carried out at the Center for Agriculture and Rural Development, Iowa State University and the Center for National Food and Agricultural Policy, University of Missouri.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. While individual projects show progress towards achieving the goal, this is a continuing program of research and analysis for the purpose of assessing farm and related policy actions and proposed actions likely to affect the agricultural sector and its components.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The annual proposal is carefully reviewed for adherence to stated objectives and progress before the special research grant is awarded. It is also peer reviewed prior to its submission. No formal evaluation of this program has been conducted.

FOOD IRRADIATION, IOWA

Question. Please provide a description of the research that has been funded under the food irradiation grant.

Answer. Since the Linear Accelerator Facility was placed in operation in March 1993, studies on the effect of irradiation on shelf-life extension, safety and quality of ground beef, beef steaks, ham, pork chops from loins, chicken breasts, and turkey have been conducted. Studies combining irradiation with high hydrostatic pressure and cooking, using whole chicken breasts, turkey and ham, have been conducted to determine the combination of these treatments that will yield a shelf-stable product while maintaining high eating quality. Several studies were conducted to determine whether consumers can detect a difference between irradiated and non-irradiated ground beef patties. Experiments were also conducted to investigate consumer acceptance of pork products irradiated to prevent trichinosis. Test markets of irradiated chicken breasts were conducted to determine consumers' willingness to pay for irradiated products. Studies on the effect of packaging materials on quality of irradiated meat have been completed. Quality changes in ready-to-eat meat and poultry products irradiated to control Listeria are under investigation. The fiscal year 2000 funds are supporting research from May 1, 2000 through June 30, 2001.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes consumers' attention and concern about the safety of fresh meat and poultry has increased with recent outbreaks of foodborne illness from E. coli 0157:H7 and Listeria monocytogenes. The meat industry has also expressed interest regarding the quality of irradiated products, and how this process can be used to yield high quality fresh meats and ready-to-eat products that are free of pathogens. The recent massive recall of over 50 million pounds of frankfurters and luncheon meats due to illness caused by Listeria monocytogenes contamination has resulted in huge economic losses. Additionally, researchers from eight other research institutes have used the irradiation facility for research projects. Thus, the principal researcher believes this research to be of national, regional and local need.

Question. What was the original goal of the research and what has been accomplished to date?

Answer. The original goal of the research was to generate knowledge necessary to develop a research and technology transfer program leading to commercial use of irradiation of foods, whereby consumers would be provided with food products with enhanced safety. The effectiveness of irradiation, using an electron beam accelerator, in destroying known pathogenic bacteria in pork and beef has been determined. Mathematical models have been developed to predict the growth of bacteria in low-dose irradiated ground pork. Demonstration of irradiation technology has been presented to some commercial firms, and plans are being developed for some large scale test markets.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 when $100,000 was appropriated for this project. The appropriations for fiscal years 1992 and 1993 were $237,000 per year; fiscal year 1994, $223,000; fiscal years 1995–1997, $201,000 each year; and fiscal years 1998–2000, $200,000 per year. A total of $2,000,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. The project received $1,037,270 in State of Iowa funds—$1 million of which was for capital construction—in fiscal year 1991; $37,942 in State funds and $67,800 in industry grants in fiscal year 1992; $68,897 in State funds, $78,300 in industry grants and $9,666 in user fees in fiscal year 1993; $70,652 in State funds, $35,420 in industry grants and $47,788 in user fees in fiscal year 1994; $72,772 in State funds, $100,000 in industry grants and $55,211 in user fees in fiscal year 1995; $81,540 in State funds, $115,300 in industry grants and $50,963 in user fees in fiscal year 1996; and $77,963 in State funds, $253,450 in industry grants and $46,550 in user fees in fiscal year 1997; and $100,200 in State funds, $205,900 in industry grants and $36,200 in user fees in fiscal year 1998; and $125,000 in State funds, $213,800 in industry grants and $34,900 in user fees in fiscal year 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at Iowa State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The principal investigator anticipates that the project 19s original objectives will be met within a few years after the USDA final rules are issued for ready-to-eat meat and poultry products.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. A review of the proposal supporting the fiscal year 1999 appropriation was conducted on February 24, 1999. Previous studies funded under this project have provided useful information toward understanding how irradiation can be useful in eliminating or reducing foodborne pathogens in meat products. It is anticipated that the proposed research will continue to further the understanding of how irradiation can be used to improve shelf-life and enhance safety of meats and meat products.

FOOD MARKETING POLICY CENTER, CONNECTICUT

Question. Please provide a description of the research done under the Food Marketing Policy Center grant.

Answer. The Food Marketing Policy Center was established in 1988 at the University of Connecticut at Storrs. The Center seeks to improve the performance of the food production and marketing system by conducting research on food and agricultural marketing and related policy questions. The Center is primarily an economic research organization, but it conducts interdisciplinary research as appropriate and it communicates results to the public. Key users include farm and consumer organizations, agricultural business firms, public agencies, State legislatures, and the U.S. Congress. The research proposal was subject to an administrative review and a peer review by the university prior to submission to CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The research addresses an ongoing national need to monitor the performance of the U.S. food system and to recommend policies that improve performance for the benefit farmers, merchants, processors, and consumers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The ongoing research goal is to identify marketing problems and assess alternatives that improve economic performance of the U.S. agricultural and food marketing sector. The Center serves as a core research group for Regional Research Project NE–165, Private Strategies, Public Policies, and Food System Performance. The research agenda includes industrial organization, strategic marketing, economics of food safety, cooperatives, and public policy including antitrust and regulation.

The Center is a prolific provider of high quality theoretical and empirical work, and makes significant scientific, management, and policy contributions. The Center has prepared about 50 working papers, 40 policy research reports, 20 policy issue papers, 8 books and numerous chapters, a number of MS and PhD theses, and has distributed scientifically important research articles to researchers, industry, Federal and State legislators, and decision makers.

This grant annually supports ten to fifteen research projects in two problem areas: impacts of changes in strategies, technologies, consumer behavior and policies on the economic performance of the food system, and impacts of private and public strategies on improvements in food safety and quality. Projects include competitive strategy analysis of cooperatives and investor-owned firms; firm dominance in food manufacturing; advertising; mergers, product relatedness and performance outcomes; effects of market structure and concentration on promotional activity; testing theories of oligopoly conduct; relationships between market structure, firm position and price levels; strategic responses to food safety and nutritional regulation; and trade agreement effects on food quality and trade.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1988, $150,000; fiscal year 1989, $285,000; fiscal year 1990, $373,000; fiscal years 1991–1993, $393,000 per year; fiscal year 1994, $369,000; fiscal years 1995–1998, $332,000 each year; and fiscal years 1999–2000, $400,000 a year. A total of $4,484,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are State appropriations as follows: $234,259 in fiscal year 1991; $231,741 in fiscal year 1992; $201,288 in fiscal year 1993; $234,557 in fiscal year 1994; $219,380 in fiscal year 1995; $134,399 in fiscal year 1996; $135,490 in fiscal year 1997; $164,772 in fiscal year 1998; and $163,895 in fiscal year 1999.

Question. Where is the work being carried out?

Answer. The research is being carried out at the University of Connecticut and the University of Massachusetts.

Question. What was the anticipated completion date for the original objectives if the projects? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1987 was for 24 months. According to the principal researcher, the objective of conducting policy-oriented research on food manufacturing and distribution industries to assist State and Federal policy makers in improving the performance of the food system is still an ongoing public concern, given increasing levels of concentration in food processing. The current phase will be completed in 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in April 1999, as it evaluated the 1999 project proposal, and determined that "the PI and associated researchers are nationally and internationally recognized and are clearly competent to execute this project. Funded research will take place at the Center . . . and in collaboration with researchers at the London Business School, University of Nebraska, Rutgers University, Montana State University, and USDA." The proposal also was subjected to peer review by experts with scientific knowledge and technical expertise.

FOOD PROCESSING CENTER, NEBRASKA

Question. Please provide a description of the research that has been funded under the food processing center grant.

Answer. The University of Nebraska Food Processing Center has been conducting short-term, highly applied research projects to assist small and mid-sized food processing companies and entrepreneurs to develop or improve processes and products and to develop new food processing enterprises. Projects were selected based on the estimated economic impact of the technical assistance or the criticality of the technical assistance to the future of the firm or venture. Priorities were placed on projects relating to the safety of the food product or process and to the fulfillment of regulatory mandates such as nutrition labeling, use of approved and effective ingredients, and adherence to regulations imposed by foreign governments. In addition, several research projects were conducted to improve or assess the quality, extend the shelf-life, or assess or improve the processing efficiency of specialty food products which impacted several processors or used alternative agricultural products.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the primary impact of this project will be statewide. Small and mid-sized food processing companies and entrepreneurs have limited technological capabilities for addressing issues related to product development, process development, product and process evaluation, food safety, quality assurance, and regulatory mandates. The short-term research and technology transfer projects conducted as part of this overall project will aid these companies in appropriately addressing these oftentimes complicated issues.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research, as stated previously, is to assist small and mid-sized food processing companies and entrepreneurs to develop or improve processes and products and to develop new food processing enterprises. Technological evaluations were conducted for 89 individuals or companies interested in developing new food processing businesses. These evaluations included formulations, processes, processing equipment, packaging, shelf-life, sensory, nutritional attributes, microbiological quality, regulatory considerations, and other factors. Additionally, microbiological analyses, shelf-life assessments, sanitation audits, and nutritional analyses were conducted for numerous Nebraska food companies.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1992. The appropriations were $50,000 per year for fiscal years 1992–1993; $47,000 for fiscal year 1994; and $42,000 for fiscal years 1995–2000 each year. A total of $399,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. The Food Processing Center received $402,389 in State funds and $1,993,914 in food industry grants and miscellaneous sources from 1992 through 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at the University of Nebraska.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. Because this project supports ongoing technical assistance to clients, the objectives are ongoing.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal was conducted on March 31,1999. Progress under previous grants for this project appears to be satisfactory, with numerous examples of assistance cited and summaries of short-term projects provided by the principal investigator.

FOOD QUALITY, ALASKA

Question. Please provide a description of the research that has been funded under the Food Quality, Alaska grant.

Answer. Research will be aimed at establishing the Salmon Quality Implementation Project. The project has two parts. The first part is the evaluation, design, and implementation of a voluntary quality seal that can be attached to salmon that meet the existing standards for premium and number one grade. The second part is a series of workshops and training sessions on salmon quality handling and maintenance for workers at all levels of the industry, from harvesting to retail.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The seafood industry is Alaska's largest employer and main source of revenue in many communities along its 38,000 miles of coastline. The salmon fishery is second only to groundfish in providing the most value in the industry. It is the mainstay of many traditional, family-owned businesses. The salmon industry is regional, involving thousands of fishermen and processing workers from Washington State, Oregon, California and throughout the nation that come to Alaska to participate in the fishery. In recent years, the Alaska salmon industry has suffered economically from increased competition from international salmon farmers, mainly in Norway and Chile. They have made great inroads in many traditional markets, surpassed Alaska in salmon production, and now set the product standard in the marketplace. One key for American businesses to recapture and strengthen their salmon markets is to guarantee and promote the quality of wild Alaska salmon. This project will provide the industry with the research and information needed to accomplish this.

Question. What was the original goal of the research and what has been accomplished to date?

Answer. The original goal of this research was to ensure a consistent and predictable level of handling and quality for Alaska seafood. In doing so, the project will help Alaska seafood processors strengthen or maintain their place in domestic and international markets. Because this is a new grant, no progress has yet been reported.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999 and the appropriation for fiscal years 1999 and 2000 $350,000 each for a total of $700,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. The State of Alaska, the Alaska Seafood Marketing Institute and the industry will contribute considerable personnel hours to perform the work described in the application. The State will contribute the time of several staff people to research and help establish the voluntary quality seal program. Nine hours a week of staff time through the end of the fiscal year (31 weeks) would account for approximately $10,000. The Alaska Seafood Marketing Institute will have a staff person set up training workshops throughout Alaska.

Question. Where is this work being carried out?

Answer. The work will be administered at the University of Alaska Fairbanks. Field work will be carried out in numerous Alaska fishing communities.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The anticipated completion date for the quality and handling training portion of the project is July 1, 2000. The anticipated completion date for the voluntary quality seal portion of the project is December 31, 2000. The project managers will able to report at that time on their success at meeting project objectives.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The proposal received in support of the fiscal year 1999 appropriation was reviewed for merit by a CSREES specialist on August 27, 1999.

FOOD SAFETY, ALABAMA

Question. Please provide a description of the research that has been funded under the Food Safety, Alabama grant.

Answer. Auburn Research Centers Food Safety Program is developing a method of food inspection that involves the placement of a sensor chip on food items. The goal is for these chips to automatically inventory and assess the safety at any point from source to consumption of appropriate fresh food products sold in the U.S.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Most food-borne illness can be attributed to bacteria. The sensor chips developed at Auburn University will target detection of the bacteria that causes most of these illnesses. This technology could result in financial savings nationally, regionally, and locally through the prevention of food-borne illness and its related costs. Up to 33 million Americans become ill each year from food borne disease. Estimates indicate that as many as 9,000 of these individuals will die with another one million suffering permanent disabilities. The USDA estimates that foodborne illness costs the U.S. economy $14.2 billion in lost productivity annually. This project will improve the safety of our food supply chain leading to an improved quality of life for every citizen and resident of the United States. In addition to these costs to the public and the nation, the costs to industry of settling civil litigation due to foodborne disease can be immense. The 1993 Jack-in-the-Box hamburger incident, which infected 433 individuals, resulted in lawsuit settlements of $126 million dollars. This research when implemented should greatly reduce the incidence of foodborne illness.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this project is to reduce the incidence of food-borne illness through the use of a sensor chip that will assess the safety of food items as they move through the food chain. The research will be conducted through June 2000 so the results will be available after that time. Already to date, the researchers have demonstrated a new method for the detection of Salmonella bacteria that has the potential to greatly reduce detection times. Current industrial methods require that a sample of suspect food be taken to the lab where tests require a minimum of 6 to 48 hours to determine a food is safe to eat. The new technology can identify harmful levels of Salmonella bacteria in a few minutes and will be packaged as a portable hand-held unit that may be used on the food production line. Additionally, Auburn University has demonstrated a working stamp size radio frequency identification sensor tag that can be used to automatically inventory and trace food within seconds. This tag stores information from farm to its final destination and can be interrogated to rapidly provide information to identify the source of a contamination or food problem should it be detected at a latter date downstream.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in June, 1999. The appropriation for fiscal year 1999 was $300,000 and for fiscal year 2000 is $446,250. A total of $746,250 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. Non-Federal State funds of $577,350 have been allocated to additionally sponsor the research in fiscal year 2000.

Question. Where is this work being carried out?

Answer. Research is being conducted at Auburn University, through the Auburn Research Center for Detection and Food Safety.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The anticipated completion date for the original objectives will be one year following the date of the award. The award date was June 15, 1999. Already the project has achieved over 50 percent of the first year objectives.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project has been underway for less than 6 months. Normally evaluations are conducted on an annual basis which would make the next evaluation due after June 2000.

FOOD SYSTEMS RESEARCH GROUP, WISCONSIN

Question. Please provide a description of the research that has been done under the Food Systems Research Group program.

Answer. The Group conducts research on contemporary issues affecting the organization and competitiveness of the U.S. food system in domestic and international markets. The issues include new technologies, market structure, firm behavior, and government policies and programs. Studies have been completed on pricing of cheddar cheese, fed cattle and hogs; changes in private label product markets; causes of structural change in the flour milling, soybean oil milling, wet corn milling, cottonseed milling, beef packing, and broiler processing industries; competition in U.S. food markets; and the relationship between U.S. food market structure and the industry's performance in global markets. The research proposal was subject to an administrative review and a peer review by the university prior to submission to CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes that the U.S. food system is changing rapidly in response to a large number of global economic, social, and technological changes. Research is needed to determine the effects of these changes on the system's organization and performance, and to ascertain needed adjustments in public policies based upon sound research. There is a national need to assess and evaluate the organization and performance of the Nation's food industry to ensure that it continues to satisfy performance expectations of farmers and consumers and adheres to acceptable standards of conduct. In spite of the growing concentration in food production-processing and increasing public policy questions concerning the performance of this industry, few organizations like the Food Systems Research Group are providing research needed for public and private decision making.

Question. What was the original goal of this research, and what has been accomplished to date?

Answer. The original goal was to assess and evaluate the organization and performance of the U.S. food industry and provide recommendations for improvements. Recent research developed models to estimate allocative efficiency in broiler, beef and pork subsectors; allocative inefficiency appears in all three because participants do not adequately anticipate dynamic market changes; vertical integration in broilers has greatly improved production efficiency but not allocative efficiency. The strategic behavior of Wisconsin agribusiness firms was documented in three case studies: one firm operates in the mature artificial breeding industry; the other two deal with relatively high input costs for cheese production. Other work continues to focus on the impact of "tough competition" on industry performance. In 1996, the project published its analysis showing manipulation of prices on the National Cheese Exchange by Kraft General Foods. Subsequently, USDA discontinued using Exchange prices in calculating basic formula milk prices, the Exchange closed, and the Chicago Mercantile Exchange opened a new cheese market. In December 1998, the University was able to publish additional materials previously held back by legal proceedings.

The project has completed numerous studies on economic structure and performance issues of the U.S. food manufacturing and distribution system. Basic research is conducted on market theories; effects of mergers, new technologies, and firm conduct on industry structure and organization; factors affecting industry prices, profits, efficiency and progressiveness; and impact of public policies and regulations on food system organization and performance.

Question. How long has this work been underway, and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal years 1976–1981, $150,000 per year; fiscal years 1982–1985, $156,000 per year; fis-

cal years 1986–1989, $148,000 per year; fiscal year 1990, $219,000; fiscal years 1991–1993, $261,000 per year; fiscal year 1994, $245,000; fiscal years 1995–1998, $221,000 per year; fiscal year 1999, $225,000; and fiscal year 2000, $425,000. A total of $4,897,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are as follows: State appropriations of $120,304 in 1991; $119,448 in 1992; $85,188 in 1993; $96,838 in 1994; $59,435 in 1995; $50,636 in 1966; $56,421 in 1997; $64,004 in 1998; and $75,115 in 1999.

Question. Where is the work being carried out?

Answer. The grant supports research at the University of Wisconsin, Madison.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1976 was for a period of 36 months. The current phase of the program will be completed in fiscal year 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in July 1999, as it evaluated the 1999 project proposal, and concluded: "The Food Systems Research Group at the University of Wisconsin does excellent research on structure, conduct and performance of selected segments of the food industry and publishes in respected journals. Researchers have won many professional awards. Much of the work provides empirical tests of competing theories. In spite of the growing concentration in food production-processing and increasing public policy questions concerning the performance of this industry, few organizations like the University of Wisconsin are providing research needed for public and private decision making."

FORAGES FOR ADVANCED LIVESTOCK PRODUCTION, KENTUCKY

Question. Please provide a description of the research that has been funded under the grant.

Answer. The Cooperative State Research, Education and Extension Service has requested the university to submit a grant proposal that has not yet been received.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to provide improved forages/livestock management systems for Kentucky and adjacent areas.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to improve the economics of livestock production through the use of advanced production systems.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $212,500.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This is a new project and no non-Federal funds have been provided to date.

Question. Where is this work being carried out?

Answer. Research will be conducted at the University of Kentucky Research Station.

Question. When was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is fiscal year 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency has not yet received the project proposal. It will be reviewed and evaluated prior to awarding fiscal year 2000 appropriations.

FORESTRY RESEARCH, ARKANSAS

Question. Please provide a description of the research that has been done under the Forestry Research grant.

Answer. The Arkansas Forest Resources Center offers programs of research, education, and outreach to the landowners of Arkansas and the surrounding region. This has been accomplished through continuing education events for landowners, the development of a series of distance-learning tutorials, and the funding of 20 assistantships for the first two classes of graduate students in the new forest resources master's program. A partial list of workshops includes: Uneven-aged Silviculture of Loblolly and Shortleaf Pine Forest Types, Environmental Law & Policy, Timber Income Tax Update, Thinning Methods and Operations, Introduction to Arc View 3.0, Estate Planning, Forest Finance Applications: Basic Tools for Daily Practice, and Opportunities in Forest Regeneration. The educational thrust has combined Center and private dollars to establish one of only three of the country's Arc View Learning Centers for natural resources. To better provide the highly educated professionals needed in the natural resources professions, educational tutorials are being developed in dendrology-tree ID, plant morphology, silvics—that aid in the (1) transfer of students in community colleges to institutions with forest resources offerings, and (2) forest resources education of non-majors at institutions without forest resources faculty. Furthermore, the University of Arkansas activated a new Master of Science program in the Fall 1998.

Research projects address issues of species diversity, richness, redundance, and the resilience of disturbed and undisturbed hardwood stands of the Mississippi River floodplain. Furthermore, research has indicated that neotropical migratory birds are indicators of ecosystem health. Factors influencing their breeding range, include habitat destruction/alteration and forest fragmentation. Thus, issues of reestablishment and structure of hardwood stands are important for timber, non-timber values, and the quality of life enjoyed regionally, nationally, and internationally. Also, other projects are contributing to the development of (1) a biological control agent for the southern pine beetle, (2) alternative forest crops for the economically-depressed Delta region, and (3) technologies for enhanced fiber and wood production from nonindustrial and industrial lands. Newer projects include an important regional social science study of the resource ethical values held by people of the southern United States and a comprehensive study for forest growth and yield.

Question. According to the research proposal, or the principal researchers, what is the national, regional, and local need for this research?

Answer. With the reduced levels of production of wood products from the Northwest, southern forests are increasingly having to produce a major portion of wood products for the United States. This increased demand and production make it critical that the forestry community understand the possible environmental effects of forestry practice. Social implications of the conflicts between forest production and environmental quality will become more and more important. Collectively, the projects address the sustainable management of southern forests.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research is to develop alternative forest management strategies for achieving multi-resource objectives; i.e., production of timber, wildlife, recreation and other values of the forest on private industrial and nonindustrial forest lands and public lands. Significant progress has been made in several areas. Some examples include: developing intensive fiber farming systems as alternatives to soybeans for Mississippi Delta farmers, taking the first step toward biological control of the southern pine beetle by discovering the nutrient needs of predators of the beetle so predators can be grown and studied in artificial cultures. The first survey of nonindustrial landowners in Arkansas for 15 years has been conducted. The survey shows that because of the average age of landowners, 60+ years, there will be a massive change in ownership in the next 10–20 years. Landowners continue to not be aware of assistance programs. The survey also indicated a concern about government programs and possible intervention on private land. This information will be useful in understanding future timber supply trends from private holdings and in the design of assistance and educational programs.

Ongoing projects include a broad array of topics, competitively awarded within the Center. These include best management practices, ecological characteristics, effects of different forest management regimes, stream-sided buffer zone effectiveness, effects of winter logging, and secondary processing efficiency.

Question. How long has the work been under-way and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows:

Grant Year	Grant Received
1994	$470,000
1995	523,000
1996	523,000
1997	523,000
1998	523,000
1999	523,000
2000	523,000
Total	3,608,000

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-fiscal funding and its source provided to this grant in 1994 was $411,726 State appropriations and $380,000 industry for a total of $791,726; $491,301 State appropriations and $785,262 industry for a total of $1,276,563 for 1995; a total of $695,204 from State and industry sources for 1996; a total of $1,115,341 from these sources in 1997; and an estimated total of $1,000,000 for 1998. For 1999, the State legislature appropriated approximately $850,000 above the 1998 level.

Question. Where is the work being carried out?

Answer. The Arkansas Forest Resources Center is administered from the School of Forest Resources on the campus of the University of Arkansas at Monticello. Individual studies are being conducted at the University of Arkansas at Fayetteville and several locations across the State.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Grants were received 1994–1999 with funds distributed for use over the 3 to 5 years following the activation year. Projects are on schedule; work from 1994 and 1995 funding are nearing completion. Forestry research is long term. Center objectives and selected projects will be continued beyond the life of individual grants using the infrastructure and capacity developed with these Special Research Grants.

Question. When was the last agency evaluation of the project? Provide a summary of the last evaluation conducted.

Answer. In 1991, an agency team visited the University and reviewed faculty qualifications, supporting sources, and the feasibility of the proposal. The team exit report indicated the faculty was highly capable, the infrastructure needed strengthening, and the proposal concepts were feasible. Since 1991, there has not been a formal program review. A review planned for the year 2000 has been rescheduled for 2001 because of a change in forest resources leadership at the University.

FRUIT AND VEGETABLE MARKET ANALYSIS, ARIZONA AND MISSOURI

Question. Please provide a description of the research that has been funded under the fruit and vegetable market analysis program.

Answer. The purpose is to provide timely knowledge and analysis of the impacts of trade, environmental, monetary, and other public policies and programs upon the Nation's fruit and vegetable industry to farmers, agribusinesses, and policymakers through a program of empirical assessment and evaluation.

Question. According to the research proposal, or the principal researchers, what is the national, regional or local need for this research?

Answer. The U.S. fruit and vegetable sector is experiencing increased growth from greater domestic and export demand. However, the growth of this sector depends upon its ability to compete domestically and internationally and to conform with the regulatory environment in which it operates. This program of research provides increasingly critical information to farmers and policymakers on the implications and impacts of various policies and programs such as environmental, trade, labor, and food safety. It is the only such program providing analysis of the total U.S. sector.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to develop the analytical capability to assess and evaluate public policies and programs impacting the U.S. fruit and vegetable industry and disseminate the results to policy makers, industry organizations, producers, and other users. Proposals have been submitted that outline long-range plans and specific projects for funding. Models have been developed for 18 major (as measured in production, consumption, and trade) U.S. fruits and vegetables representing 80 percent of the farm value of the U.S. fruit and vegetable industry. Trade models for those commodities with a significant import and/or export sector will also be devel-

oped. These models feed in to a larger food and agricultural sector model to support analysis of cross commodity and policy effects.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $329,000; for fiscal years 1995–1998, $296,000 each year; and for fiscal years 1999, $320,000; and for fiscal year 2000, $320,000. A total of $2,153,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funding and its source provided to this grant in 1994 was $50,073 State appropriations and $11,000 industry for a total of $61,073; $21,876 State appropriations and $36,624 industry for a total of $58,500 for 1995; a total of $62,400 from State and industry sources expected for 1996; and $50,000 each year from these sources in 1997 and 1998.

Question. Where is the work being carried out?

Answer. The work is being carried out at Arizona State University and the University of Missouri.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The university researchers anticipate that work will support ongoing, changing projects to look at the impact of various public policy proposals on the U.S. fruit and vegetable industry.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. We have conducted no formal evaluation. However annual proposals are peer reviewed for scientific merit and relevance; also each annual budget proposal is carefully reviewed and work progress is compared with prior year's objectives. Informal discussions with congressional staff indicate that the analyses are extremely useful.

GENERIC COMMODITY PROMOTION, NEW YORK

Question. Please provide a description of the research that has been done under the generic commodity promotion program.

Answer. The grant supports, in part, the National Institute on Commodity Promotion Research and Evaluation which provides objective analyses of national and State commodity checkoff programs designed to enhance domestic and export demand for U.S. agricultural products. "Checkoff" programs provide funds from producers to pay for advertizing and promotional programs. The overall project proposal was peer reviewed at the university level; a competitive peer review process is used to select specific research projects.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher states that producers are contributing about $1 billion annually to commodity research and promotion funds designed to expand the domestic and export markets for their products. The number of commodity groups participating and the size of the funds available could continue to grow. The 1996 FAIR Act requires all federally-constituted research and promotion boards to evaluate their programs at least every five years. Accurate evaluations require the development of sophisticated techniques that differentiate the impact of research and promotion expenditures from several other market influencing factors.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to determine the economic effectiveness of generic promotion programs designed to increase the sales of agricultural commodities in domestic and international markets. Accomplishments over the last five years include: Understanding key economic relationships in the advertising and promotion of milk and dairy products, beef, cotton, and eggs, and the exports of beef, pork, and wheat; developing new methods of estimating the relationships among advertising, promotion, government support programs, and government policy; developing new methods of measuring advertising "wearout;" determining the sensitivity of results using various methods; explaining the effect of socioeconomic and market factors on the impact of advertising; estimating optimal allocation of advertising expenditures by type of media; comparing the relative returns from generic and brand advertising. The Institute has sponsored educational workshops and conferences for promotion

board leaders, and for elected and appointed public officials responsible for developing public policy and administering checkoff programs.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by the grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $235,000; for fiscal years 1995–1999, $212,000 each year; and for fiscal year 2000, $198,000. A total of $1,493,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal matching funds and sources allocated to this grant by Cornell University are as follows: $97,333 a year in State appropriations for 1994–96; $125,650 for 1997; and $130,430 each for 1998 and 1999. Collaborating institutions performing work under subcontracts also contribute non-Federal matching funds.

Question. Where is this work being carried out?

Answer. The work is being carried out at Cornell University in collaboration with eight other land-grant universities.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1994 was for a period of 21 months, however, the need to evaluate the benefits of commodity promotion and research programs is a growing regional and national concern, as producers take on greater responsibility for marketing their products. An increasing number of promotion and research programs are being evaluated. The current phase of the program will be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in February 1999, as it evaluated the 1999 project proposal, and determined that "the project has sound objectives and procedures that are helping private and public decision makers effectively expand markets for U.S. agricultural products leading to a highly competitive agricultural production system and enhanced economic opportunity for Americans. The principal investigator is well recognized for his leadership in this area of research. Research results appear in several peer reviewed professional journals and popular press, and researchers have ongoing dialog with private and public decision makers.

GLOBAL CHANGE

Question. Please provide a description of the research that has been funded under the global change grant.

Answer. Radiation from the sun occurs in a spectrum of wavelengths with the majority of wavelengths being beneficial to humans and other living organisms. A small portion of the short wavelength radiation, what is known as the Ultraviolet or UV–B Region of the spectrum, is harmful to many biological organisms. Fortunately, most of the UV–B radiation from the sun is absorbed by ozone located primarily in the stratosphere and does not reach the surface of the earth. The discovery of destruction of the stratospheric ozone layer and development of the ozone hole over polar regions has raised concern about the real potential for increased UV–B irradiance reaching the surface of the earth and the significant negative impact this could have on all biological systems including man, animals, and plants of agricultural importance. There is an urgent need to determine the amount of UV–B radiation reaching the earth's surface and to learn more about the effect of this changing environmental force. The Cooperative State Research, Education and Extension Service, CSREES, is in the process of establishing a network for monitoring surface UV–B radiation which will meet the needs of the science community of the United States, and which will be compatible with similar networks being developed throughout the world. The fiscal year 1999 grant supports work thru September 2000.

This grant is part of a government-wide initiative. The research is closely coordinated with the National Aeronautical and Space Administration, the National Oceanographic and Atmospheric Administration, the Environmental Protection Agency, the Smithsonian, the National Science Foundation, and the Department of the Interior. All these Federal agencies are involved in the U. S. Global Change Research Program Inter-agency UV-Monitoring Network Plan.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes destruction of the stratospheric ozone layer, our shield from the full intensity of solar radiation, continues to increase. This creates a high priority need for information to document not only the levels of UV–B radiation reaching the earth's surface, but the climatology of that radiation. The United States, and the rest of the world, needs to know the strength of the UV–B radiation reaching the earth and the potential impact on all forms of life, especially animal and plant life of agriculturally important species. The principal researcher believes this research to be of national as well as regional and local importance.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The purpose of the USDA UV–B Network is to provide accurate, geographically dispersed data on UV–B radiation reaching the surface of the earth and to detect trends over time in this type of radiation. A primary problem which had to be overcome in order to reach this goal was the development of instrumentation adequate to make the measurements required for the monitoring network. A major advance occurred during 1996 with the availability to the network of a new multi-band instrument which will provide the spectral information needed to support both biological and atmospheric science research and to serve as ground-truth for satellite measurements. These instruments have been deployed and are currently in operation at twenty-six monitoring sites across the United States, including Hawaii. The researchers plan to have additional sites in Alaska, Puerto Rico, Oregon, North Carolina, and Oklahoma, but these plans are on hold due to lack of funding to support their installation and operation.

Two grants to design and build six advanced spectro-radiometers have been awarded under the National Research Initiative Competitive Grants Program. These instruments are to be used in a research network to make precise measurements of the total UV–B spectra at selected research sites. The first of these instruments failed to meet spectral performance standards when tested and calibrated by the National Institute of Science and Technology. An alternative design which resulted in a much larger and more difficult instrument to deploy has been developed. The first of the advanced instruments was deployed at Department of Commerce research site at Table Mountain near Boulder, Colorado during the fall of 1998. The second and third were installed at a Department of Energy solar radiation research site in Oklahoma and at an Agricultural Research Service Plant Stress site in Beltsville, Maryland during 1999. Additional funding will be required to support the deployment of additional research instruments.

To gain experience in network operation, broadband instruments along with ancillary instruments were installed at ten sites and have been in operation for the last 64–72 months. These sites are now equipped with a full compliment of instruments including the new multi-band instrument. Sixteen additional sites developed since 1997 are similarly equipped with broadband and the new multi-band UV instrument. Data from each site is transmitted daily to Colorado State University for preliminary analysis, distribution and archiving. These data are available, within 24 hours of collection, on the Internet via a World Wide Web Site located in the Natural Resources Research Laboratory at Colorado State University. The Department of Agriculture is also a participant in the development of a central calibration facility at Department of Commerce facilities in Boulder, Colorado. The purpose of the central calibration facility is to ensure uniform and acceptable calibration and characterization of all instruments used in interagency UV–B monitoring programs.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1992, and the appropriation for fiscal years 1992–1993 was $2,000,000 per year; fiscal year 1994 was $1,175,000; fiscal year 1995 was $1,625,000; fiscal year 1996 was $1,615,000; fiscal year 1997 was $1,657,000; and fiscal years 1998, 1999 and 2000 were $1,000,000 per year. A total of $12,982,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are as follows: $162,000 State appropriations in 1993; $183,106 State appropriations in 1994; and $285,430 provided by Colorado State University in 1995.

Question. Where is this work being carried out?

Answer. Colorado State University is managing the operating network, which when completed will include all regions of the country. At least thirty sites are planned for the climatological network including sites in Hawaii, Alaska and Puerto

Rico in order to provide broad geographic coverage. Ten sites have been operational with broad band instruments for up to six years and twenty-six sites are now operational with new generation instruments. The research level network began with the first instrument installed at the Table Mountain, Colorado instrument intercomparison site and the second and third have been installed at the Department of Agriculture Plant Stress Laboratory at Beltsville, Maryland and The Department of Energy Solar Radiation site near Ponca City, Oklahoma as part of the Atmospheric Radiation Measurements field network in 1999.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. As with other weather and climate observations, this network will be an ongoing need for the predictable future. These measurements will provide information on the nature and seriousness of UV–B radiation in the United States and will provide ground truth validation to other predictions of UV–B irradiance. The project has nearly met its first objective of the establishment of a climatological network to monitor UV–B radiation at the surface of the earth. Years of operation will be required to measure trends in UV–B radiation and to develop models to predict the climatology of UV–B radiation.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency has assigned two technical staff to continuously monitor activities in the global change research program. A team of three experts in UV–B radiation measurement technology reviewed specifications for the development of the advanced spectroradiometers in July, 1996 prior to the procurement of major components of the instrument. A panel of radiation spectra scientists were brought in to review data derived from the new multi-band instruments in December 1996 to advise on the interpretation and analysis of data derived from these instruments. Agency staff is in contact with program management on a weekly basis and has visited the program headquarters six times during the last year. The annual plan of work has been reviewed by three scientists prior to approval by the agency. A review of the UV–B Monitoring Program by a panel of technical experts from outside the Department is planned for 2000.

GLOBAL MARKETING SUPPORT SERVICES, ARKANSAS

Question. Please provide a description of the research that has been done under the global marketing support services program.

Answer. The Global Marketing Support Services project provides leadership for a comprehensive program to integrate Arkansas into the global economy. It provides market analyses and other research to identify marketing opportunities, and provides access to essential databases for people interested in conducting their own research. The research effort supports several educational activities, including workshops, educational materials, one-on-one technical assistance that help mostly small and moderate size businesses understand and enter the export market The research proposal received a peer review at the university prior to submission to CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes the emerging importance of global trade to the nation's economy and the reduction of trade barriers world-wide present unprecedented opportunities for cooperative public-private-university research to develop expertise not only in Local markets, but in world markets as well.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to develop a university research and service organization to support international trade development activities by local area businesses. During the past year, two market analyses were done for Slovakia, and work was initiated for countries in Central and South America. As a result of previous work, a Panamanian business leader visited Arkansas firms in 1999. Two "Export Marketing—Getting Started" workshops were held; six firms received one-on-one assistance and have significantly increased their interest in international marketing. Six factsheets were completed and distributed. An Internet website was used to distribute information, and an Internet international market was developed. The project developed stronger ties with the Small Business Development Council, Arkansas Economic Development Commission and the U.S. and Foreign Commercial Service as partners in educational and technical assistance activities.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $47,000; for fiscal years 1995 through 1997, $92,000 per year; and for fiscal years 1998 through 2000, $127,000 per year. A total of $704,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were $90,000 per year in State appropriations for 1994 through 1996; $51,700 for 1997; $80,000 for 1998; and $83,000 for 1999.

Question. Where is this work being carried out?

Answer. This research is being conducted at the University of Arkansas, Fayetteville.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1994 was for a period of 12 months, but the objective of expanding the export capacity of small to medium-sized agribusiness firms will not be met until 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in February 1999, as it evaluated the 1999 proposal, and determined that "the project is helping agribusiness expand markets for U.S. Agricultural products leading to a highly competitive agricultural production system and enhanced economic opportunity for Americans. The principal investigator provides very good leadership for the project and integrates it into the overall research, education and extension functions of the university to provide relevant and useful assistance to Arkansas firms."

GRAIN SORGHUM, KANSAS

Question. Please provide a description of the research that has been funded under the Grain Sorghum grant.

Answer. This project was designed to improve the yield improvement of grain sorghum cultivars by developing early maturing hybrids with a longer grain filling period. The research focuses on identification of sorghum germplasm, which have a longer grain filling period or earlier maturation date. These traits may be used to shift more of the production to grain and less to vegetative growth, thus enabling more efficient use of the limited water supply. These funds are awarded to scientists working on sorghum at Kansas State University.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The focus of this research is toward the non-irrigated lands of Kansas where sorghum can produce a grain crop under conditions that would not be possible with corn and is, therefore, very important in the rotation with wheat. While the research is directed toward Kansas conditions, it would also apply to adjoining States. Germplasm research of national significance could potentially be supported by the competitive grants awarded under the National Research Initiative or the Initiative for Future Agriculture Food and Systems.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to identify germplasm and use it to develop grain sorghum cultivars that mature earlier and produce more grain. Initial studies have identified genetic characteristics controlling grain yield under a range of climatic conditions. Researchers have identified several sorghum lines, which have a grain-filling period as much as one-third longer than U.S. adapted parent lines. Analyses show that variability exists, the trait is genetically controlled, and incorporation into adapted germplasm can be accomplished. Simulation of expected production gains has been initiated.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 1997 and the appropriation for fiscal years 1997 through 2000 was $106,000, for a total of $424,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. In 1998, Kansas State provided support via salaries and associated fringe benefits of $31,852, associated indirect costs of $14,652, and in-kind costs of $45,580, for a total of $92,084 and $95,700 for 1999.

Question. Where is this work being carried out?

Answer. These funds are awarded to Kansas State University, which allocates the money to Kansas State University scientists working on sorghum.

Question. When was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The objectives of this project, which began in 1997, are to develop sorghum parental lines with genetically longer grain fill duration and identify changes in management necessary to optimize grain production in these lines. Five years or more are required to accomplish the objectives. The first objective has been completed. The researchers expect to complete the next three original objectives by 2004 and subsequent objectives by 2006. Preliminary results have contributed toward the understanding of factors controlling grain yield and the development of higher yielding sorghum cultivars for Kansas.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project is subjected to the institutional review and approval process, as well as review by an agency scientist. In addition, stakeholder input was obtained through formal and informal methods. The institutional review of the project confirmed that high priority issues of the sorghum industry in Kansas and other sorghum producing States were being addressed.

GRASS SEED CROPPING SYSTEMS FOR SUSTAINABLE AGRICULTURE

Question. Please provide a description of the research that has been funded under the Grass Seed Cropping Systems for Sustainable Agriculture grant.

Answer. This program was developed to provide management systems for sustainable grass seed production without field burning of the straw residue following harvest which results in adverse air quality problems. Grass seed yields are often significantly reduced the following season if the residue is not burned.

Funds from this grant are awarded competitively to scientists at Oregon State University, the University of Idaho, and Washington State University engaged in research on grass seed production. Each award has passed a merit review by peer scientist.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that according to information provided by technical committees representing researchers and the grass seed industry, the need for this research is to develop sustainable systems of seed production that do not depend on field burning of straw residue. Much of the grass seed for the United States, including lawn grasses, is produced in the area. Field burning of straw residue creates unacceptable levels of air pollution and yields of some cultivar decline without burning.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal for this project is to develop grass seed production systems that do not depend on field burning of straw residue. To date, joint planning by State experiment station administrators and researchers from the three States with industry input have developed an integrated regional research effort to solve the problem.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $470,000, and for fiscal years 1995–2000, $423,000 each year. A total of $3,008,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal support for this project in fiscal year 1994 was $266,055, $298,052 for fiscal year 1995, $282,053 in 1996 $301,650 in 1997, $310,700 in 1998, and $346,500 in 1999.

Question. Where is this work being carried out?

Answer. The research will be conducted by the three State agricultural experiment stations in Idaho, Oregon and Washington.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Completion of the initial objectives was anticipated to take five years and, were partially completed in 1999. Revised goals leading to application of new management systems have been developed and should be completed in 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The entire project is reviewed annually by a steering committee for focus and relevance. The combined proposal is reviewed by the agency before funds are awarded.

Considerable progress has been made toward identifying the consequences of phased out field burning of straw residue on grass seed production. Current and future effort are directed toward development of sustainable systems without field burning. This program is subject to annual comprehensive evaluation by a team of peer scientist, industry representatives, and farmers. The results are used to guide research for the next year. Each proposal is subjected to the institution project approval process and reviewed by the agency National Program Leader.

HUMAN NUTRITION, IOWA

Question. Please provide a description of the work that has been funded under the Human Nutrition, Iowa grant.

Answer. This research aims to develop animal and plant foods with nutritionally optimal fat content and to improve utilization of foods containing non-nutrient health protectants, components that may reduce health risks. The research includes food production and processing, human and animal nutrient utilization, consumer food choices, and economic impacts of designed food to support optimal nutrition. The fiscal year 1999 grant supports research efforts of 30 investigators from seven disciplines through June 2000. CSREES requested that the university submit a grant proposal for fiscal year 2000 which is now under CSREES merit review.

Question. According to the principal researcher, what is the national, regional or local need for this research?

Answer. The research addresses food quality, nutrition and optimal health. Much of the research focuses on improving the nutritional quality of foods important to the economy of the Midwest, while making those improvements economically feasible. Ongoing research focuses on increasing health protective lipids and plant chemicals in human foods. Such foods have recently been called functional foods and the development of functional foods is of high priority to the food industry. Recent strategies have included genetic modification of plant foods for animal and human diets.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the Center for Designing Foods to Improve Nutrition, the administrative unit for this grant, is to improve human nutrition and health maintenance by determining how to improve animal and plant food fat content and how to increase availability of health-protectant factors in the human food supply.

The Center's research group on soybean health effects has established an international reputation for the soybean isoflavone database. Studies of isoflavone absorption and bioavailability indicated different human phenotypes in the intestinal breakdown of isoflavones. Ongoing studies are determining genetic and environmental factors responsible for these differences. Results suggest that consumption of soybeans with isoflavones during menopause help to maintain bone density. One project focuses on the structural features of flavones and related compounds that are effective in preventing colon cancer. Results suggest that combining flavonoids at low doses may enhance the ability in prevention of colon cancer.

Additional projects are focusing on other phytochemicals that are widely distributed in plant foods and may account for many of the beneficial properties associated with eating fruits and vegetables. Another project has identified a bioactive compound from cinnamon that may potentiate the action of insulin to help overcome insulin resistance in type II diabetics. Recent research using the Center's unique analytical facilities determined that a normal dietary intake of the carotenoid, lutien, interferes with the generation of vitamin A from beta-carotene, a major carotenoid precursor for vitamin A.

Other accomplishments include development of strategies for enriching yogurt, milk, eggs and pork with conjugated linoleic acids commonly called CLA. These compounds have unique cancer preventive properties and are derived from animal fats. Eggs were shown to be a particularly good human food for increasing dietary CLA. Other ongoing research identified fractions of human milk that enhance iron absorption by human colon cells. Such a milk factor was long expected to be responsible for the unique high iron absorption by human infants fed mothers' milk. The identification of this factor will have important benefits for infant feeding and for improving iron fortification. In the area of behavior modification, Center scientists developed a two-credit college course for freshmen that successfully prevented weight

gain, whereas control students who did not participate gained 7.8 kilograms over the sixteen-month study period.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 with an appropriation of $300,000. The fiscal years 1992–1993 appropriation was $500,000 per year; $470,000 in fiscal year 1994; $473,000 per year in fiscal years 1995 through fiscal year 2000. A total of $4,608,000 has been appropriated.

Question. What are the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $293,000 university, $312,869 industry, and $14,000 miscellaneous in 1991; $90,000 State appropriations, $473,608 university, $131,160 industry, and $116,560 miscellaneous in 1992; $307,500 State appropriations, $472,081 university, and $222,267 industry in 1993; $486,000 university and $254,000 private in 1994; $210,000 university and $200,000 private in 1995; $613,770 university and $207,811 private in 1996; $690,736 university and $458,000 private in 1997; $502,124 university and $700,000 private in 1998; and $363,000 university, $3,109,000 private and $2,617,000 other Federal in 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at the Center for Designing Foods to Improve Nutrition, Iowa State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original overall objective to design foods to improve nutrition is continuing to be addressed. A new set of related objectives will be completed in 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The grant proposals for fiscal years 1998 and 1999 have undergone extensive scientific peer review by the grantee. Progress and objectives were further reviewed in May 1999, by the Center's newly formed External Advisory Council and their recommendations are being implemented.

HUMAN NUTRITION, LOUISIANA

Question. Please provide a description of the work that has been funded under the Human Nutrition, Louisiana grant.

Answer. Obesity remains a worldwide epidemic. The grant entitled "Dietary Fat and Obesity" examines three aspects of this problem. Will the replacement of dietary fat reduce body weight in overweight men? Will fluctuations in daily fat intake influence the ability to use fat? How do good and bad fatty acids produce their differences?

Question. According to the principal researcher, what is the national, regional or local need for this research?

Answer. If dietary fat plays a role in the epidemic of obesity, reducing fat intake might help alleviate its consequences. In collaboration with industry, the effects of a commodity-derived fat substitute made from sugar and soybean oil, which can lower the intake of available fat, is under investigation.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The overall goal of this grant is to identify the basis for the susceptibility to obesity of people who eat high-fat diets and to understand how they differ from those people who are resistant to becoming obese when eating a high-fat diet. In the first project, researchers have just completed a year-long feeding study in which one group received a standard diet that was compared with two low-fat diets. The data that are now being analyzed suggest that overweight men lose weight when eating the special commodity-derived fat replacement, but not when eating a standard diet. In the second project, studies on the effect of varying the intake of fat from day to day suggest that the adaptation is similar to a single change. This implies important sensing mechanisms respond rapidly but are not well understood. Data from the third project, dealing with dietary fatty acids and insulin sensitivity, clearly show that trans fatty acids acutely increase insulin secretion and/or reduce insulin clearance, and that this effect is more pronounced in people with certain genetic characteristics. Longer-term feeding studies with trans fatty acids in healthy young men and women showed that trans fatty acids do not have strong effects on insulin action if a low-fat diet is consumed.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991, and the appropriation for fiscal years 1991–1993 was $800,000 per year and for fiscal years 1994–2000 was $752,000 per year. A total of $7,664,000 has been appropriated.

Question. What are the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $523,100 State appropriations in 1991; $515,100 State appropriations and $2,216,606 private in 1992; $536,100 State appropriations and $940,000 private in 1993; $627,000 state appropriations and $3,775,000 private in 1994; $546,100 State appropriations and $3,100,000 private in 1995; $1,471,000 State appropriations and $2,488,000 private in 1996; $1,998,000 State appropriations and $2,104,000 private in 1997; $987,000 State appropriations and $1,892,000 private in 1998; and $1,004,000 State appropriations and $3,136,000 private in 1999.

Question. Where is this work being carried out?

Answer. Research will be conducted at the Pennington Biomedical Research Center, Louisiana State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original overall objective was to understand the relationship of dietary fat to the development of obesity, and this objective hasn't changed. The anticipated completion date for the specific related objectives is 2001. The objectives to be completed over the remaining time of the grant will be reviewed by an external advisory team.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. In March 1999 an on-site panel of researchers evaluated the proposed objectives and experimental protocols. The critiques from this site visit were used to revise the final proposal. Another site visit is planned in 2000 to assess the progress, and evaluate a new set of relative objectives, and future research protocols.

HUMAN NUTRITION, NEW YORK

Question. Please provide a description of the work that has been funded under the Human Nutrition, New York grant.

Answer. This grant continues to bring together investigators who focus on issues that range from improving our understanding of key roles of nutrients at the molecular level to the development of improved strategies to enable consumers to adopt newly created knowledge easily and effectively. At the molecular end of the spectrum, emphasis is given to nutrient-gene interactions and at the consumer end, emphasis is given to the role that a supportive environment plays in enabling consumers to make desired changes in their eating patterns. The fiscal year 1999 grant supports research through September 2000 and the focus shifted to address the individualization of nutrient requirements from a broad multidisciplinary perspective.

Question. According to the principal researcher, what is the national, regional or local need for this research?

Answer. In the past decade, and in particular the past five years, there has been an explosion of knowledge concerning individual differences in the genetic control of metabolism which underlay disease processes and health maintenance. Because metabolism cannot exist without the provision of nutrients, and because nutrients influence genetic control, an understanding of genomics is fundamental to the development of nutritional sciences, from the biological to the social. Further, knowledge of individuality will become critical for the development of appropriate nutrition programs and policies, ranging from food system concerns, to the philosophy and design of dietary guidelines and guidance, to the implementation and evaluation of food assistance programs. For all of these applications there is a need for an integrated consideration of individual differences, not just in biology, but also in personal and cultural experience with food and other lifestyle and environmental exposures.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. Dietary Guidelines emphasize a reliance on plant-based foods. This emphasis is designed to control caloric consumption, reduce fat intake, modify the composition of ingested fats, enhance the consumption of foods associated with reduced cancer risk and simultaneously insure that nutrient needs are met in the proportion that is recommended. The researchers continue to address information gaps that re-

late to these health goals and to the policy aims for their implementation and that limit the more effective enhancement of consumer practices. This grant supported 25 research and outreach projects over the past year including 14 new awards in fiscal year 1999.

Selected highlights of the work in community outreach included the expansion of the Sisters in Health program to ten additional counties in New York State. This research-based nutrition education program encourages low income women to eat more fruits and vegetables through active experiences with foods in a positive social setting and has reported a 30 percent increase in fruit and vegetable consumption by participants. Another project supported the Community Food Security planning sessions that were held in six counties in New York State. Members of the groups have incorporated the insights and plans obtained from these sessions into their existing programs and activities.

The new initiative in genomics led to a study of the regulation of folate metabolism during neural development in a mouse model system. Disruption in folate metabolism due to nutritional deficiency and/or genetic predisposition is responsible for the occurrence of approximately 60 to 70 percent of neural tube birth defects including spina bifida. Using transgenic and gene knock-out approaches, researchers identified key genes that regulate folate metabolism exclusively during neural development. They are elucidating the molecular association between certain genes and nutrient status in the disease process, thereby defining the relative contribution of both nutrition and genetics in these folate-related birth defects. Other work in genomics include a study of the potential role of Receptor Associated Protein as a chaperone of lipoprotein lipase by employing mice with deletion of a critical gene. Lipoprotein lipase is a pivotal enzyme that regulates lipid metabolism. The enzyme is found mainly in adipose tissue and muscles but not in the liver. Recent work may have identified the molecular basis for the lack of expression of this enzyme in the liver.

Question. How long has this work been underway, and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $450,000; fiscal years 1990–1991, $556,000 per year; fiscal years 1992–1993, $735,000 per year; fiscal year 1994, $691,000; fiscal years 1995–2000, $622,000 each year. A total of $7,455,000 has been appropriated.

Question. What are the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $154,056 State appropriations and $2,456 private in 1991; $238,430 State appropriations and $60,746 private in 1992; $19,401 State appropriations and $22,083 private in 1993; $202,441 State appropriations and $1,175 private in 1994; $296,794 State appropriations in 1995; $348,127 in State appropriations and $39,593 private in 1996; $133,162 State appropriations in 1997; $8,185 university appropriations, $166,752 State appropriations, and $7,905 private in 1998; and $6,395 university appropriations, $164,244 State appropriations, and $7,414 private in 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at Cornell University, New York.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original overall objective to integrate nutrition goals and food systems is continuing to be addressed in fiscal year 1999. The university changed the focus to complement the university's initiative in genomics and to human and social science issues that relate to food and nutrition. Progress has been consistent with the proposed time lines. They anticipate completing the specific related objectives in 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES made a site visit on May 27, 1999, to evaluate the change in focus. The grant proposal for fiscal year 1999 was also subjected to independent peer review coordinated through the Cornell Agricultural Experiment Station. Based on reviewer recommendations, two proposed objectives were not funded and modifications were made to experimental designs of other projects.

HYDROPONIC TOMATO PRODUCTION, OHIO

Question. Please provide a description of the research that has been funded under the Hydroponic Tomato Production, Ohio grant.

Answer. The Cooperative State Research, Education, and Extension Service has requested the university to submit a grant proposal that has not yet been received. Cultural practices, greenhouse design, and economics will be evaluated for Ohio and adjacent areas. Tomato production will be evaluated as an alternative enterprise to other crops.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The research is needed to develop and evaluate management protocols for economical production of green houses tomatoes as an alternative crop for Ohio and adjacent areas.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals of the research is to provide recommendations for management systems for successful operation of green house tomatoes as an alterative crop.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 and the appropriation for fiscal year 1998 was $140,000, and for fiscal years 1999 and 2000 is $200,000 each year. A total of $540,000, has been appropriated.

Question. What is the source and amount of non-Federal provided by fiscal year?

Answer. The non-Federal funds provided for support of the project are $19,400 for fiscal year 1998 and $24,500 for 1999.

Question. Where is this work being carried out?

Answer. The research will be conducted by the Ohio State Agricultural Experiment Station at selected locations in Ohio.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigator for this project anticipates completion of the original objectives in fiscal year 2002. New objectives related to grass breeding are projected for completion in 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was subjected to a peer review in the institution and again reviewed by the agency National Program Leader when initialed in 1998.

ILLINOIS-MISSOURI ALLIANCE FOR BIOTECHNOLOGY

Question. Please provide a description of the research that has been funded under the Illinois-Missouri Alliance grant.

Answer. The Illinois-Missouri Alliance has initiated a competitive grants program in agricultural biotechnology for research in targeted priority areas of need related to corn and soybeans. The scope of interest includes production, processing, marketing, utilization, inputs and support services, along with economic, social, environmental, and natural resource concerns. The Alliance has solicited research project proposals from scientists at Illinois and Missouri and other midwestern institutions, and has conducted peer reviews for science quality, commercial feasibility and potential economic impact to select the proposals that will be funded. In 1999 the Alliance awarded three new research grants at three institutions totaling $590,000.

In 1998 the Alliance started an on-line magazine called AgBioForum devoted to the economics and management of agricultural biotechnology. The purpose of AgBioForum is to provide unbiased timely information and new ideas leading to socially responsible and economically efficient decisions in science, public policy, and private strategies pertaining to agricultural biotechnology. In its first year of operation, AgBioForum experienced over 145,000 hits from individuals in universities, industry, government, and international organizations.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal investigator has indicated that the goal of the Alliance is the pre-commercial development of emerging biotechnology discoveries for agriculture. The midwestern region produces more than half of the nation's output of corn and soybean crops, and is critical to domestic food security and United States competitiveness in global agricultural markets. Alliance grants are awarded on a regional basis to advance corn and soybean production in the Midwest. The Alliance is implementing a research strategy that it hopes will generate important biotechnological developments that are rapidly adaptable to unique local soil, climatic and so-

cioeconomic conditions of the region. Alliance grants are awarded to projects with a clearly defined marketable product or service derived from biotechnology research.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. Fiscal year 1999 was the fifth year of funding for the Alliance. The research program focuses on the two major commodity crops, corn and soybeans, as produced, processed and marketed in the midwest. The goal of this biotechnology program is to fund integrated research and development projects that will lead to specifically defined practical technologies for commercialization. The projects funded in fiscal year 1999 include efforts to: (1) engineer maize to produce an isoflavone that is important in human health, (2) develop molecular markers for resistance of soybean to the sudden death syndrome fungus and then move resistance into commercial cultivars, and (3) to develop the genetic basis for asexual seed production in tripsicum, a close relative of maize.

Question. How long has this work been underway and how much has been appropriated by fiscal year through 2000?

Answer. The work supported by this grant began in fiscal year 1995. The appropriations for fiscal years 1995 and 1996 were $1,357,000 each year, for fiscal year 1997, $1,316,000, and for fiscal years 1998 through 2000, $1,184,000 per year, bringing the total appropriations to date to $7,582,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The Alliance has not specified a required amount of matching funds, but it is expected that most projects will have commitments for significant direct and in-kind non-Federal support. Since Alliance projects are still underway, the exact amount of the non-Federal contribution is still unknown. The non-Federal contribution is expected to be substantial, and a system for accounting for future non-Federal contributions is in place.

Question. Where is this work being carried out?

Answer. The research projects identified for funding in fiscal years 1995 through 1999 are being conducted at the University of Illinois, the University of Missouri, Iowa State University, Northwestern University, Southern Illinois University, and the Agricultural Research Service.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Each project proposal for Alliance funding has a target date for completion. The four initial projects were three-year studies with anticipated completions at the end of fiscal year 1998. Most of the second and third rounds of projects are also three-year studies with anticipated completions at the end of fiscal years 1999 and 2000, respectively.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Illinois-Missouri Biotechnology Alliance was evaluated for scientific merit by an agency peer review panel on February 25, 1999. The panel recommended approval of the project pending receipt of supplemental information on administrative aspects of the project. The supplemental information was received and we are satisfied that the program is being administered in compliance with the purpose of the grant. A peer review panel will be convened to re-evaluate the project upon receipt of a proposal for fiscal year 2000.

IMPROVED DAIRY MANAGEMENT PRACTICES, PENNSYLVANIA

Question. Please provide a description of the research that has been funded under the Improved Dairy Management Practices grant.

Answer. The research focuses on developing methods to help dairy farmers in the adoption of new technology and management practices which lead to improved dairy farm profitability. Individual research projects funded by the grant are determined by a competitive peer review process administered by the Institution using peers from Institutions located primarily in other States.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the local need is for the identification and implementation of profit enhancing management strategies for Pennsylvania dairy farms in response to changing market conditions and emerging technologies. The current focus is to develop economically-viable solutions to issues confronting Pennsylvania dairy farmers such as dealing with animal waste in an environmentally-friendly manner, reducing the cost of forage production systems, including

grazing systems, and to develop a better understanding of decision processes by dairy farmers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals of this research remain the same, which is the development of methods to help dairy farmers in the adoption of new technology and management practices which lead to improved dairy farm profitability. A farm management survey is complete and analysis of results is in progress. Farm financial models have been developed and are undergoing a field test on selected farms. Workshops to teach elements of business management to dairy farmers have been conducted, and survey instruments are in place to monitor effectiveness of workshops. Research is currently underway to develop improved models for nutrient management on northeastern dairy farms, to evaluate the potential role of intensive grazing systems to replace harvested forage, and to better understand how decisions are made by dairy farm families. Refinement of an expert computer-based system to assist dairy farmers in controlling the udder disease, mastitis, is underway. A study to evaluate the induction of lactation on dairy profitability is underway. An additional study to evaluate the impact of improved protein nutrition during late gestation on dairy cow performance has been initiated.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was $335,000 per year. The fiscal year 1994 appropriation was $329,000 and $296,000 each year in fiscal years 1995–2000. A total of $2,775,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. During fiscal year 1992, $354,917 were from State funds, and $16,000 from Industry, for a total of $370,417. During fiscal year 1993, $360,374 were from State funds and $16,000 from Industry for a total of $376,374. Information is not available for fiscal years 1994–1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at Pennsylvania State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal researcher anticipated completion of the original objectives by March 1994. The original objectives were met. Availability of continued funding has permitted the institution to develop a competitively awarded grant program within the institution to address priority issues related to management of dairy farms. Proposals are reviewed and ranked by peers from other institutions prior to award. It is anticipated that awards from the fiscal year 2000 appropriation will be complete in September 2002. Keeping with the Administration's policy of awarding research grants competitively, no further Federal funding for this grant is requested.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency accepts technical review of specific proposals funded by this grant on an annual basis. The overall proposal is review by the agency on an annual basis. In addition, technical staff has conducted on-site review of the program in 1993 and in 1995. The overall objective of the work funded by this grant has direct relationship to the development of Integrated Management System as well as to aspects of animal production systems on animal well-being and impact on the environment.

IMPROVED EARLY DETECTION OF CROP DISEASE, N.C.

Question. Please provide a description of the research that has been funded under the grant.

Answer. CSREES has requested the university to submit a grant proposal that has not yet been received.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal investigator is preparing to submit a proposal, but at this time no additional information is available.

Question. How long has this work been underway and how much has been appropriated by fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $170,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are not known at this time.

Question. Where is the work being carried out?

Answer. Research will be conducted at the University of North Carolina-Greensboro.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This is a new grant.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This is a new project that will undergo merit review when received.

IMPROVED FRUIT PRACTICES, MICHIGAN

Question. Please provide a description of the work that has been done under the improved fruit practices grant.

Answer. Funds from this grant will be awarded competitively to scientist at Michigan State University working with these crops. This research will involve a multidisciplinary approach to reduce chemical use on apple, blueberry, and sour cherry, three important Michigan fruit crops, and improve the management of dry edible beans and sugar beets. Research will be conducted on crop management techniques and reduced chemical use.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes Michigan's need for this research is to develop and maintain/expand their tree fruit and small fruits industry. There is a need to improve the culture and management of dry edible beans and sugar beets.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The planned objectives of the research are to reduce the chemical contamination of the environment from fruit production and improve production practices for beans and beets through multidisciplinary research, including pesticides, and the development of new nonchemical production methods.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $494,000, and for fiscal years 1995–2000, $445,000 each year. A total of $3,164,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant in fiscal year 1994 were $437,338 from State appropriations and $135,000 from industry, for fiscal year 1995 were $574,494 from State appropriations and $127,000 from industry and a total of $908,969 for 1996. The non-Federal funds for 1997 totaled $752,500. The non-Federal funds for 1998 total $729,145, and for 1999 $1,332,300.

Question. Where is this work being carried out?

Answer. Research will be conducted at Michigan State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Principal Investigators have reported significant progress toward improved cultural practices for these speciality crops which is expected to reduce the need for chemical pesticides, and expect to complete the original objective by the end of fiscal year 1999. Long-term goals are expected to take an additional five years with a projected completion date of 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project has not been subjected to a comprehensive review. The annual proposals including all of its sub projects are subjected to peer review before submission to the Cooperative State Research, Education, and Extension Service before they are approved. The project has progress toward the objective of developing management practices and strategies for economical production of specialty crops in Michigan with reduced chemical pesticide use.

This program is evaluated at the end of each research cycle and priorities adjusted for the next years funding. The evaluation is performed by scientists at Michigan State University.

INFECTIOUS DISEASE RESEARCH, COLORADO

Question. Please provide a description of the research that has been conducted under the Infectious Disease Research, Colorado grant.

Answer. The purpose of this project is to establish a multidisciplinary research center to study infectious animal diseases which have a critical economic impact. The "Center for Economically Important Infectious Animal Diseases" will work collaboratively with universities and State and Federal agencies. The focus will be on the impact of such diseases on international trade.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for the research?

Answer. The need for this research is to provide valid risk assessment models for diseases which affect international trade and animal and public health. Livestock producers and the industry need this type of information to enable them to make correct disease management decisions. The Center will utilize commodity advisory groups to prioritize specific disease problems and will focus on those diseases with the greatest potential for economic impact.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to establish a regional center that will foster interactive work on risk assessment, disease control, and minimize the economic impact of disease outbreaks in livestock. The Center has been successful in obtaining additional funding from a variety of sources to initiate studies on diseases such as vesicular stomatitis and tuberculosis. The coordinating structures have been established and the Center is poised to make excellent progress during the next year.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999 with appropriations in fiscal year 1999 of $250,000 and in fiscal year 2000, $255,000, for a total of $505,000.

Question. What is the source and amount of non-Federal funds by fiscal year?

Answer. In fiscal year 1999 the project also received the following funds: other Federal agency grants, $85,750; private foundation grants, $39,488; State, $33,120.

Question. Where is this work being performed?

Answer. The research is being conducted at the College of Veterinary Medicine, Colorado State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date is 2003. The work is proceeding on the designated schedule and it is expected that the objectives will be met in a timely manner.

Question. When was the last agency evaluation of this project? Provide a summary of it.

Answer. Because the project was just initiated in fiscal year 1999, no evaluation has been done at this time. However, the first review will be conducted later in fiscal year 2000, on the first anniversary of the initiation of the project.

INSTITUTE FOR FOOD SCIENCE AND ENGINEERING, ARKANSAS

Question. Please provide a description of the research that has been funded under the Institute for Food Science and Engineering grant.

Answer. As the flagship center for the Institute of Food Science and Engineering, the Center for Food Processing and Engineering has as its objectives to facilitate and encourage value-added research and improve the processing of agricultural products.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the Institute will provide technical support and expertise to small and mid-sized food processors that usually do not possess adequate expertise in-house. The economy of the southern region will be improved through the creation of new jobs and a high multiplier effect from the research. The Institute will develop and disseminate scientific information and provide educational programs related to value-added further processing, storage and marketing of food products. These efforts will assure food safety, improve the sen-

sory and nutritional quality of food and meet the nutritional requirements and food preferences of a changing society.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to establish an Institute of Food Science and Engineering at the University of Arkansas-Fayetteville. The Institute for Food Science and Engineering and the Center for Food Processing and Engineering are operating. Research projects at the Center include: postharvest management practices for rice, such as studies of physicochemical properties, bacterial load of rice products, and milling systems, and development of methods to improve the texture and dill flavor of pickles, and the color of acidified pickled vegetables, with estimated impact to the pickle industry of $500,000 annually. Researchers have developed 12 mechanized systems for total vineyard mechanization which maintain or improve juice and wine quality. Research on physicochemical properties of potatoes and bitterness in carrots and have had estimated economic impacts of several million dollars. Research on elecrochemical flow-through systems for chicken processing water and near infrared/mid-infrared imaging for large scale fruit processing have important applications in industry. Institute staff, including the Descriptive Sensory Panel, have assisted both national food processing companies and small commercial kitchens in process development, with an impact of up to $2,000,000 annually on the Arkansas vegetable processing industry. The Institute's Center of Excellence presents workshops in the United States as well as planning train the trainer courses in Mexico and Central America to improve the safety of imported fresh fruit and vegetables. To date, 70 publications, two IMPACT reports and a quarterly newsletter have served to keep the industry and fellow scientists informed of research and technology transfer activities.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1996. The appropriation for fiscal years 1996 and 1997 was $750,000 each year, $950,000 for fiscal year 1998, and $1,250,000 each for fiscal years 1999 and 2000. A total of $4,950,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. The non-Federal funds and sources provided for this grant include $184,700 in State funds and $93,000 from industry in fiscal year 1996, and $187,357 in State funds and $320,403 industry funds in fiscal year 1997. Thus far in fiscal year 1998, industry has provided $93,599, with firm commitments of an additional $55,000. The State has also provided facilities and administrative and clerical support estimated at $303,694 through June 30, 1998. The Institute has also received $48,000 to establish the Food and Agriculture Organization Center of Excellence.

Question. Where is this work being carried out?

Answer. Research will be conducted at the University of Arkansas at Fayetteville.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The principal researcher anticipates that work will be completed on the original goals in fiscal year 2002. The goals of this project related to establishing the centers of the Institute have not been fully met. The Center for Food Processing and Engineering and the Center for Food Safety and Quality are in operation; activation of the Center for Human Nutrition is scheduled for 1999. The objectives related to research and service to industry, food entrepreneurs and the general public would continue to be ongoing.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. In a review of the proposal on April 14, 1999, the assessment was that satisfactory progress was demonstrated in meeting the goals of the Institute.

INTEGRATED PEST MANAGEMENT

Question. Please provide a description of the research that has been funded under the Integrated Pest Management research grant.

Answer. This research grant develops new pest management tools to address critical pest problems identified by farmers in an agricultural production region. Funds are distributed through the Regional Integrated Pest Management—IPM—Grants Program, which provides competitively-awarded grants to develop new pest manage-

ment tactics to replace management tools lost as a result of regulatory action, pest resistance, and other factors. The Regional IPM Grants program supports research and extension projects that identify new pest management tactics, validate the effectiveness of new tactics in a production setting, and help producers implement these tactics by providing education and training programs. Proposals submitted to the Regional IPM Grants Program undergo technical and merit review at the regional and national levels.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research.

Answer. The ability of the Nation's agricultural production system to keep pace with domestic and global demand for food and fiber is dependant on access to safe, profitable, and reliable pest management systems. For a variety of reasons, including the Food Quality Protection Act of 1996—FQPA—and pest resistance, many of the chemical control options farmers and other pest managers have relied on for many years are no longer available. The loss of these important tools is likely to continue at an accelerated rate over the next several years, and will have significant impacts on pest management systems in the United States over the next decade. The "minor use" crops—high value crops grown on relatively few acres—will be particularly hard hit during this period. For these reasons and others, it is essential that farmers be provided with new pest management tools and better information so they can remain competitive in today's global marketplace. These research grant funds are an important part of the Department's plan to assist farmers in finding effective pest management alternatives so they can adjust to changes in pesticide availability resulting from implementation of FQPA.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research is to provide farmers with new pest management options that allow them to reduce dependance on pesticides, improve profitability, and protect vital natural resources. The research supported by this research grant has made important contributions to increasing knowledge about new approaches to pest management, but the need for continued investment in this area of research is greater than ever. The following are some accomplishment examples:

—In Massachusetts, an Integrated Pest Management approach for fresh sweet corn was developed using early season applications of Bacillus thuringuienses followed by an application of vegetable oil. This system is effective and economical and meets the requirements for organic production and allows small-acreage sweet corn growers to produce the crop without relying on insecticides.

—In Arkansas, a "friendly" fungus was discovered that attacks cotton aphids, a major pest of cotton. The aphid fungus saves Arkansas cotton growers millions of dollars each year by reducing the need to apply aphid insecticides.

—In Kentucky, researchers developed a simple management system for Japanese beetles that allows landscapers to determine the optimum timing for insect management. This management system has resulted in better use of resistant varieties and has reduced pesticide use.

Question. How long has this work been underway and how much as been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1981, $1,500,000; fiscal years 1982 through 1985, $3,091,000 per year; fiscal years 1986 through 1989, $2,940,000; fiscal year 1990, $2,903,000; fiscal year 1991, $4,000,000; fiscal years 1992 and 1993, $4,457,000 per year; fiscal year 1994, $3,034,000; and fiscal years 1995–2000, $2,731,000 each year. A total of $60,861,000 has been appropriated since fiscal year 1981.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. A study of the sources of non-Federal funds that contribute to this research effort was conducted in 1993–94 with the following results. In fiscal year 1993, State appropriations, $841,017, product sales, $33,987, industry grants, $17,081, and other, $31,737; for fiscal year 1994, State appropriations, $2,303,458, product sales, $77,157, industry grants, $210,110, and other, $216,552. These studies, which have not been repeated since 1994, demonstrate a trend toward greater annual State investments in Integrated Pest Management programs.

Question. Where is the work being carried out?

Answer. Scientists in all States are eligible to compete for this funding on a competitive basis. This research is currently being carried out by Colleges of Agriculture in more than 30 States.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Due to the passage of FQPA in 1996, the economic and environmental pressures facing U.S. agriculture today are at least as great today as they were in 1981 when Federal funds were first appropriated for this research grant. It is important for government to address the needs of agricultural producers by supporting research and extension efforts to develop alternative pest management approaches. It is anticipated that the need for this work will only increase as new pests emerge, existing pests become resistant to current control methods, as new pesticide regulations are implemented, and as national and international markets shift.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Evaluation of this project is a continuous process. Projects funded by this research grant are awarded through a competitive process that includes relevance, technical, and merit review by multi-disciplinary panels. Progress reports are reviewed to evaluate accomplishments and special attention is given to studies involving new control strategies relating to at-risk sites with pest management usage patterns impacted by FQPA implementation.

INTEGRATED PRODUCTION SYSTEMS, OKLAHOMA

Question. Please provide a description of the research that has been funded under the Integrated Production Systems, Oklahoma grant.

Answer. This grant focuses on the development of efficient management systems for production of watermelons and blackberries under intensively-managed conditions. The work will address biotic and abiotic production components under Southeastern Oklahoma conditions for use in production guidelines. This will include planting densities, fertilizer studies, weed management and insect and disease control.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for the research.

Answer. The principal researcher believes the need for this research is focused on the local area of Southeastern Oklahoma, an area that is economically-depressed and in need of alternative crops to diversify the dominant cow/calf livestock production.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to develop new and alternative crops to supplement and diversify the cow/calf livestock agriculture of Southeastern Oklahoma with emphasis on horticultural crops. Work to date has shown promise for strawberries, blackberries, cabbage, melons and blueberries. CD–ROM technology transfer to research results to support an expert system will be developed for grower use.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Work supported by this grant started in fiscal year 1984 and the appropriations were: fiscal year 1984, $200,000; fiscal year 1985, $250,000; fiscal year 1986, $238,000; fiscal years 1987–1989, $188,000 per year; fiscal years 1990–1991, $186,000 per year; fiscal year 1992, $193,000; fiscal year 1993, $190,000; fiscal year 1994, $179,000; fiscal years 1995–1998, $161,000 each year and fiscal years 1999–2000, $180,000 per year. A total of $3,190,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $165,989 State appropriations in 1991; $160,421 State appropriations in 1992; and $164,278 State appropriations in 1993. Non-Federal support for 1994 was $141,850 for State appropriations. Funds for fiscal year 1995 were $129,552, for 1996 $146,000, for 1997 $152,000, for 1998, $148,000; and for 1999 $151,000.

Question. Where is this work being carried out?

Answer. This research is being done at the West Watkins Agricultural Research and Extension Center at Lane, Oklahoma, a branch of the Oklahoma State Agricultural Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives of this project were to develop production systems for alternative crops with economic potential for southeastern Oklahoma. Each year's funding cycle has addressed specific crop and management objectives to be completed over two years time. These short term objectives have been met for each of the completed two year projects. However the original objective of developing al-

ternative cropping systems is very long term and have not been completed. The current project is projected for completion in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Each of the annual project proposals has been put through the institutions' review and is reviewed by an agency scientist before approval. In addition to the annual review of individual proposals, a comprehensive review of the Lane Agricultural Center, where this research is conducted, was conducted in 1993. This review revealed that work supported by this grant is central to the mission of that station and represents an important contribution to the agriculture of the area.

This work has provided practical management information for farmers of southeastern Oklahoma that has improved their ability to economically-produce small fruit and vegetable crops. This project is evaluated internally at the end of each year in order to set priorities for the next year.

INTERNATIONAL AGRICULTURAL MARKET STRUCTURES & INSTITUTIONS, KY

Question. Please provide a description of the research that has been done under the International Agricultural Market Structures and Institutions program.

Answer. The International Agricultural Market Structures and Institutions project began late in fiscal year 1999 as a means of helping U.S. agriculture discover new ways to increase its global market share. The project analyzes food consumption trends and food distribution systems; evaluates the impact of actual and potential changes in local policies; identifies potential markets for food products produced in southern U.S. States.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. U.S. firms need to become more aggressive in international markets, but these markets are unfamiliar to many firms. The structure of international markets and the institutions that serve them are often different than in domestic markets, and the structures and institutions are continuously changing. Very few southeastern agribusinesses have the necessary research and intellectual resources to study international markets; they rely on their public institutions, such as the University of Kentucky, to assist them in discovering and exploiting export market windows.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to increase the international marketing success of American farmers and agribusinesses by increasing their understanding of international markets and the impact of policies that affect those markets.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999. The appropriation for fiscal years 1999 and 2000 was $250,000 a year. A total of $500,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Non-Federal funding for this grant was $135,000 from State appropriations in 1999.

Question. Where is this work being carried out?

Answer. The work is being conducted at University of Kentucky in Lexington.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1999 was for a three-year project ending in 2002. Work is ongoing for the original objectives. Additional funds in 2000 will extend the project to 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This was a new project in 1999 when CSREES performed a merit review of the original proposal and noted that: "The University of Kentucky has faculty with expertise to conduct such a study. The principal investigator has been engaged in such work for several years, has conducted projects in other countries, and has been the university's director of international programs."

INTERNATIONAL ARID LANDS CONSORTIUM

Question. Please provide a description of the research that has been funded under the International Arid Lands consortium.

Answer. Fiscal year 2000 is the seventh year that Cooperative State Research, Education, and Extension Service has funded the International Arid Lands Consortium. The Forest Service supported the program during fiscal year 1993 to develop an ecological approach to multiple-use management and sustainable use of arid and semiarid lands. Projects that began in 1996–1999 will continue to be funded to address issues of land reclamation, land use, water resources development and conservation, water quality, and inventory technology, and remote sensing. All proposals are peer reviewed and awarded competitively, whereby the principal investigator must be from a Consortium member institution.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the consortium is devoted to the development, management and reclamation of arid and semi-arid lands in the United States, Israel, and elsewhere in the world. The International Arid Lands Consortium will work to achieve research and development, educational and training initiatives, and demonstration projects. The current member institutions are the University of Arizona, The University of Illinois, Jewish National Fund, Jordan's Higher Council for Science and Technology, New Mexico State University, South Dakota State University, Texas A&M University, Kingsville and Nevada's Desert Research Institute. Affiliate membership includes Egypt's Ministry of Agriculture and Land Reclamation Undersecretary for Afforestation. The United States Department of Agriculture's Forest Service works very closely with The International Arid Lands Consortium through a service-wide memorandum of understanding.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the Consortium was and continues to be acknowledged as the leading international organization supporting ecological sustainability of arid and semi-arid lands. To date, 63 projects have been funded, 43 of which are to conduct research and development, 11 for demonstration projects, and 9 for international workshops. Funds approximating $4.04 million have been used to fund these projects.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The International Arid Lands Consortium was incorporated in 1991. Funds were appropriated to the Forest Service in 1993. Additional funds were received during each of the years that followed. $329,000 has been appropriated from Cooperative State, Research, Education, Extension Service for fiscal years 1994 through 1998, and $400,000 for fiscal years 1999 and 2000 each for total appropriations of $2,445,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Members of the International Arid Lands Consortium have provided funds to support the Consortium office in Tucson, Arizona, and for printed materials as needed. Each member has provided travel and operations support for semi-annual meetings, teleconferences, and other related activities. In fiscal years 1993–1996, $60,000 in State appropriations were provided. Industry provided $84,083 and $100,000 in fiscal years 1993 and 1995, respectively. Additional funds of $34,000 were received during 1996 from the Egyptian affiliate member to enhance future collaboration. Funds of $50,000 from industry were received during 1998–1999.

Question. Where is this work being carried out?

Answer. Research is currently being conducted at the University of Arizona, South Dakota State University, Texas A&M University, Kingsville, New Mexico State University, University of Illinois, Nevada's Desert Research Institute, and several research and higher education institutions in Israel, Jordan and Egypt.

Question. What was the anticipated completion date for the original objectives of the projects? Have those objectives been met? What is the anticipated completion date of additional or related objectives.

Answer. All research and demonstration projects that started during 1993–1995 have been completed. The projects started in 1996–1997 are expected to be completed within 12 months depending upon the nature of the project. Projects started during 1998–1999 will be completed within 2 years. Several demonstration projects were completed and 6 international workshops were held during 1994 through 1999. The International Arid Lands Consortium is an organization with long-term goals.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The cognizant staff scientist reviews the project semi-annually and has determined that the research is conducted is in accordance with the mission of the agency.

IOWA BIOTECHNOLOGY CONSORTIUM

Question. Please provide a description of the work that has been funded under the Iowa Biotechnology Consortium grant.

Answer. This Consortium is the focal point for cooperative biotechnology research endeavors between Iowa State University, the University of Iowa and the City of Cedar Rapids to recover and utilize byproduct materials arising from new and emerging industries in biotechnology with an emphasis on fermentation wastes and agribusiness. Both fundamental and applied research studies are being conducted to reduce the burden of agricultural bioprocessing wastes on municipal waste management systems and to transform components of these agricultural wastes into commercially viable products. The overall project involves a coordinated approach by a diverse group of investigators, and funding decisions for individual studies within each participating institution are based on a competitive peer review process with letter and panel evaluations.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The environmental burden associated with agriculture and the agricultural processing industries is recognized as a growing problem in the United States. These researchers believe that technological breakthroughs are possible to recover and recycle energy, chemicals, and materials from agriculture-related wastes. Although these principal investigators are working with wastes that are generated in the State of Iowa, similar waste streams are generated by agricultural industries across the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals of this project were aimed at enhancing the recovery and utilization of by-product materials arising from new and emerging industries using biotechnology. Recycling agricultural wastes, isolating useful byproducts and developing value added processing remain the primary thrusts of the project. A cadre of scientists has been established by the Consortium to assist in finding uses for the by-product waste streams generated by agricultural processing. The Consortium is also making important progress in bioconversion, biocatalysis, membrane concentration, and bioseparation of by-products. Recently, new studies have been initiated on: value-added products related to culture of polysaccharide-producing bacteria; screening of agricultural seed processing fractions for biocatalysts; conversion of lignocellulose to lactic acid; the use of waste by-products as feeds for livestock and aquacultural species; composting strategies for waste streams; and exploitation of mico-organisms that colonize extreme environments found in food processing plants.

Question. How long has this work been under way and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $1,225,000; fiscal year 1990, $1,593,000; fiscal year 1991, $1,756,000; fiscal year 1992, $1,953,000; fiscal year 1993, $2,000,000; fiscal year 1994, $1,880,000; fiscal years 1995–1996 $1,792,000 each year; fiscal year 1997, $1,738,000; and in fiscal years 1998 through 2000, $1,564,000 each year. A total of $20,421,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Non-Federal funds and sources provided for this grant were as follows: $623,803 from the State of Iowa, $42,813 from the city of Cedar Rapids in 1991; $768,287 from the State of Iowa, and $365,813 from the city of Cedar Rapids in 1992; $858,113 from the State of Iowa, and $170,000 from the city of Cedar Rapids in 1993; $841,689 from the State of Iowa, and $36,000 from the City of Cedar Rapids in 1994; $1,016,505 from the State of Iowa, and $36,000 from the city of Cedar Rapids in 1995; $862,558 from the State of Iowa, and $40,000 from the City of Cedar Rapids in 1996; $1,044,864 from the State of Iowa, and $50,000 from the City of Cedar Rapids in 1997; $303,549 from the State of Iowa, and $50,000 from the City of Cedar Rapids in 1998; and $293,461 from the State of Iowa, and $59,400 from the City of Cedar Rapids in 1999.

In addition, leveraging of Federal grant monies has been obtained in the form of industrial matching funds or contracts for related projects. Some of the more noteworthy awards are as follows: $20,000 from Archer Daniels Midland; $342,720 from Ajinomoto; $40,000 from BASF; $18,000 from Bluestem Solid Waste Agency; $1,748,975 from Cargill; $177,200 from Heartland Lysine, Inc.; $48,000 from Horizon Technology, Inc.; $75,274 from Iowa Corn Promotion Board; $65,200 from Iowa

Energy Center; $80,273 from National Corn Growers Association, $25,000 from National Pork Producers Council; and $11,500 from PathoGenesis Corporation.

Question. Where is this work being carried out?

Answer. Research is being conducted at Iowa State University and the University of Iowa, in collaboration with the City of Cedar Rapids. In addition, field studies are being conducted at various sites through out Iowa, including the facilities of participating industries located in Cedar Rapids and other Iowa communities.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Consortium was originally created as a partnership between the City of Cedar Rapids and the participating universities to assist the City in dealing with wastes associated with corn and oat processing and milling, biocatalysis to produce high-fructose syrups, and one of the largest fermentation facilities in the world. More recently, new biotechnology industries have been attracted to Cedar Rapids and have added greatly to the volume of industrial waste streams. No firm date was established to complete this research at the beginning of the project. The researchers have worked closely with the City and the industries generating these agricultural wastes since 1989, and the nature of the studies has evolved as significant progress has been made in analyzing waste streams and in devising laboratory procedures for extracting useful products. The City of Cedar Rapids is planning to invest funds from other sources in special waste treatment facilities to conduct large scale tests of new treatment methods. Several years will be required to complete these tests and to refine separation technologies.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Iowa Biotechnology Consortium proposal is composed of a selected group of studies that are individually peer reviewed within the universities. Once the complete proposal is submitted to CSREES, it is again evaluated for scientific merit by an agency biotechnology peer panel that makes recommendations regarding approval for the award. The Iowa Biotechnology Consortium proposal for fiscal year 2000 has not yet been received, and once available a CSREES review panel will be convened to review and evaluate the proposed studies in the grant application and to make recommendations regarding overall approval of the project. In addition, the panel will assess progress during the past year as a part of the approval process and post-award management. A site visit was made by a National Program Leader to the research facilities of the University of Iowa during the past year, and the Program Manager is planning to conduct an on-site assessment of research at Iowa State University during the coming year.

IR–4 MINOR CROP MANAGEMENT

Question. Please provide a description of the research that has been funded under the IR–4 Minor Crop Management grant.

Answer. The Pest Management for Minor Crops (IR–4) Program is a highly effective effort between the State Agricultural Experiment Stations, CSREES, and the Agricultural Research Service. IR–4 provides the national leadership, coordination and focal point for obtaining data to support the regulatory clearance through the U.S. Environmental Protection Agency (EPA) for pesticides and biological control agents for specialty food crops such as fruits and vegetables as well as non-food crops like turf and ornamentals. In many cases, the agricultural chemical industry can not economically justify the time and expense required to conduct the necessary research for products with limited market potential. With assistance from IR–4, registration-related costs are manageable, and producers of a large number of small acreage crops such as vegetables, fruits, nuts, herbs and other specialized crops have access to necessary pest control products. In order to accomplish the above, a four step process has been developed. Step one involves research prioritization. Because of limited resources, IR–4 requests and receives input from stakeholders on potential research projects. Yearly workshops are conducted that involve growers, commodity organizations, university research and extension specialists, EPA staff and industry representatives to determine which projects are the most critical to minor crop agriculture. Step two is research planning. Research protocols are written after careful review and comments from stakeholders. Step three is research implementation. A typical IR–4 program consists of both field and laboratory phases. For the field work, researchers apply the crop protection chemical to the target crop according to the experimental protocol. The crop is harvested and transferred to the laboratories where the chemical residues in the crop, if any, are determined. All field and laboratory research is conducted under EPA Good Laboratory Practices.

Step four is data submission and approval. The data are critically reviewed and formatted into a regulatory package and submitted to the EPA for their review. If appropriate, the EPA will approve the submission and grant a tolerance to use the chemical on the target minor crop.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This is a national effort which identifies needs by a network of users, commodity groups, and State university and Federal researchers. This research is highly significant to national and regional as well as local needs. The basic mission of IR–4 is to aid producers of minor food crops and ornamentals in obtaining needed crop protection products. IR–4 is the principal public effort supporting the registration of crop protection products and biological pest control agents for approximately $40 billion minor crop industry representing 40 percent of the total farm crop value in the U.S.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to obtain minor use pesticide registrations with a high priority placed on those pesticides classified as Reduced Risk, assist in the maintenance of current registrations and to assist with the development and registration of biopesticides. For 1999, IR–4 submitted data to EPA that supported 632 new minor food use clearances. During the past three years, over 960 new minor food use clearance requests were submitted to IR–4 from growers, State and Federal scientists and extension specialists. The Food Use part of the IR–4 Program continues to have a high productivity which, according to EPA, supports 40 percent of all EPA pesticide registrations. Since the program's inception in 1963, IR–4 has been granted over 5000 food use clearances.

For ornamental crops in 1999, IR–4 submitted 532 pesticide clearance requests to EPA. Since 1977, IR–4 has assisted with the registration of over 7000 crop protection chemicals and biological pest control agents on nursery stock, flowers and turf grass. The ornamental industry accounts for over 25 percent or $11 billion of the total minor crop value in the U.S. Biopesticides have been an important IR–4 thrust since 1982. EPA granted 58 IR–4 supported biopesticide food use clearances in 1999 compared to 48 biopesticide clearances in 1998.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from appropriated funds as follows: Program redirection in fiscal year 1975, $250,000; fiscal year 1979, $500,000; fiscal years 1976–1980, $1,000,000 per year; fiscal year 1981, $1,250,000; fiscal years 1982–1985, $1,400,00 per year; fiscal years 1986–1989, $1,369,000 per year; fiscal year 1990, $1,975,000; fiscal year 1991, $3,000,000; fiscal years 1992–1993, $3,500,000; fiscal year 1994, $6,345,000; fiscal year 1995 through 1997, $5,711,000 per year; and fiscal years 1998 through 2000, $8,990,000 per year. A total of $79,499,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $891,856 State appropriations and $65,402 industry in 1991; $1,002,834 State appropriations and $104,292 industry in 1992; $1,086,876 State appropriations and $310,133 industry in 1993; $550,160 State appropriations, $408,600 industry, and $924,169 miscellaneous in 1994; $775,432 State appropriations, $266,714 industry, and $751,375 miscellaneous in 1995; and an estimated $800,000 State appropriations, $250,000 industry, and $800,000 miscellaneous in each years of 1996 through 1999.

Question. Where is this work being carried out?

Answer. Field work is performed at the State and Territorial Experiment Stations. Laboratory analysis is conducted primarily at the California, New York, Florida and Michigan Agricultural Experiment Stations with assistance by the Puerto Rico, Hawaii, North Dakota, North Carolina, Washington, Virginia, and Idaho Agricultural Experiment Stations. Field Research Centers located in Hawaii, Oregon, Washington, California, Wisconsin, Michigan, North Dakota, South Dakota, North Carolina, Florida, Tennessee, Texas, New Jersey, New York, Maryland and New Hampshire conduct the field residue program. Protocol development, data assimilation, writing petitions and registration processing are coordinated through the New Jersey Agricultural Experiment Station. Agricultural Research Service is conducting minor use pesticide studies at field locations in California, Georgia, Ohio, South Carolina, Texas, and Washington. Agricultural Research Service laboratories in Georgia, Maryland, and Washington are cooperating with analyses.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Selected categories of the Special Research Grants Program address important national and regional research initiatives. IR–4 is involved in research on biological systems that by their nature are ever changing and presenting new challenges to agriculture. The IR–4 workload is anticipated to be long term because of the sensitivities about food safety and the environment, and the eventual loss of a large number of conventional pesticide registrations for minor crops because of the 1996 Food Quality Protection Act—FQPA. The FQPA presents a serious challenge to minor crop pest management. It is estimated that there will be significant loss of conventional pesticide registrations for minor crops. IR–4 has developed a strategy to minimize the impact of loss of the critical pest control tools needed by our domestic minor crop growers. The IR–4 strategy involves the following factors: first, facilitating regulatory clearance of Reduced Risk pesticides for minor crops; second, when appropriate, develop risk mitigation measures for existing minor use registrations; third, assist with the registration of biologically-based pest control products for minor crops; and fourth, register and maintain pesticides essential to integrated pest management systems—IPM.

With the implementation of the 1995 Strategy Plan, IR–4 has achieved significant accomplishments. Since FQPA requires that the EPA review all of the almost 10,000 tolerances by fiscal year 2006, it is anticipated that IR–4 program will have a significant challenge to help bring new crop protection solutions to minor crop growers well into the next century.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Each year the grant applications are peer reviewed and reviewed by CSREES' senior scientific staff. A summary of those reviews indicate excellent progress in achieving the objective of providing safe pest controls for minor uses. In December 1997, CSREES sponsored a Peer Review of the Project by a panel chaired by a retired Administrator of USDA–ARS and representatives from the USDA, EPA, commodity groups, the food processing industry, the crop protection industry and the land grant university system; a report was issued January 1998. The report covered the areas of response to FQPA, Project operations, accomplishments, good laboratory practices, the ARS companion program and future outlook with specific recommendations for each area. The review panel was "in unanimous agreement that IR–4 is a very successful program which serves an important need to producers of agricultural products for ultimate consumption by the American public. The program is effectively and efficiently administered by a dedicated professional staff". The goal in 2000 and beyond will be to build on this basis and fully implement the recommendations of the panel. This review and previous reviews have resulted in significant improvement in the IR–4 program's productivity and quality of research. Additionally, the customers served by IR–4 have provided input to the program to enhance its effectiveness.

JOINTED GOATGRASS (AEGILOPS CYLINDRICUM)

Question. Please provide a description of the research that has been funded under the Jointed Goatgrass grant.

Answer. Research is conducted as sub-projects by more than 30 scientists in 10 western and mid-western States on systems for suppression of jointed goatgrass in winter wheat production systems. Research includes integrated cultural management, reduction of seed in the soil, identification of more competitive wheat varieties and crop rotations, and modeling to predict economic outcomes of changing management practices. The premier research projects continue to be four regional, long-term integrated management studies conducted across nine States. In these studies, various cultural control practices such as seeding rates, row spacing, planting dates, seed size, competitive varieties, fertilizer placement, crop rotations, and tillage practices are being evaluated as an integrated management system for the suppression of jointed goatgrass. Research is also being conducted on genetic diversity in the jointed goatgrass population, soil conditions responsible for persistence of jointed goatgrass seedbank, timing and intensity of tillage on seed persistence in the soil, gene flow between wheat and jointed goatgrass, identification of crop traits that make wheat more competitive against jointed goatgrass, and making the bioeconomic model more user friendly. All funded projects have a technology transfer component and a national extension coordinator insures that growers and extension personnel are fully informed about all options for the managing this devastating weed. The National Extension Coordinator is housed at Colorado State University.

Question. According to the research proposal or the principal researcher, what is the national, regional, or local need for this research?

Answer. Jointed goatgrass infests nearly five million acres of winter wheat lands in the west and mid-west. Through the efforts of the national program, the rate of spread of this weed has decreased significantly in the past 5 years. However, jointed goatgrass still costs U.S. wheat producers an estimated $145 million annually in lost yield, reduced quality, production of less profitable crops, increased management costs, and reduced land values. Control of jointed goatgrass in a standing wheat crop is impossible with currently available technology because seed survives in the soil for five years or more, and because jointed goatgrass is genetically related to wheat. Jointed goatgrass has increased rapidly in the past 25 years in part because of the widespread adoption of conservation tillage systems. Jointed goatgrass proliferated in such systems, and it greatly impedes the universal adoption of such practices. The principal investigator and the National Association of Wheat Growers believe this research is of high national and regional importance.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this project is to reduce the devastating effect of jointed goatgrass on winter wheat production and quality, and to prevent the spread of this weed into new, non-infested areas. Numerous individual cultural control practices have been evaluated in several States as to their effectiveness for the suppression of jointed goatgrass and on the growth and yield of wheat. Four regional, long-term integrated management projects have been established where three or more individual cultural control practices have been combined into an integrated management system for the suppression of jointed goatgrass in winter wheat. Results from these projects show that combining three or more individual cultural control practices into an integrated management system will suppress jointed goatgrass and improve the yield and quality of winter wheat. Significant progress has been made in understanding gene flow between wheat and jointed goatgrass. This information will be very valuable in managing the introduction of herbicide-resistant wheat for the control of jointed goatgrass. A bioeconomic model has been constructed that combines jointed goatgrass population biology information, weather data, and responses of jointed goatgrass and wheat to various cultural control practices, and predicts wheat yields, response of jointed goatgrass, and economic outcomes from changing production practices. In 1999, a symposium on jointed goatgrass was held as part of the Western Society of Weed Science meetings. At this symposium, ten papers were presented, outlining the latest research and technology transfer activities of this national program. Information presented at this symposium was used to establish new priorities for this program and to guide the program for the next five years. Since 1994, six regional symposia have been held to transfer to producers and extension personnel the latest information on the identification, biology and management of jointed goatgrass in winter wheat. A World Wide Web site (http://www.ianr.unl.edu/jgg) has been established and updated annually to further enhance information transfer. Also, a videotape, a poster and a slide set have been produced to assist extension personnel in transferring to producers information on jointed goatgrass biology and management.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grain began in fiscal year 1994. The appropriation for fiscal year 1994 was $329,000; for fiscal years 1995–1997, $296,000, each year; $346,000 for fiscal year 1998; and $360,000 in fiscal years 1999 and 2000 bringing the total appropriations to $2,283,000.

Question. What is the source and amount of no-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: for 1994, $82,198 State appropriations, $82,256 from industry, and $14,871 miscellaneous; for fiscal year 1995, $67,442 State appropriations, $38,496 from industry, and $13,304 miscellaneous; for each fiscal year 1996–1997, an estimated $70,000 State appropriations, $50,000 from industry, and $14,000 miscellaneous; for 1998 $231,335 State appropriations, $42,570 from State wheat commissions, and $15,000 miscellaneous; and for fiscal year 1999, $258,122 State appropriations, $87,750 State wheat commissions, and $72,100 miscellaneous.

Question. Where is this work being carried out?

Answer. The research is being conducted by university scientists in 10 western States with serious infestations including Washington State University, who is the principal coordinating institution and receives the grant, Colorado, Kansas, Nebraska, Oklahoma, Utah, Oregon, Idaho, Montana, Wyoming, and South Dakota.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initiated to accomplish significant results in five years, and significant accomplishments have been made. However, the jointed goatgrass problem will require an additional five more years to accomplish all of the objectives and to have effective management practices available for producers to control jointed goatgrass in winter wheat.

Question. When was the agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Each year the sub-grants are peer reviewed for scientific merit and adherence to the program objectives by a panel of scientists and producers. The overall grant is reviewed annually by CSREES's scientific staff. Sub-contract grants to the various universities are awarded using a peer review process coordinated by Washington State University.

LIVESTOCK AND DAIRY POLICY, NEW YORK AND TEXAS

Question. Please provide a description of the research that has been done under the livestock and dairy policy program grant?

Answer. The purpose of this grant is to assess the possible economic impacts on the U.S. livestock and dairy sectors from various macroeconomic, farm, environmental, and trade policies and new technologies. Both Cornell University and Texas A&M University conduct analysis of these policies and disseminate the information to policymakers, farmers, and agribusinesses. Cornell focuses on sector-level dairy policies, and Texas A&M focuses on policies affecting livestock and dairy at the farm level.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Information on the implications of new and alternative farm, trade, and macroeconomic policies affecting the livestock and dairy sectors is of special interest to policy-making officials, farmers, and others. Such information enables farmers and agribusinesses to make necessary adjustments to their operations to enhance profitability and for national public officials to consider alternatives to sustain adequate supplies and minimize costs. The principal researchers believe this research to be of national, regional and local significance.

Question. What was the original goal of this research and what has been done to date?

Answer. The original goal was to establish a specialized research program that could provide timely and comprehensive analysis of numerous policy and technological changes affecting livestock and dairy farmers and agribusinesses and advise them and policymakers promptly of possible outcomes. This goal has been achieved and the program continues to provide timely assessments and evaluations of provisions and proposed changes in agricultural policies, the General Agreement on Tariffs and Trade, and the North American Free Trade Agreement; various income and excise tax measures; and alternative pricing measures for milk. The institutions were integrally involved in several current studies relating to dairy provisions in the 1996 farm legislation. These studies contributed significantly to the development of proposed regulations called for in this legislation. Both institutions maintain extension outreach programs to disseminate results of their analysis throughout the United States. They have organized a national Dairy Markets and Policy Extension committee to advise and assist them in this effort. This latter committee was especially helpful to USDA in educating farmers about proposed milk marketing order changes last year.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $50,000; fiscal year 1990, $518,000; fiscal years 1991–1993, $525,000 per year; fiscal year 1994, $494,000; fiscal years 1995–1997, $445,000 each year and fiscal year 1999, $475,000; fiscal year 2000, $475,000. A total of $5,767,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are as follows: $37,420 State appropriations in 1991; $162,086 State appropriations and $133,278 product sales for a total of $295,364 in 1992; and $301,817 State appropriations, $1,412 industry, and $7,121 miscellaneous for a total of $310,350 in 1993; $24,702 State appropriations, and $5,961 industry for a total of $30,663 in 1994; $235,526

State appropriations for 1995; $250,000 in State appropriations for 1996; and approximately $245,000 in State funding for 1997 and 1998.

Question. Where is this work being carried out?

Answer. The research is being conducted at Cornell University and Texas A&M University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This program is of a continuing nature for the purpose of assessing existing issues and proposed policy changes affecting the livestock and dairy industries.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. We have conducted no formal evaluations of this project. Annual proposals for funding, however, are peer reviewed for relevance and scientific merit. Our agency contact is also in regular contact with principal researchers at each institution to discuss progress toward project objectives.

LOWBUSH BLUEBERRY RESEARCH, MAINE

Question. Please provide a description of the research that has been funded under the lowbush blueberry research program grant.

Answer. Interdisciplinary research is being conducted on many aspects of lowbush blueberry culture and processing including investigations into factors affecting processing quality, biological control of insect pest, sustainable pollination, weed, disease, and fertility management, cold heartiness, and group water protection.

Question. According to this research proposal, or the principal investigator, what is the national, regional, or local need for this research?

Answer. Maine produces 99 percent of all lowbush blueberries or 33 percent of all blueberries in the United States. This work is of major local interest, and helps maintain the continued availability and high quality of this native fruit commodity.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original research goal was to provide answers to unique lowbush blueberry production, pest, and processing problems. Research to date indicates that the field sanitizer was able to use heat to control insect pests without adversely affecting plant growth, while providing a non-chemical alternative for pest management. Biological control agents were sued to control fireworms. Lowbush blueberry yields were increased by use of native and alfalfa leafcutter bees. Mechanical harvesting was found to be effective and had yields and fruit quality comparable to hand harvest, providing growers with a more efficient tool to harvest blueberries. Products for the use in food industry are being extracted from cull berries therefore improving utilization and reducing waste.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1990, $170,000; fiscal year 1991, $202,000; fiscal years 1992–1993, $185,000 per year; fiscal year 1994, $208,000; and fiscal years 1995–2000, $220,000 per year. A total of $2,270,000 has been appropriated to date.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Direct industry support was about $65,000 from 1996–2000 per year.

Question. Where is this work being carried out?

Answer. Research is being carried out at the University of Maine.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives have not yet been met. The University of Maine researchers estimate that the project will be concluded at the end of fiscal year 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last agency merit review of this project was January, 1999. Research accomplishments included investigations of post emergence, grass specific herbicides to control weeds rather than the use of broad spectrum; timing of fertilization treatments and comparisons of various fertilizer combinations have indicated that fertilizers containing nitrogen increase yields. Other research accomplishments include the insect management of blueberry maggots through behavioral control and the use of less toxic chemicals from control of blueberry flea beetles.

MAPLE RESEARCH, VERMONT

Question. Please provide a description of the research that has been funded under the Maple Research Grant?

Answer. The research is designed to increase understanding of the sources of heavy metal contamination in maple sap and syrup and explore methods of reducing or eliminating lead and other heavy metal contaminant levels in the finished product through alteration of manufacturing equipment and production practices.

Question. According to the research proposal, or the principal researchers, what is the national, regional, or local focus for this research?

Answer. Maple products are an important cultural heritage, and a significant source of seasonal income in maple producing areas of rural America. Identifying sources of heavy metal contaminants during processing, and exploring methods to reduce or eliminate contaminants from maple products is important in assuring consumers that these food products are not harmful.

Question. What was the original goal of this research and what has been accomplished?

Answer. The goal of this research is to conduct investigations on maple tree physiology, the ecology and management of maple stands, and related aspects of the maple syrup industry in Vermont and the Northeast. The primary goal of this work has been to identify and eliminate sources of lead and other heavy metal contaminants in maple syrup.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Work under this project began in fiscal year 1985. Annual appropriations in support of this project are as follows: fiscal year 1985—$100,000; fiscal years 1986 and 1987—$95,000 per year; fiscal years 1988 and 1989—$100,000 per year; fiscal years 1990 through 1993—$99,000 per year; fiscal year 1994—$93,000; fiscal years 1995 through 1997—$84,000 each year; fiscal years 1998 through 2000—$100,000 per year. A total of $1,532,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal years?

Answer. Non-Federal fiscal support for this project is provided by two primary sources and one secondary source. The primary sources are State appropriations and product sales. The secondary source is local support, but that support is not available each year. The total non-Federal contribution from these sources provides an average 86 cents for every dollar of Federal funding. Early in the project the total non-Federal contribution was 60 cents for every dollar and most recently one dollar, ten cents for every dollar of Federal funding.

Question. Where is this work being carried out?

Answer. This research is being conducted at the Vermont Agricultural Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The work from this project, relative to maple tree physiology and management of maple stands has been completed. The objective of identify sources of heavy metals in maple syrup products and subsequently reducing them is underway. The anticipated completion date is 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Project proposals and progress reports are reviewed and evaluated annually by the U.S. Department of Agriculture. Satisfactory progress has been made on tree physiology and maple tree (sugar bush) management. Progressive work on identifying sources and controlling maple syrup contaminants is in place and is being monitored by the department.

MEADOWFOAM, OREGON

Question. Please provide a description of the research that has been funded under the grant.

Answer. This funding will be used to: develop meadowfoam cultivars with increased seed yield, lodging resistance, oil concentration, and insect resistance; increase seed, field test and deploy several new experimental cultivars; enhance the genome map of meadowfoam; develop DNA markers for molecular breeding and genetic analysis in meadowfoam; and map genes affecting self-pollination, seed yield, oil content, and insect resistance. The proposal will be internally and externally reviewed for scientific merit. This research will be reviewed by State and Federal scientists and administrators for merit and progress.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research is needed to increase the productivity of meadowfoam as an edible and industrial oilseed crop. Meadowfoam oil is a basic feedstock for lubricants, cosmetics, and personal care products. Oregon State University has recently developed a food grade meadowfoam oil that should open edible oil markets for this crop. This research is needed to expand the range of production of meadowfoam and to supply United States farmers with competitive cultivars (varieties) for commercial production.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to increase the productivity of meadowfoam as an oilseed crop for United States farmers. This research led to the development of a new variety of meadowfoam that outyielded existing cultivars by 800 kilograms per hectare in 1999. Seed increases and advanced field tests are underway for this cultivar. Significant progress was made on the development of high-throughput DNA markers for use in molecular breeding. These markers are being used to elucidate the genetics of several economically important traits in meadowfoam.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in 1999 and the appropriation for fiscal year 1999 was $300,000, and for fiscal year 2000, $300,000. A total of $600,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Non-Federal funds have not been provided.

Question. Where is this work being carried out?

Answer. The breeding research is being conducted at Corvallis, Oregon. Cultivars are being field tested at four sites in the western United States including Corvallis and Medford, Oregon, Mt. Vernon Washington, and Davis, California, and three sites in the eastern United States including Blacksburg, Virginia, and two as yet unspecified sites.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional and related objectives?

Answer. The anticipated completion date for the original objectives is June 2001. Progress has been made towards each of the stated objectives; however, we are still in the middle of the first year and thus cannot fully report on progress. To date, the first field experiments were planted in October 1999 and will be harvested in July 2000. Results will be assessed after harvest.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Evaluation of this project will conducted annually based on the annual progress report and discussions with the principal investigator as appropriate. The evaluation is conducted by the cognizant staff scientist who has determined that research to date is in accordance with the mission of the agency.

MICHIGAN BIOTECHNOLOGY CONSORTIUM

Question. Please provide a description of the work that has been funded under the Michigan Biotechnology Consortium grant.

Answer. The objective of the Consortium's research program is to develop bioprocessing technology to manufacture products from agricultural raw materials; to increase the utilization of agricultural raw materials; reduce agricultural surpluses; degrade agricultural and associated wastes, thereby decreasing environmental costs of agricultural products and processes; and to reduce the need to import foreign petroleum.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that the development of value-added products from agricultural raw materials will increase their utilization, reduce commodity surpluses and environmental costs and decrease the need for foreign petroleum thus contributing significantly to local, regional and national priorities. Biotechnology research of national significance could potentially be supported by competitive grants awarded under the National Research Initiative or the Initiative for Future Food and Agricultural Systems.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research is to select and develop market-viable technologies for the production of industrial products from agricultural raw materials. The Consortium has used funding from the Special Grants program to develop technologies now in the marketplace. Examples include the production of lactic acid from corn which resulted in the building of a $200 million plant in Nebraska. Agricultural resources were used as a feedstock for plant growth formulations that enhance productivity and reduce plant stress, biodegradable plastic resins for compostable films used in lawn/leaf litter bags, agricultural mulch films, etc., biodegradable plastic resins for injection molded products such as disposable cutlery, all-natural food flavors, calcium magnesium acetate deicer and biodegradable adhesives. The byproduct of cheese production (whey) was used to produce high quality, high value optically pure chiral intermediates for pharmaceuticals and agrochemicals.

A sand/manure separation system for dairy farms was developed to cost-effectively separate manure from sand and recycle both components. Numerous enzymes have been characterized and are now in use to provide value added modifications in the processing of agricultural products. Improved methods to clean up herbicides, pesticides and other agricultural materials have been developed. Many of the technologies developed have been commercialized through several licenses and eight new company startups.

Special Grant funding in fiscal year 1999 allowed the Consortium to develop high value animal feeds from agricultural residues, paint removers, biobased polymers for medical applications, liquid crystals and metals recovery, naturally occurring bioactive compounds and biocontrol agents, inks that are not hazardous aromatic products, fruit brandy, specialty mushrooms and methods to improve the economics of ethanol production. Funding also supported a technology transfer program that brought researchers from over 30 land grant universities, Federal laboratories and State Departments of Agriculture together with Consortium researchers to review numerous commercially promising biobased agricultural technologies.

Question. How long has this work been under way and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $1,750,000; fiscal year 1990, $2,160,000; fiscal year 1991, $2,246,000; fiscal years 1992–1993, $2,358,000 per year; fiscal year 1994, $2,217,000; fiscal year 1995, $1,995,000; fiscal years 1996 and 1997, $750,000 per year; and fiscal years 1998 through 2000, $675,000 per year. A total of $18,609,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds provided for this grant were as follows: $1,750,000—State of Michigan, $160,000—industry and $1,000,000 from miscellaneous in 1991; $1,750,000—State of Michigan, $175,000—industry and $1,000,000 from miscellaneous in 1992; $1,750,000—State of Michigan, $100,000 from industry in 1993; $1,750,000—State of Michigan, $175,000—industry and $100,000 from miscellaneous in 1994; $200,000—State of Michigan, $2,035,000 from industry in 1995; $1,250,000—State of Michigan, $350,000—industry and $6,000,000 from miscellaneous in 1996; $402,000—industry and $10,000,000 from miscellaneous in 1997; $500,000—State of Michigan and $1,060,000 from industry in 1998; and $1,400,000—State of Michigan and $1,356,000 from industry in 1999. A total of $34,263,500 has been provided to support this work by non-Federal sources.

Question. Where is this work being carried out?

Answer. The research is being conducted on the campus of Michigan State University and at the Michigan Biotechnology Institute International. Demonstrations of technology occur throughout the United States.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Consortium reports specific milestones for technology development over a five year period. Specific milestones for technologies which will be commercialized in fiscal year 1999 were established in fiscal year 1995 and updated annually. The Consortium has been successful in effectively closing the gap between research and commercialization in the five-year period.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Michigan Biotechnology Institute was evaluated for scientific merit by an agency peer review panel on February 25, 1999. The panel recommended approval of the project pending receipt of supplemental information on administrative

aspects of the project. A merit review panel will be convened to re-evaluate of the project upon receipt of a proposal for fiscal year 2000.

MIDWEST ADVANCED FOOD MANUFACTURING ALLIANCE, NEBRASKA

Question. Please provide a description of the research that has been funded under the Midwest Advanced Food Manufacturing Alliance grant.

Answer. The stated purpose of the Midwest Advanced Food Manufacturing Alliance is to expedite the development of new manufacturing and processing technologies for food and related products derived from United States produced crops and livestock. The Alliance involves research scientists in food science and technology, food engineering, nutrition, microbiology, computer science, and other relevant areas from 12 leading Midwestern universities and private sector researchers from numerous U.S. food processing companies. Specific research projects are awarded on a competitive basis to university scientists with matching funds from non-Federal sources for research involving the processing, packaging, storage, and transportation of food products. Projects selected for funding are merit reviewed by non-participating university scientists, industry scientists and scientists from professional organizations. Close cooperation between corporate and university researchers assure that the latest scientific advances are applied to the most relevant problems and that solutions are efficiently transferred and used by the private sector.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this project?

Answer. The principal researcher believes the food manufacturing industry is the number one manufacturing industry in the Midwestern region and that opportunities for trade in high value processed food products will grow exponentially on a worldwide basis. The Alliance is positioned to fill the void in longer range research and development for the food industry. Though the focus is regional, it is anticipated that impacts may also be local and national.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal, as stated previously, was to expedite the development of new manufacturing and processing technologies for food and related products derived from United States produced crops and livestock. This is accomplished by conducting a research proposal competition among faculty from the 12 participating universities to fund research projects where matching funds are available from industry. Fourteen projects were funded from fiscal year 1994 funds with completion and final reports due by May 1, 1996. Ten projects were funded from fiscal year 1995 funds with anticipated completion and final reports due by August 31, 1997. Ten projects were also funded from fiscal year 1996 funds with anticipated completion and final reports due by May 31, 1998. Eleven projects were funded from fiscal year 1997 funds with anticipated completion and final reports due by May 31, 1999. Nine projects were funded from fiscal year 1998 funds with anticipated completion and final reports due by May 31, 2000. Eleven projects were funded from fiscal year 1999 funds with anticipated completion and final reports due by May 31, 2001. Proposals are reviewed for scientific merit by independent scientists, and final selection of projects includes consideration of industrial interest and commitment on non-Federal matching funds.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $470,000, and for fiscal years 1995–2000, $423,000 each year. A total of $3,008,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year 2000?

Answer. Industry matching funds were $823,148 in fiscal year 1994, $414,164 in fiscal year 1995, $576,600 in fiscal year 1996, $429,579 in fiscal year 1997, $557,549 in fiscal year 1998, and $490,496 in fiscal year 1999.

Question. Where is this work being carried out?

Answer. The work is being coordinated by the Nebraska Agricultural Experiment Station at Lincoln. Specific research projects are also being conducted at 8 other universities that are part of the Alliance.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The overall objectives of the Alliance are ongoing. Funding supports the continuing and evolving needs and opportunities for foods manufactured and processed from U.S. produced crops and livestock.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal was conducted on February 24, 1999. The principal investigator has provided descriptions of projects funded by this grant. Scientifically sound, industry-relevant projects appear to be the basis of the project, with impact results expected.

MIDWEST AGRICULTURAL PRODUCTS, IOWA

Question. Please provide a description of the research that has been done under the Midwest Agricultural Products program.

Answer. The Midwest Agribusiness Trade Research and Information Center does applied research to improve the global competitiveness and marketability of agricultural products produced in the Midwest and disseminates the results to small and medium-sized agribusinesses. Projects include analyses of potential international markets for U.S. agricultural products and equipment/technology; attitudes of foreign consumers; development of new/improved U.S. products to meet foreign needs. The overall project proposal was peer reviewed at the university level, and individual research activities are reviewed by the principal investigator and other faculty.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes that agribusiness firms in the United States, especially small to medium-sized firms, have a large unrealized potential to expand export sales and foreign business ventures. These untapped opportunities exist in the Pacific Rim and in emerging markets such as Mexico, China, and Eastern Europe. The reluctance of small to medium-sized firms to explore these market opportunities is, in part, due to the high cost of market information and analysis and the perceived high risk of doing business in new markets. This project meets the needs of these firms at the local, regional, and national level.

Question. What was the original goal of this research, and what has been accomplished to date?

Answer. The goal is to enhance the exports of agricultural commodities, value-added products, and equipment produced by Midwestern agribusiness firms by providing research and educational programs as well as assistance to individual firms. Recent results include studies on improving the U.S. position in world soybean trade; global competitiveness of U.S. pork subsector; challenges and responses for marketing in large developing Asian countries such as China and India. The soybean study focused on the ability of U.S. firms to provide quality products designed for specific international market uses. Analyses of international markets include Hungary and the Baltic States. Several market development studies, conducted in cooperation with overseas firms, have resulted in ongoing relationships with U.S. firms; an Iowa firm is negotiating a sale of feed processing equipment; another Iowa firm has formed a joint venture in ovine genetics. The primary audience is small- to medium-sized agribusiness firms because they often lack the resources to conduct studies or acquire sufficient marketing information necessary for international trade.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992–1993 was $700,000 per year; fiscal year 1994, $658,000; and fiscal years 1995–2000, $592,000 per year. A total of $5,610,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant are as follows: $185,495 State appropriations and $373,897 industry for a total of $559,392 in 1992; $183,192 State appropriations and $318,966 industry for a total of $502,158 in 1993; $127,948 State appropriations and $500,394 industry for a total of $628,342 in 1994; $258,053 State appropriations and $389,834 industry for a total of $647,887 for 1995; $165,425 State appropriations for 1996; $162,883 State appropriations for 1997; and $143,850 State appropriations and $51,384 industry for a total of $195,234 in 1998. $72,934 State appropriations and $45,860 industry for a total of

$118,794 in 1999. Industry contributions were not reported for fiscal years 1996 to 1997.

Question. Where is the work being carried out?

Answer. The program is carried out by Iowa State University.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1992 was for a period of 24 months, however, the objective of expanding the export capacity of small to medium-sized agribusiness firms is an ongoing regional and national concern. The current phase of the program will be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in January 1998, as it evaluated the project proposal for 1999, and concluded that "the project has sound objectives and procedures that are helping agribusiness effectively expand markets for U.S. agricultural products leading to a highly competitive agricultural production system and enhanced economic opportunity for Americans." Research results appear in several peer-reviewed professional journals and the popular press.

MILK SAFETY, PENNSYLVANIA

Question. Please provide a description of the research that has been funded under the milk safety grant.

Answer. The overall goal of the milk safety program is to provide insight into factors that help ensure an adequate and safe milk supply. The research has focused on factors that affect milk production, processing, manufacturing, and consumption; including computer models for risk assessment. Special attention has been given to ways of preventing and/or treating pathogens that enter the milk supply.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that the question of microbial safety is of paramount interest to the milk/dairy industry at all levels—national, regional and local. Dairy products have been associated with several large outbreaks of staphylococcal food poisoning. Coagulase negative Staphylococcus, Listeria monocytogenes and pathogenic E. coli species, including E. coli O157:H7, are of public health concern. The population of infants, elderly, and immunosuppressed individuals at highest risk in the U.S. continues to grow rapidly. Understanding the growth of these microorganisms will provide pathways to minimize the occurrence of food poisoning related to milk and dairy products. For products which receive minimal thermal processing or which may be preserved primarily by acidification, development of additional means of controlling the growth of these foodborne pathogens is of critical importance in guaranteeing a safe milk supply. Ensuring the safety of dairy products impacts not only consumer health and confidence in the safety of the food supply, but economic viability as well.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The research is aimed at minimizing or eliminating future foodborne disease outbreaks from milk and dairy products. Researchers demonstrated that when subjected to a sublethal heat shock prior to pasteurization, Listeria monocytogenes becomes much more heat-resistant than previously thought, likely requiring the design of new pasteurization guidelines to ensure the safety of dairy products. They also developed a simple, fast, sensitive, specific and inexpensive method for the detection of Listeria monocytogenes in dairy products that will allow dairy processors to rapidly and easily screen for the presence of this pathogen in their products and in the processing environment. A computer model of Listeria monocytogenes growth in dairy foods under dynamic refrigeration conditions and during extended storage has been developed and partially validated. This will equip producers and processors with a powerful tool for further enhancing the safety of fluid milk and dairy product. Discoveries of factors influencing growth of Staphylococcus aureus could be used to prevent or contain growth of this pathogen in foods. Researchers have identified and sequenced a gene from this bacterium that is essential for growth under stressful conditions. Consumer research has identified characteristics of consumers most likely to have a high general concern about milk and dairy product safety and nutrition. In addition, consumers indicate more trust in farmers' efforts to ensure food safety than in the efforts of other segments of the food system. Research has also indicated that consumers are concerned about food safety, but do not know a great deal about such important hazards as Salmonella, E. coli, and Listeria. Researchers

have examined the effects of water availability on the production of enterotoxins by S. aureus and found that the presence of certain nutrients within the environment, or food product, can greatly stimulate enterotoxin production when water availability is low. These results have important implications concerning the safety of certain food products, including those containing dairy ingredients.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded for milk consumption and milk safety from funds appropriated as follows: fiscal years 1986 through 1989, $285,000 per year; fiscal year 1990, $281,000; fiscal year 1991, $283,000; fiscal year 1992, $284,000; fiscal year 1993, $184,000; fiscal years 1994–1998, $268,000 per year; fiscal year 1999, $250,000, and fiscal year 2000 $297,500 A total of $4,059,500 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The University estimates that non-Federal funds contributed to this project include the following costs and salaries: $265,000 for fiscal year 1991; $224,700 for fiscal year 1992; $142,600 for fiscal year 1993; $252,168 for fiscal year 1995; and $621,903 for fiscal year 1998; and $460,423 for fiscal year 1999. No data available for fiscal years 1994, 1996, and 1997.

Question. Where is the work being carried out?

Answer. The research is being conducted at the Pennsylvania State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The researchers anticipate that research supported by this grant should be concluded in 2000. Continuing and evolving needs related to the safety of milk and dairy products are expected to reveal new related objectives.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. The proposal supporting the fiscal year 1999 appropriation was reviewed on August 12,1999 and the agency science specialist concluded that the projects addressed important issues related to safety of milk and dairy products, were scientifically sound, and that satisfactory progress was being demonstrated using previously awarded grant funds.

MINOR USE ANIMAL DRUGS

Question. Please provide a description of the research that has been funded under the minor use animal drug program grant.

Answer. The National Agricultural Program to Approve Animal Drugs for Minor Species and Uses—NRSP–7—was established to obtain the Food and Drug Administration approval of animal drugs intended for use in minor species and for minor uses in major species. The objectives of the program are to identify the animal drug needs for minor species and minor uses in major species; generate and disseminate data for the safe, effective, and legal use of drugs used primarily in therapy or reproductive management of minor animal species; and facilitate the Food and Drug Administration in obtaining approvals for minor uses. Studies are conducted to determine efficacy, target animal safety, human food safety, and environmental safety. The shortage of drugs for minor food animal uses is a concern well recognized by animal producers, veterinarians, animal scientists, and regulators. The funds for the special research grant are divided between the four regional animal drug coordinators and the headquarters at Cornell University for support of the drug approval program. The NRSP–7 funds are being utilized by the State Agricultural Experiment Stations where the regional animal drug coordinators are located as well as by other stations to develop data required for meeting approval requirements. Participants in the research program consist of the regional coordinators, State Agricultural Experiment Stations, USDA's Agricultural Research Service, schools of veterinary medicine, and the pharmaceutical companies. Research priorities are continually updated through workshops and meetings with producer groups representing species categories such as small ruminants, game birds, fur-bearing animals, and aquaculture species. Each request for drug approval is evaluated by the technical committee according to established criteria which include significance to the animal industry, cost of developing the necessary data, availability of a pharmaceutical sponsor, and food safety implications. All grants are reviewed for relevance to industry needs and undergo scientific peer review.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Animal agriculture throughout the United States has relied on chemical and pharmaceutical companies to provide their industry safe and efficacious drugs to combat diseases and parasites. The high cost incurred to obtain data to approve these drugs, when coupled with limited economic returns, has limited the availability of approved drugs for minor uses and minor species. The economic losses due to the unavailability of drugs to producers for minor species and minor uses threatens the economic viability of some segments of the animal industry. The need for approved drugs to control diseases in minor species and for minor uses in major species has increased with intensified production units and consumer demand for residue-free meat and animal products. The program provides research needed to develop and ultimately culminate in drug approval by FDA for the above purposes. The goals are accomplished through the use of regional animal drug coordinators as well as a national coordinator to prioritize the need, secure investigators at Federal, State and private institutions, and oversee the research and data compilation necessary to meet Federal regulations for approval. All drug approvals are national, although industry use may be regional. For example, certain aquaculture and the game bird industries are concentrated in specific geographic sections of the country. The administration believes this research supports national, regional and local needs.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the NRSP–7 Minor Use Animal Drug Program was to obtain approval by the Food and Drug Administration for animal drugs intended for use in minor species and for minor uses in major species. This continues to remain the dominant goal of the program. In recent years, the research program has expanded or given additional emphasis to aquaculture species, veal calves and sheep. The importance of environmental assessment, residue withdrawals and occupational safety have increasingly been given more attention during the approval process to help assure consumer protection.

Since the beginning of the program, over 300 requests have been received from animal producers, universities and veterinarians for the development of data in support of the filing of a New Animal Drug Approval. Currently, data representing 28 Public Master Files have been published in the Federal. The Public Master File publication enables pharmaceutical companies to extend their label claims to minor species by referencing the published file in their New Animal Drug Approval filing. Furthermore, these data also enter the public domain as presentations to professional groups, publication of peer-reviewed articles and inclusion in the Food Animal Residue Avoidance Databank. Through these channels, NRSP–7 provides data supporting the safe and effective use of therapeutics in minor species by consumers. Moreover, the Minor Use Animal Drug Program has averaged an expenditure of only about $200,000 for each drug approved for minor species.

In 1999, two Public Master Files, based on data submitted by NRSP–7, were published in the Federal Register indicating drug approval by the Food and Drug Administration. They were: Sulfadimethoxine/ormetoprim for control of coccidiosis in Chukar partridges and amoxicillin for treatment of bacterial pneumonia in sheep. In addition, three Public Master Files were submitted to the Food and Drug Administration by NRSP–7 for review. The three drugs and their use are: oxytetracycline for otolith marking of fish, ceftiofur for bacterial pneumonia in goats, and ivermectin pour-on for hypodemosis in American bison. In addition to the development of data for Food and Drug Administration review, the NRSP–7 program initiated a species grouping program. Designed to make the drug approval process more efficient for all minor species, research was begun that will enable game birds and fish to be evaluated on the basis of one or two marker species. With species grouping, safety and efficacy studies of a drug in one species could be extrapolated to other species within the same class. Considering that the aquatic and game bird classes contain at present 10 and 8 economically significant production species, respectively, rates of Public Master File publications could be increased many-fold. The Center for Veterinary Medicine of the Food and Drug Administration is cooperating and supporting this program to the fullest extent, thereby demonstrating a prime example of Federal interagency collaboration in coordination with academic institutions, pharmaceutical industries and commodity interests to effectively meet an urgent public health need.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from appropriated funds in the amount of $240,000 per year for fiscal years 1982–85; $229,000 per year for fiscal years 1986–

1989; $226,000 for fiscal year 1990; $450,000 for fiscal year 1991; $464,000 per year for fiscal years 1992 and 1993; $611,000 for fiscal year 1994; and $550,000 per year for fiscal years 1995–2000. A total of $7,391,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $156,099 State appropriations, $29,409 industry contributions and $11,365 miscellaneous in 1991; $265,523 State appropriations, $1,182 product sales, $10,805 industry contributions and $59 miscellaneous in 1992; $212,004 State appropriations, $315 industry contributions and $103 miscellaneous in 1993; $157,690 State appropriations and $7,103 miscellaneous in 1994; $84,359 State appropriations in 1995; $191,835 non-Federal support in 1996; $357,099 non-Federal support in 1997; $104,596 State appropriations and $97,375 industry contributions in 1998; and $317,225 State appropriations and $9,678 industry contributions, and $7,000 miscellaneous in 1999.

Question. Where is this work being carried out?

Answer. The grants have been awarded to the four regional animal drug coordinators located at Cornell University, the University of Florida, Michigan State University and the University of California-Davis, and to program Headquarters at Cornell University. Research is conducted at these universities and through allocation of these funds for specific experiments at the State Agricultural Experiment Stations, the Agricultural Research Service, the U.S. Department of Interior, and in conjunction with several pharmaceutical companies.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. Selected categories of the Special Research Grants program address important national/regional research initiatives. The overall objectives established cooperatively with FDA and industry remain valid. However, specific objectives continually are met and revised to reflect the changing priorities for FDA, industry, and consumers. Research projects for this program have involved 20 different animal and aquaculture species with emphasis given in recent years to research on drugs for the expanding aquaculture industry and increasing number of requests from the sheep, veal calf, and game bird industries. The program involves research on biological systems that by their nature are ever changing and presenting new challenges and/or threats to agriculture.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency conducted a formal review of the Minor Use Animal Drug Program in 1997. An external review team of experts representing animal drug research and development, the veterinary profession, the pharmaceutical industry, and academia, found the program to be very productive. Recommendations from the review included (1) improve the visibility of the Minor Use Animal Drug Program, (2) improve working relationships with the veterinary and pharmaceutical communities, (3) and acquire additional support for the program by pharmaceutical companies, universities, and the Federal Government to meet the identified national needs with emphasis on responsiveness to industry needs and food and environmental safety. In 1999, stakeholders representing the sheep, aquaculture, goat, and game bird industries met with CSREES administration and NRSP–7 representatives to define research priorities for the Minor Use Animal Drug Program. Annually, grant proposals are scientifically peer reviewed and twice a year the agency and program representatives meet with the Food and Drug Administration representatives to evaluate progress and to prioritize research requests. Workshops are held periodically to identify priorities for the program whereby producers, pharmaceutical companies, FDA, and researchers participate.

MOLLUSCAN SHELLFISH, OREGON

Question. Please provide a description of the research that has been funded under the Molluscan Shellfish grant.

Answer. The agency requested that the university submit a grant proposal that has yet to be received. A molluscan shellfish germplasm repository was established with funds from this grant and has played a key role in the genetic improvement of cultured shellfish stocks on the west coast. With specific shellfish stocks that are being made available to commercial growers, a broodstock selection program is currently underway to determine stocks with traits desirable for commercial culture. Additionally, the repository is used to establish a population of tetraploid pacific

oysters for use in the production in triploid oysters and has established a population of Kumamoto oysters.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The researchers indicate that there is a national need for a molluscan broodstock development program. This line of research will benefit the commercial shellfish industries on the west coast and nationally through the conservation of shellfish lines with desirable traits, studies involving genetic manipulation to increase disease resistance and enhance growth, and judicious husbandry practices utilizing molluscan shellfish resources.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goals of this research program are to establish a repository for molluscan shellfish germplasm, to establish breeding programs for commercial production of molluscan shellfish, and to establish a resource center for the industry researchers, and other interested parties in the United States and abroad. The oyster broodstock selection program was implemented in partnership with industry and performance trials of selected stocks continue at commercial sites. Tetraploid oysters are being produced for use in the production of triploid seedstock to be used in commercial production trials. A temperature-controlled algae culture facility has been constructed to provide adequate nutrition to the oysters used in the studies. Oyster broodstock conditioning systems have been developed and in 1999, over 120 families were evaluated at commercial sites

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1995 with an appropriation of $250,000; fiscal year 1996 was $300,000; and $400,000 in each of fiscal years 1997 through 2000. A total of $2,150,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university estimates a total of $135,454 of non-Federal funding in fiscal year 1995 primarily from State sources; in fiscal years 1996, 1997, 1998, and 1999, no cost sharing was provided.

Question. Where is this work being carried out?

Answer. Research will be conducted at Oregon State University.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Specific research objectives outlined in the original proposal were completed in 1996. Researchers have broadened the scope of the project from the original objectives and it is anticipated that these objectives will be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The proposal is put though the university's peer review process and is reviewed on an annual basis by the Program Managers, the Program Specialist, and is consistent with United States Department of Agriculture guidelines. The researchers are asked to the develop a research proposal consistent with the National Science and Technology Council's Strategic Plan for Aquaculture Research and Development. The university is required to submit an accomplishment report when the new proposal is submitted to the agency for funding. The 1999 review concluded that the researchers were well qualified and work in close cooperation with the private sector. Progress on previous work is well documented and the work complements other research being funded though the United States Department of Agriculture on molluscan shellfish.

MULTI-CROPPING STRATEGIES FOR AQUACULTURE, HAWAII

Question. Please provide a description of the research funded under the Multi-Cropping Strategies for aquaculture research grant in Hawaii.

Answer. The agency requested that the university submit a grant proposal that has yet to be received. The original goal of this program was to identify and develop sustainable and commercial opportunities inherent in the Molokai aquaculture community while maintaining the cultural and physical environment unique to Molokai. In fiscal year 1993, the university redirected this research program to address the opportunities of alternative aquaculture production systems, including the ancient Hawaiian fish ponds on the island of Molokai. A community-based research identification process has been used to identify and develop specific research projects and prioritize objectives in this program. Current research includes work in the area of

water quality characterization to accelerate permitting of aquaculture systems. Field testing of alternative species in the ancient Hawaiian fish ponds also continues.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researchers indicate that the primary need for this research is to assist the native Hawaiians in improving the profitability and sustainability of the ancient Hawaiian fish ponds and other appropriate aquaculture systems as part of a total community development program on the Island of Molokai.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this program was to develop technology for the coproduction of shrimp and oysters in aquacultural production systems. Research led to the development of oyster production systems that have been field tested under commercial conditions. The objective of the program is to implement sustainable subsistence and commercial development of Molokai fish ponds while maintaining the culture and physical environment unique to Molokai. Production methods have been developed for native species including Pacific threadfin, Moi, and seaweed and studies involving shrimp and ornamental fish production are underway. Additionally, studies addressing water quality issues necessary for permitting of the ancient Hawaiian fish ponds for aquaculture are being conducted.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. This research was initiated in fiscal year 1987 and $152,000 per year was appropriated in fiscal years 1987 through 1989. The fiscal year 1990–1993 appropriations were $150,000 per year; $141,000 in fiscal year 1994; and $127,000 in fiscal years 1995–2000, each year. A total of $1,959,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The university reports a total of $137,286 of non-Federal funding for this program in fiscal years 1991–1994, $318,468 in fiscal years 1995–1996, $116,730 in fiscal year 1997, $197,000 in fiscal year 1998, and no non-Federal funds are available for this project for fiscal years 1999 and 2000.

Question. Where is this work being carried out?

Answer. Research is being conducted through the University of Hawaii on the island of Molokai.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The completion date for the original project was 1993. The original objectives were met. The specific research outlined in the current proposal will be completed in fiscal year 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The proposal is placed through the university's peer-review process, is reviewed by the Program Managers and Program Specialist on an annual basis, and is consistent with United States Department of Agriculture guidelines. The researchers are asked to the develop a research proposal consistent with the National Science and Technology Council's Strategic Plan for Aquaculture Research and Development. The university is required to provide an accomplishment report when the new grant proposal is submitted to the agency for funding. Adequate progress has been reported on specific tasks by agency-funded personnel and activities. The research is relevant and addresses an important opportunity for the aquaculture industry on Molokai.

MULTI-COMMODITY RESEARCH, OREGON

Question. Please provide a description of the research done under the Multi-Commodity Research program?

Answer. This research provides agricultural market research and analysis to support Pacific Northwest producers and agribusiness in penetrating new and expanding Pacific Rim markets for value-added products. It examines the potential for increasing the competitiveness of Pacific Northwest agriculture through improvements in food production, processing, and trade by assisting decision makers in developing economic and business strategies. The research proposal was peer reviewed at the university prior to submission to CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Oregon and other Pacific Northwest States produce a wide variety of agricultural commodities and products with export potential to Pacific Rim countries. Research and analysis are necessary to guide agricultural producers and processors in assessing markets, developing market strategies, and creating appropriate value-added products.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research project is to gain better specific understanding of the technical, economic, and social relationships that define Oregon's value-added agricultural sector, and examine how these factors affect the economic performance of the sector. This project investigates and develops innovations in value-added agriculture to improve the economic performance of the agricultural and food manufacturing sectors in the Pacific Northwest.

Work in progress has resulted in research output in four topic areas: market research, packaging research, sensory research, and food processing industry strategic planning. Output includes development of a World Wide Web site for PNW exports, data bases, survey work, and collaborative research activity with industry and with institute and university researchers in selected Asian countries. Many high quality manuscripts, working papers, journal articles, and graduate theses have been produced.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The research began in fiscal year 1993. The appropriation for fiscal year 1993 was $300,000; fiscal year 1994, $282,000; and fiscal years 1995 through 2000, $364,000 for each year. The total amount appropriated is $2,766,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Non-Federal funding for this grant $177,574 in State appropriations in 1993, and $162,394 in 1994. The project involves the use of Oregon State University administrative personnel, equipment, utilities and facilities that are indirect costs to the project. These costs constitute an Oregon State University contribution to the project that is not allowable as a reimbursable expense. Because the Oregon State appropriations process penalizes the University for reporting nonreimbursed indirect costs, the university has not reported the amount of non-Federal funds appropriated for fiscal years 1995–2000.

Question. Where is the work being carried out?

Answer. The research is carried out at Oregon State University in Corvallis, and at the Northwest Food Innovation Center in Portland, Oregon.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1993 was for a period of 12 months, however, the goal of enhancing Oregon's value-added agricultural sector in an ongoing regional and national concern. Progress on the original objectives is as follows: baseline data have been accumulated; an economic growth assessment model is being refined; global competitiveness is being assessed for value-added Pacific Northwest agricultural products; targets for performance are being worked out with agricultural industries; and trade teams have been involved in assessing the ability of U.S. based industries to meet the demands for noodle production for Asian markets. The current phase of the program will be completed in 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in January 1999, as it evaluated the 1999 project proposal, and determined that: "This institution has a highly productive history regarding this research. Outputs and accomplishments in 1998 include 4 scientific journal articles and 1 scientific paper presentation; participation in 8 domestic and 2 international professional, scientific and industry meetings; participation on 2 multistate research committees; completion of 2 MS theses and 1 Ph.D. dissertation; and 1 patent application."

NATIONAL BIOLOGICAL IMPACT ASSESSMENT PROGRAM

Question. Please provide a description of the work that has been funded under the National Biological Impact Assessment Program grant.

Answer. The National Biological Impact Assessment Program supports the environmentally responsible use of biotechnology products to benefit agriculture and the environment. This grant provides funding for the Information Systems for Biotechnology which is a national resource in agricultural biotechnology information.

The Information Systems for Biotechnology provides information to the research community regarding biotechnology regulations and the environmental issues associated with small and large scale releases of genetically modified organisms. It provides searchable databases, documents and resource lists on the internet, a monthly News Report with over 2,200 subscribers, custom software to assist in risk assessment and management, and printed reference materials.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The National Biological Impact Assessment Program provides information on biotechnology not found anywhere else. This program fulfills an important national need to provide scientists easy access to relevant information that will facilitate conducting research that complies with the oversight and regulatory requirements for testing biotechnology products, and foster the safe application of biotechnology to benefit agriculture and the environment. The Information System for Biotechnology was the first on-line system to address the rapidly expanding information needs of the agricultural biotechnology research community and institutional biosafety committees. It continues to be one of the most comprehensive sources of information on this topic.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was to facilitate and assess the safe application of new techniques for the genetic modification of plants, animals and microorganisms to benefit agriculture and the environment. Since its inception in 1989, the Program has developed tools and resources to provide scientists, regulators, teachers, administrators, and the interested public with value-added information in a readily accessible form. It has developed into a sophisticated computer-based information system and internet site that responds to more than 4200 requests per month from over 40 countries. The site carries documents pertaining to regulatory oversight of biotechnology products, policy statements, and risk assessment and risk management information. Searchable databases include records of all environmental releases of genetically engineered organisms conducted under authority of the Department of Agriculture, institutional biosafety committees, State regulatory contacts, biotechnology research centers and companies. A monthly News Report, covering research, regulatory, legal and international issues, is distributed to 1700 e-mail and 500 print subscribers. Biosafety training workshops have been conducted for public and private sector scientists and State regulatory officials. A major recent activity was publication of the proceedings of a risk assessment workshop on Ecological Effects of Pest Resistance Genes in Managed Ecosystems, that was held January 31-February 3, 1999. Over 800 copies have been distributed by request. Also, a guidebook for safely conducting transgenic research in greenhouses titled "Greenhouse Research with Transgenic Plants and Microbes: A Common Sense Guide to Containment" has been published.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $125,000; fiscal year 1990, $123,000; fiscal years 1991–1993, $300,000 per year; fiscal year 1994, $282,000; and fiscal years 1995–2000, $254,000 per year. A total of $2,954,000 has been appropriated. There are no other potential sources of funding from other Cooperative State Research, Education, and Extension Service programs.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Virginia Tech contributes administrative and clerical support which amounts to approximately $5000 per year.

Question. Where is this work being carried out?

Answer. The grant award is with Virginia Tech. Current partners in the program include the University of Minnesota and the Institute for Biotechnology Information.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Ensuring the environmentally responsible use of agricultural biotechnology products is an ongoing and important task. Opportunities for plant and animal improvement through biotechnology are expanding as more genes are identified and new methods are developed for introducing specific, beneficial genes into plant and animal populations. As these genetically enhanced crops and livestock are adopted commercially, assuring long term safety and efficacy will be a high national priority.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An external panel of scientists reviewed this program in 1994. The review report was highly complimentary of this project and recommended continuation of the program. Another external review is being planned for the year 2000. The current proposal was peer-reviewed at Virginia Tech prior to submission and was also peer-reviewed by the agency.

NEMATODE RESISTANCE GENETIC ENGINEERING, NEW MEXICO

Question. Please provide a description of the work that has been funded under the Nematode Resistance Genetic Engineering Project grant.

Answer. This research is designed to investigate naturally occurring compounds from diverse sources that may confer pesticidal resistance if introduced into agronomic plants. The main target pests are no longer plant parasitic nematodes but include insects as well. The work is using molecular biological techniques to incorporate genes into agronomic plants which will shorten the time frame to produce transgenic plants. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes that the successful development of these techniques and subsequence transfer of genes with insecticidal and/or pesticidal activity into agronomic plants will provide an environmentally sound system for all plants susceptible to pests. The principal researcher believes that project has the potential for both regional and national application.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to provide an alternative approach for the control of plant parasitic nematodes through the use of molecular biological technologies to transfer pesticide resistance to plants. More recently, a insecticidal protease inhibitor gene has been used in transformed plants. A unique technique utilizing insect intestinal membrane vesicles were used as tools for detection of specific protein binding domains. The synthetic gene, CRY3A Bt has been successful for four years in field trails with transformed potato in managing Colorado potato beetles.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 and the appropriations for fiscal years 1990–1993 were $150,000 per year; $141,000 was appropriated in 1994; and $127,000 in fiscal years 1995–2000, each year. A total of $1,353,000 has been appropriated thus far.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funds and sources provided for this grant were as follows: $65,000 State appropriations in 1991; $62,000 in State appropriations in 1992; $75,000 in State appropriations in 1994; and $75,000 State appropriations in 1995. For 1996, the University and the Plant Genetic Engineering Laboratory are providing matching contributions in faculty and staff salaries, facilities, equipment maintenance and replacement, and administrative support. In 1997, there were no matching non-Federal funds. In 1998 and 1999, State appropriated funds were $48,000 and $71,000, respectively. In 2000, the non-Federal funds are $70,000.

Question. Where is the work being carried out?

Answer. Research is being conducted at the New Mexico State University, and at collaborating universities in the region.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives have not as yet been met. The estimated completion date for this project is in 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last evaluation of this project was a merit review conducted in January, 1999. In summary, the overall goal of this project is to use molecular technology to develop pesticide capability in plants of agronomic importance. A plant transformation system was developed to improve the historically difficult transformation efficiently of monocots. In field trails of transformed eggplants and potatoes, high

levels of effectiveness against insects have been found. Other constructs are being used in many crops to determine resistance to nematodes and other crop pests.

NEVADA ARID RANGELANDS INITIATIVE, NEVADA

Question. Please provide a description of the research that has been funded under the grant.

Answer. The Cooperative State Research, Education, and Extension Service has requested the university to submit a grant proposal that has not yet been received.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to develop management systems to protect Nevada's arid range land from invasive weeds and wildfires.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to develop research management and educational programs to promote healthy productive and sustainable use of Nevada rangeland.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $255,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This is a new project. No non-Federal funds have been provided at this time.

Question. Where is the work being carried out?

Answer. Research will be conducted at the University of Nevada Research Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project is under development, however anticipated completion for the original objectives should be 5 years.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project is under development and will be evaluated prior to funding.

NEW CROP OPPORTUNITIES, ALASKA

Question. Please provide a description of the research that has been funded under the grant.

Answer. Cooperative State Research, Education, and Extension Service has requested the university to submit a grant proposal that has not yet been received. The research will address the feasibility of growing wild rice as an alternative crop in Alaska.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research addresses a local need to find an alternative crop for the State of Alaska.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This grant is new and the research will build upon existing expertise to offer new opportunities for crop diversification.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $425,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. Since this is a new grant, and a proposal has not yet been received, the source and amount of non-Federal funds for this research is unknown.

Question. Where is this work being carried out?

Answer. This work will be carried at the School of Agriculture and Land Resources management at the University of Alaska, Fairbanks.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met: What is the anticipated date of additional or related objectives?

Answer. This project is expected to be completed in three years.

Question. When was the last agency evaluation of this project? Provide a summary of the evaluation conducted.

Answer. Since this is a new grant, no evaluation has been conducted.

NEW CROP OPPORTUNITIES, KENTUCKY

Question. Please provide a description of the research that has been funded under the grant.

Answer. CSREES has requested the university to submit a grant proposal that has not yet been received. The research will promote economically sustainable crop production, new crops, and expanded crop uses in Kentucky. Improved plant and innovative production systems through integrated research in plant ecology, biochemistry, physiology and genetics, will be developed. Technology and information support for Kentucky farmers and for the economic base of the State will be provided.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research addresses a regional need to find alternative crops to replace tobacco.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This grant is new and the research will build upon existing expertise to offer new opportunities for crop diversification, technology transfer and demonstrations.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $595,000.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This is a new grant and no non-Federal funds have been provided.

Question. Where is this work being carried out?

Answer. This work will be carried at the University of Kentucky and at various locations across the State.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated date of additional or related objectives?

Answer. This project is expected to be completed in three years.

Question. When was the last agency evaluation of this project? Provide a summary of the evaluation conducted.

Answer. This is a new grant and no evaluation has been conducted yet.

NONFOOD AGRICULTURAL PRODUCTS PROGRAM, NEBRASKA

Question. Please provide a description of the research that has been funded under the Nonfood Agricultural Products Program grant.

Answer. This work focuses on the identification of specific market niches that can be filled by products produced from agricultural materials, developing the needed technology to produce the product, and working with the private sector to transfer the technology into commercial practice. Major areas of application include starch-based polymers, use of tallow as diesel fuel, improvements in ethanol production, use of vegetable oil as drip oil for irrigation wells, as a two cycle engine oil, and as a chain saw bar oil, production of levulinic acid, the extraction of wax from grain sorghum and production of microcrystalline cellulose from crop biomass. The Dean and Director of Agricultural Research has initiated a review process that parallels the process used for Experiment Station projects. Two to three faculty member are asked to critically review the proposal using criteria as described by Cooperative State Research, Education and Extension Service in the letter soliciting proposals for 1999.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes our ability to produce agricultural commodities exceeds our needs for food and feed. These commodities are environmentally friendly feedstocks which can be used in the production of many biochemicals and biomaterials that have traditionally been produced from petroleum. The production of the commodities and the value-added processing of these commodities is regional in scope.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The objectives are to identify niche markets for industrial utilization of agricultural products, improve and develop conversion processes as needed for specific product isolation and utilization, provide technical, marketing and business assistance to industries, and coordinate agricultural industrial materials research at the University of Nebraska, Lincoln. Accomplishments include commercialization of soybean based drip oil for irrigation wells. Bruning Grain Co. Marketing "Soy Bio Drip." MCC Technologies, Inc. continues to refine the processing requirement and develop a business plan for production of microcrystalline cellulose from crop residues such as corn cobs, wheat straw and cellulose via a reactive extrusion process developed by the university's Industrial Agricultural Products Center. Various hardness grades of plastic particle media blast using a combination of commercially available biodegradable polymers have been produced. A water resistant starch-based foam has been developed and a patent disclosure has been submitted. A commercialization strategy is being developed. Also, an alternative process for producing biodiesel has been developed and will be disclosed soon. All of these commercialization projects are the result of research efforts, most of which have been supported by the Nonfood Agricultural Products Program. Two Small Business Innovation Research, Phase I, proposals have been funded for technologies developed at the Center. A Phase II proposal is currently being written on loose fill packaging. A Phase II proposal on levulinic acid is anticipated.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The funding levels for this project are $109,000 in 1990; $110,000 per year in fiscal years 1991–1993; $103,000 in fiscal year 1994; $93,000 in fiscal year 1995; and $64,000 in fiscal years 1996–2000 per year. A total of $955,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. The non-Federal funding for this project is: in fiscal year 1992, $315,000; fiscal year 1993, $330,000; fiscal year 1994, $330,000; fiscal year 1995, $309,000; fiscal year 1996, $251,000; fiscal year 1997 $250,000; fiscal year 1998, $340,000; and fiscal year 1999, $260,000 . These funds were from Nebraska Corn, Soybean, Wheat, Sorghum and Beef Boards, World Wildlife Fund, Nebraska Bankers Association, United Soybean Board and National Corn Growers Association, Bioplastics, Inc., Biofoam, Inc. and M.C.C. Technologies, Inc.

Question. Where is this work being carried out?

Answer. This work is being conducted at the Industrial Agricultural Products Center, L.W. Chase Hall, University of Nebraska, East Campus, Lincoln, Nebraska.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The objectives of the original projects were completed. Specific objectives have been identified in each renewal request.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project is evaluated based on the annual progress report. The cognizant staff scientist has reviewed the project and determined that the research is conducted in accordance with the mission of this agency.

OIL RESOURCES FROM DESERT PLANTS, NEW MEXICO

Question. Please provide a description of the research that has been done under the Oil Resources from Desert Plants, New Mexico.

Answer. The Plant Genetic Engineering Laboratory has been exploring the potential for the production of high value industrial oils from agricultural products. The effort has been focused on transferring the unique oil producing capability of jojoba into oilseed rape and soybean. With the development of technology to both isolate the enzyme components of oil biosynthesis and successfully transform the target plants, significant advances have been made with jojoba. In addition, oil enzymes have been studied in castor, oilseed rape, desert primrose, cyanobacteria, and meadowfoam.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes desert plant sources of valuable oils for industrial applications are typically low yielding and limited in climatic areas for farm production. Genetic engineering offers an opportunity to move genetic capability to high yielding major crops. Many of the oils and their derivative acids,

waxes, and others can directly substitute for imports of similar polymer materials, especially petroleum.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research is to transfer the unique oil producing capability of jojoba and other native shrubs into higher yielding crops such as oilseed rape and soybean. This is a form of metabolic engineering and it requires the transfer of coordinated groups of genes and enzymes into the host plant to catalyze the necessary biochemical reactions. Recent progress includes successful transformation of tobacco and alfalfa plants with oil metabolism genes from the meadowfoam plant and a cyanobacterium.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. This research began in fiscal year 1989 with a $100,000 grant under the Supplemental and Alternative Crops program. Grants have been awarded under the Special Research Grants program as follows: fiscal year 1990, $148,000; fiscal years 1991–1993, $200,000 per year; fiscal year 1994, $188,000; fiscal years 1995–1996, $169,000 each year; and fiscal years 1997 through 2000, $175,000 per year. A total of $2,074,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Matching funds from State and private sources used to help fund this project were $27,747 in fiscal year 1998 and $71,000 in fiscal year 1999. New Mexico State University and the Plant Genetic Engineering Laboratory also provide $90,000 for in-kind support per year including faculty salaries, graduate student stipends, facilities, equipment maintenance, and administrative support services.

Question. Where is this work being carried out?

Answer. The research is being conducted by the Plant Genetic Engineering Laboratory at New Mexico State University, Las Cruces, New Mexico.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. An estimate of the total time required to complete all phases of the project is 3–4 years. The application of this research for improved management of natural resources will evolve and expand as technology in the area advances.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Oil Resources from Desert Plants, New Mexico project was evaluated for scientific merit by an agency peer review panel on February 25, 1999. The panel recommended approval of the project pending receipt of supplemental information on administrative aspects of the project. The Institution conducts an internal peer review of this project by scientists with expertise in this area of research. A panel of scientists will be convened to re-evaluate the project upon receipt of a proposal for fiscal year 2000.

ORGANIC WASTE UTILIZATION, NEW MEXICO

Question. Please provide a description of the research that has been funded under the Organic Waste Utilization, New Mexico grant.

Answer. Composted dairy waste is utilized as a pretreatment to land application. Composting dairy waste before land application may alleviate many of the potential problems associated with dairy waste use in agronomic production systems. Composting may also add value to the dairy waste as a potential landscape or potting medium. High temperatures maintained in the composting process may be sufficient for killing enteric pathogens and weed seeds in dairy waste. Noxious odors and water content may be reduced via composting. Composted dairy waste may be easier to apply, produce better seed beds, and not increase soil salinity as much as uncomposted dairy waste. Changes in the physical structure of the soil are being monitored for the effects of composted vs uncomposted amendments. This project undergoes annual peer review from academic institutions and experts from government and state agencies, and industrial partners.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the research will address the utilization of dairy waste combined with other high-carbon waste from agriculture and industry, including potash and paper waste, for composting. This approach to waste management will have high impact for states where dairy and agriculture are important industry sectors. This is especially true for New Mexico and the southwest United

States where the dairy business is growing rapidly. This research will also provide an additional pollution prevention tool for the industrial sectors dealing with potash and paper waste. The principal investigator believes this research to be of local, regional and national importance.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the research was and continues to determine the feasibility of simultaneously composting dairy waste from agriculture and industry. The research will determine effects of utilizing composted waste, as opposed to raw waste, as a soil amendment on plant growth, irrigation requirements, and nutrient and heavy metal uptake. Phase I, to determine the feasibility of simultaneous composting dairy waste with available high carbon wastes from agriculture and industry, has been completed. Phase II, to determine the appropriate ratios of waste to carbon substrate for successful composting is completed. Phase III, to determine the kinetics of nutrient release and effects of composted material on heavy metal uptake will be completed next year. The study of the second and third year application of the compost will be undertaken this year. This will identify the long term soil impact resulting from compost application.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1996 and the appropriation for fiscal year 1996 was $150,000, and for fiscal years 1997 through 2000, $100,000 per year. A total of $550,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds for the duration of this grant from the state appropriation is $75,000. There is another $50,000 in-kind support from the industrial partners. Additionally, a sum of $15,000 from the New Mexico State Highway Department has been leveraged by this project.

Question. Where is this work being carried out?

Answer. This work is being carried out in New Mexico under the direction of the Waste-Management Education and Research Consortium in collaboration with The Composting Council and industrial partners, such as Envio in Ohio, Plains Electric, and McKinley Paper in New Mexico.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Completion date of the initial phases I and II was March 2000 and the project has progressed according to the specified targets. Phase III is ongoing and will be completed by early 2001. Phase IV was added last year to evaluate the multi-year compost application on parameters such as plant growth, soil water retention and soil salinity.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project has been evaluated based on the semi-annual progress report and research findings presented at conferences. The cognizant staff scientist has reviewed the project and determined that this research is conducted in accordance with the mission of this agency.

PASTURE & FORAGE RESEARCH, UTAH

Question. Please provide a description of the research that has been funded under the Pasture and Forage Research, Utah grant.

Answer. This is a multidisciplinary effort to develop profitable and sustainable pasture and forage management systems. The Cooperative State Research, Education, and Extension Service requested Utah State University to submit a grant proposal that has not yet been received.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The proposed research under this Special Research Grant will address issues related to forage production and utilization in Utah.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this project is to develop a comprehensive guide for the management of irrigated pastures to assist livestock producers reduce cost and increase net returns.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $200,000, and for fiscal years 1998 through 2000 was $225,000 per year. A total of $875,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds in support of this project and related activities were $360,200 for 1997, $356,000 for 1998 and $364,000 for 1999.

Question. Where is this work being carried out?

Answer. Research will be conducted at the Utah Agricultural Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigators anticipate the completion date for these objectives to be in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The grant is peer reviewed annually through the institutions project approval process as well as by the agency National Program Leader and the last on-site review took place in November 1999. The evaluation summary noted that the program, as implemented at the farm level, has already produced significant results in addressing problems of 4–H in Utah and the surrounding area.

PEACH TREE SHORT LIFE IN SOUTH CAROLINA

Question. Please provide a description of the research that has been funded under the Peach Tree Short Life in South Carolina grant.

Answer. Progress continued in 1999 with focus on the evaluation and longevity and productivity of Guardian rootstocks on peach tree short life sites in the southeast and replant sites throughout North America. More fundamental work has involved the biochemical characterization of the egg-kill factor produced by a bacteria on nematode eggs. Other basic studies involved the cloning of genes associated with production and expression of toxins from bacteria. New studies were initiated on the use of solarization to reduce nematode populations for peach tree replant. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES.

Question. According to the research proposal , or the principal researcher, what is the national, regional, or local need for this research?

Answer. According to the principal researcher the problem of disease on peach, nectarine, and plum trees in the southeastern United States effects is very great. More than 70 percent of peach acreage in the southeast is affected. Research continued on the improvement of rootstocks and the use of the cultivar Guardian BY520–9 which has now been released in 22 states including California, New Jersey and Michigan where bacterial canker is a problem.

Question. What was the original goal of this research and what has been accomplished to date.

Answer. The goal of this research was the continued evaluation of productivity of peach Guardian BY520–9 rootstocks on peach tree short life and investigations into novel management for ring nematodes by bacteria. Recent accomplishments include the increase in bulk commercial production of Guardian seed while two new Guardian selections have had very good nursery trails. Guardian rootstock continues to be tested in 22 states and is performing well. A marker for a gene for rootstock resistance to two root-knot nematode species was sequenced and successfully used to correctly sort current commercial rootstocks according to their known nematode resistance or susceptibility. A major find is that the egg-kill factor produced by the bacteria kills root-knot nematode eggs as well as ring nematode eggs.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1981, $100,000; fiscal years 1982–1985, $192,000 per year; fiscal years 1986–1988, $183,000 per year; fiscal year 1989, $192,000; fiscal year 1990, $190,000; fiscal years 1991–1993, $192,00 per year; fiscal year 1994, $180,000; fiscal years 1995–2000, $162,000 per year. A total of $3,527,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources for this grant were as follows: $149,281 state appropriations in 1991; $153,276 state appropriations in 1992; $149,918 state appropriations in 1993; $211,090 state appropriations in 1994; $193,976 in state appropriations in 1995; $169,806 in state appropriations in 1996

and 1997; $150,693 in state appropriations in 1998; $92,099 in 1999; and $92,099 in state appropriations in 2000.

Question. Where is this work being carried out?

Answer. This research is being conducted at South Carolina Agricultural Experiment Station.

Question. What as the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The researchers anticipate that the work may be completed in fiscal year 2001. Adequate progress has been made to assure that the objectives will be met before the completion date.

Question. What was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last agency evaluation of this project was a merit review completed in January, 1999. In summary, the evaluation of peach rootstocks with resistance to peach tree short life is of continued importance in managing this disease. The use of biological control strategies in suppression of plant parasitic nematodes are a complementary area of research in that it can enhance disease management by protecting the peach rootstocks. Solarization of orchard sites prior to peach tree replanting significantly altered the microbial community and suppressed nematode multiplication in the rhizosphere. Some accomplishments were the increased production and release of commercial Guardian seed and continued evaluation of rootstock in 22 states and provinces. A molecular techniques that separates resistant and susceptible peach rootstocks was validated.

PEANUT ALLERGY REDUCTION, ALABAMA

Question. Please provide a description of the research that has been funded under the Peanut Allergy Reduction, grant.

Answer. The industry, in conjunction with Alabama A&M University, Auburn University and the University of Georgia are trying to develop a response to the problem of peanut allergy being experienced by greater numbers of people and have determined that research is needed in the following areas:

—the possibility of reducing the allergenic potential of peanuts through bioengineering and traditional breeding targeted at modifying the peanut proteins responsible for causing allergic reactions;

— development of vaccines and other means to desensitize people with peanut allergies; and

— development of better marketing, handling and processing methods to reduce allergy risks.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Peanut allergies present a major problem for the growth of the peanut industry nationally, regionally and locally.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals of this research are to (1) reduce the allergenic potential of peanuts through bioengineering and traditional breeding targeted at modifying the peanut proteins responsible for causing allergic reactions; (2) develop vaccines and other means to desensitize people with peanut allergies; and (3) develop better marketing, handling and processing methods to reduce allergy risks.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant begins during this fiscal year 2000. The appropriation for fiscal year 2000 is $425,000.

Question. What is the source and amount of non-federal funds provided by fiscal year 2000?

Answer. A grant proposal is expected from a consortium of universities, among them are Alabama A&M University, Auburn University, and the University of Georgia. Since grant proposals have not yet been received, the source and amount of non-federal funds for this research is not known.

Question. Where is this work being carried out?

Answer. The research is expected to be carried out in Alabama.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. Since grant proposals from the cooperating universities of the consortium have not yet been received, the anticipated completion date and completion of objectives is not yet known.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Since grant proposals from the cooperating universities of the consortium have not yet been received, the date of the last agency evaluation is not yet known.

PEST CONTROL ALTERNATIVES, SOUTH CAROLINA

Question. Please provide a description of the research that has been funded under the Pest Control Alternatives grant.

Answer. This grant supports research and technology transfer to provide growers with alternatives for managing pests and to implement the use of new alternatives reducing the sole reliance on chemical pesticides.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The investigators contributing to the research and technology transfer at South Carolina believe that need for the development of alternatives for managing pests on vegetables is a regional and national problem. Contributions from the South Carolina work are projected by South Carolina to impact vegetable production in the Southern region and consumers of vegetable production from the Southern region.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. Studies conducted during 1999 demonstrated that Bacillus thuringiensis formulations and combinations with botanicals such as neem controlled a number of insect pests important on collards. Comparisons were conducted with commonly used conventional pesticides. Clearly, microbial products or microbial materials in combination with botanicals such as neem, can control caterpillars on leafy greens without the use of broad spectrum chemical insecticides. Fresh cowpea pods were treated with different concentrations of neem to determine the effects on the southern green stinkbug. Numbers of feeding punctures were significantly reduced when pods were treated with neem. Also, treatment caused deformed adults that could not feed or reproduce. Because neem is "soft" on beneficial insects and spiders, it may be considered as a part of an ecologically-compatible program of insect control in several vegetable crops.

Field studies conducted during 1999 have shown that applications of the entomopathogenic nematode, Steinernema fletiae, are as effective in reducing damage from the squash vine borer as standard insecticide sprays. Foliage sprays of a Bacillus thuringiensis formulation were also effective in reducing damage by this pest.

Plant-feeding insects and predators were monitored by two different methods in 5 species of medicinal plants during the spring and summer of 1999. Except for one small, localized outbreak of whiteffies, the natural enemies kept potential posts in check, Major predators included ladybeetles, Nabis sp., Geocoris spp., and spiders in the genus Pardosa. These preliminary results show that any insect management program on medicinal herbs should avoid altogether the use of chemical insecticides. Seedless watermelon were more resistant to powdery mildew than seeded ones. Losses to powdery mildew should be less with seedless than with seeded varieties. 19Munchkin' and 19Baby Boo' mini-pumpkins were the most productive varieties among 11 mini-pumpkins tested. Collards produced by crossing collard and cabbage germplasm had increased vigor and favorable color, size and shape for the fresh market. South Carolina county extension agents were provided technology transfer information by Clemson University research scientists participating in this research. Topics included, (1) conservation of indigenous natural enemies, (2) augmentation of predators and parasitoids, (3) age of microbial agents in cultivated systems and (4) nematodes as biocontrol agents. County agents should be more informed about the practical use of biological control agents as alternatives to chemical insecticides.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was $125,000 per year. In fiscal year 1994 the appropriation was $118,000 and in fiscal years 1995 through 2000, $106,000. A total of $1,004,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. South Carolina has provided approximately $200,000 in personnel support and operating dollars per year from State appropriations based on the PI's estimate.

Question. Where is the work being carried out?

Answer. This research and technology transfer program is being conducted at the South Carolina Agricultural Experiment Station, Clemson University at Clemson, Florence, and Charleston, South Carolina.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives of the project were for five years. The project was revised in 1998. Research on objective A: to develop and evaluate microbial pest control agents for control of plant pathogens and insect pests of vegetables, is diffuse and non-conclusive. It would be far superior for continued work in this area to be submitted to competitive peer review programs where the investigators would need to clearly focus specific activities and receive the benefit of the comments of peer scientists. Objective B: to determine the efficacy of innovative cultural practices for vegetable production systems in South Carolina and Objective C: to assess the role of indigenous predators, parasites, and pathogens in controlling insect pests; determine environmental and biological factors that influence the abundance and distribution of these indigenous beneficials; and consider the presence of natural enemies, as well as pests, in management decisions. These are areas where the most progress appears evident and has been cited in the accomplishments. The base of information and orientation of the research in these areas is adequate and of such quality that the investigators could compete well in competitive grant programs such as sustainable agriculture or regional Integrated Pest Management grant programs, and would benefit from the peer review process. Progress in these areas is an ongoing process as explanations are sought for the results being obtained. Objective D: to evaluate and develop germplasm, breeding lines and cultivars for resistance to major pathogens of commercially important vegetables and Objective E: to transfer new technology to user groups, have not at this time, demonstrated progress which could be anticipated from ongoing conventional sources of funds.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project is evaluated annually when the grant is processed. An agency evaluation of this project is to be scheduled for the last part of fiscal year 2000.

PEST MANAGEMENT ALTERNATIVES

Question. Please provide a description of the research that has been funded under the Pest Management Alternatives special grant.

Answer. This special research grant supports projects that help farmers respond to the environmental and regulatory issues confronting agriculture. These special grant funds support research that provides farmers with replacement technologies for pesticides that are under consideration for regulatory action by EPA and for which producers do not have effective alternatives. The passage of the Food Quality Protection Act of 1996 (FQPA) makes this special research grant of critical importance to the Nation's farmers.

New pest management tools are being developed to address critical pest problems identified by farmers and others in a crop production region, and to identify new approaches to managing pests without some of the most widely used pesticides. Farmers have identified the lack of effective alternative pest management tactics as a primary reason for not implementing IPM on their farms. Where effective alternative tactics have been developed, they are widely and rapidly implemented by farmers. These special research grant funds are distributed on a competitive basis to all eligible research institutions through the Pest Management Alternatives Program or PMAP. Research priorities for PMAP are established with the help of a database analysis system, which draws upon the expertise of the land-grant university system, commodity groups, and others.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research.

Answer. The ability of the Nation's agricultural production system to keep pace with domestic and global demand for food and fiber is dependant on access to safe, profitable and reliable pest management systems. For a variety of factors, farmers and other pest managers have fewer chemical control options available to them than they did at the beginning of the decade, and this trend is likely to continue at an accelerated rate. The Food Quality Protection Act of 1996 (FQPA) will have significant impacts on pest management systems in the United States over the next dec-

ade, and the "minor use" (high value crops grown on relatively few acres) will be particularly hard hit. For these reasons and others, it is essential that farmers be provided with new pest management tools and better information so they can remain competitive in today's global marketplace.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This research is conducted to help farmers respond to the environmental and regulatory issues confronting agriculture by providing them with new options for managing pests. The research supported by this special grant is identifying new ways to manage pests without key pesticides that may no longer be available as FQPA is implemented. Some highlights of the research funded through PMAP include technology that reduces organophosphates in apples, modified cropping systems that replace herbicide use in pumpkins and squash, surface amendments that reduce aerial pesticide pollutants, development of pest and natural enemy thresholds to improve pest scouting on wheat, models to improve pesticide use efficiencies in minor fruit crops, improved insecticide and herbicide spray technology, new selective insecticides to control broccoli insects, and use of non-traditional oil sprays to control mites on apples.

Question. How long has this work been underway and how much as been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal years 1996 through 2000, $1,623,000 each year. A total of $8,115,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds are not required by this grants program.

Question. Where is the work being carried out?

Answer. All State agricultural experiment stations, all colleges and universities, other research institutions and organizations, Federal agencies, private organizations or corporations, and individuals are eligible to compete for this funding. This research is currently being carried out by State Agricultural Experiment Stations and other research organizations located in 20 States.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The economic and environmental pressures facing U.S. agriculture today are greater today than in 1996 when federal funds were first appropriated for this special research grant. There will be a need for continued investment in research to develop new approaches to managing pests for the foreseeable future as the Food Quality Protection Act of 1996 is implemented.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Each new draft RFP and all project proposals are evaluated annually by multi-disciplinary relevancy and merit review panels. A joint USDA/EPA workshop to evaluate the progress and scope of the program was held in Arlington, VA on May 11th, 1999. The conclusions were that the program was on course and making good progress, and could do more with additional funding. The projects supported by this special research grant have consistently provided key knowledge needed in developing new approaches to pest management. The focus on pesticides targeted by FQPA assures that critical pest management alternatives are being addressed. PMAP has supported 82 projects in 29 States since it started five years ago.

PHYTOPHTHORA ROOT ROT, NEW MEXICO

Question. Please provide a description of the research that has been funded under the Phytophthora Root Rot grant.

Answer. Work has continued to focus in general on the development of strategies for sustainable vegetable production in irrigated lands. This research includes continued work on the search for Phytophthora root rot resistance in chilies, identification of molecular markers for rot tolerant genes, investigation on irrigation modification as a means to manage root rot, and soil bed temperature control as a means to manage disease.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes that since Phytophthora disease threatens chili production in west Texas, New Mexico, and Eastern Arizona, this problem is of state and regional significance.

Question. What is the original goal of this research and what has been accomplished to date?

Answer. The original goal was to improve chile production through genetically superior cultivars, combined with new improved cultural practices. Researchers have developed a highly effective disease screen that selects resistant seedlings, found that genes for resistance to root rot do not provide protection against Phytophthora foliar blight, that a wild species of Capsicum is immune to the fungus, and that molecular markers are useful to introgress genes for tolerance.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 with an appropriation of $125,000 for that year. The fiscal years 1992–1993 appropriation was $150,000 per year; $141,000 in fiscal year 1994; and $127,000 in fiscal years 1995–2000, each year. A total of $1,328,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds from state appropriations and the California Pepper Commission were $255,614, in 1997; $253,614 in 1998; and state appropriations in 2000 are $250,000.

Question. Where is this work being carried out?

Answer. Research is being conducted at New Mexico State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives was 1995. These objectives have not been met. Related programs deal with research and development efforts designed to prevent or manage diseases impacting vegetable production in irrigated areas, and cooperators estimate that the objectives of these programs should be met by 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last merit review was made in January, 1999. In summary, the development of resistant cultivars and research on interactions of Capsicum and Phytophthora for developing strategies for irrigated crop growers to be competitive in the international economic arena continued. More than 40,000 seedlings were screened for resistance to root rot and/or foliar blight in the greenhouse. Several individual plants from cayenne, jalapeno, and new Mexican pod types were found to possess both root-rot and foliar blight resistance. Unfortunately due to an introduction of curly top virus the field evaluation were lost this year. However, other research continues to identify molecular makers linked to foliar blight.

PLANT, DROUGHT, AND DISEASE RESISTANCE GENE CATALOGING

Question. Please provide a description of the research that has been funded under the Plant, Drought, and Disease Resistance Gene Cataloging grant.

Answer. This research grant identifies, characterizes, and catalogs genes that enhance the ability of agricultural crops to resist stress caused by drought and disease organisms. The project constructs, carts, and distributes Cana libraries for genes that are differentially expressed in response to drought or disease pressure. Work is also being done to sequence DNA of these genes, to characterize their patterns of expression, and to develop databases to share information with other scientists.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research will improve the drought and disease resistance of agricultural crops in New Mexico and throughout the United States. This work has applications throughout the Nation, especially in the arid and semi-arid production regions.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This research project was supported so that better adapted agricultural crops could be developed for difficult environments in New Mexico and throughout the United States. New Mexico State University established the facility, developed a database to catalogue Cana, and began the initial work of sequencing and cataloging genes into biologically informative groups. To date, scientists have isolated the appropriate DNA to construct libraries of drought-stress induced transcripts from three different chile genotypes, one grass, and one clover. Additionally, they have selected the germplasm to characterize for other species.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 and has been with appropriations of the following amounts: fiscal years 1998 and 1999, $150,000 per year; fiscal year 2000, $212,500. A total of $512,500 has been appropriated since fiscal year 1998.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. In fiscal year 1998, New Mexico Agricultural Experiment Station provided $8,444 in non-federal funds. The funds covered a portion of the salary for the two principal investigators.

Question. Where is this work being carried out?

Answer. The research is primarily conducted at New Mexico State University. Collaborations with Los Alamos National Lab and the National Center for Genome Resources have been established.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. When it was initiated in fiscal year 1998, this project was designed to demonstrate significant accomplishments within a five-year time frame. The principal investigators report significant progress has been made in achieving project objectives.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last agency evaluation of this project was an agency merit review which took place last March, 2000. This evaluation noted that the faculty at New Mexico State University have been conducting research on genes involved in disease and drought resistance on a wide range of crops and have recently developed expertise and collaborative efforts in bio-informatics. Work has begun on two new databases in the areas of plant metabolism and cell biology. When the cDNA libraries are constructed, curated and distributed, scientists from around the world will have access to this database information. It was noted that this project addresses high priority objectives in plant genetics which are directed to economically important crops and approval of funding was highly recommended.

POTATO RESEARCH

Question. Please provide a description of the research that has been funded under the grant.

Answer. Scientists at several of the State Agricultural Experiment Stations are breeding new potato varieties, high yielding, disease and insect resistant potato cultivars, adapted to the growing conditions in their particular areas, both for the fresh market and processing. Research is being conducted in such areas as protoplast regeneration, somoclonal variation, storage, propagation, germplasm preservation, and cultural practices. Congressional language for fiscal years 1997, 1998, 1999, and 2000 has directed CSREES to award these funds on a competitive basis. In each of the years, CSREES published a request for proposals in the Federal Register and awarded grants competitively based on a scientific peer review.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research effort addresses needs of the potato producers and processors throughout the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was to improve potato production through genetics and cultural practices as well as improve storage for quality potatoes for processing and fresh market. This research has resulted in a number of new high yielding, good quality, disease and insect resistant cultivars, which are now being used in the processing industry and in the fresh market. Regional comprehensive breeding programs have been developed to produce cultivars targeted to the specific growing conditions of that region. A number of the new cultivars have also been adaptable to other regions. These programs have also had success in identifying resistance to pests and pathogens in wild germplasm and are developing expertise to incorporate genetic engineering approaches as traditional components of the program.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1983, $200,000; fiscal year 1984, $400,000; fiscal year 1985, $600,000; fiscal years

1986–1987, $761,000 per year; fiscal year 1988, $997,000; fiscal year 1989, $1,177,000; fiscal year 1990, $1,310,000; fiscal year 1991, $1,371,000; fiscal years 1992 and 1993, $1,435,000 per year; fiscal year 1994, $1,349,000; fiscal years 1995 through 1998, $1,214,000; and for fiscal years 1999 and 2000, $1,300,000 per year. A total of $19,252,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $401,424 state appropriations, $4,897 product sales, $249,830 industry, and $30,092 miscellaneous in 1991; $567,626 state appropriations, $6,182 product sales, $334,478 industry, and $44,323 miscellaneous in 1992; $556,291 state appropriations, $9,341 product sales, $409,541 industry, and $44,859 miscellaneous in 1993; $696,079 state appropriations, $21,467 product sales, $321,214 industry, and $226,363 miscellaneous in 1994; $935,702 state appropriations, $35,376 product sales, $494,891 industry, and $230,080 miscellaneous in 1995; and an estimated $900,000 state appropriations, $10,000 product sales, $400,000 industry, and $200,000 miscellaneous in each of 1996, 1997, 1998, and 1999.

Question. Where is this work being carried out?

Answer. The research work is being carried out at the Cornell, Idaho, Maine, Michigan, North Dakota, Oregon, Pennsylvania, Washington, North Carolina, New Jersey, and Colorado State Agricultural Experiment Stations. The grant to Colorado is divided by Colorado with the California and Texas Agricultural Experiment Stations.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initiated to accomplish significant results in about five years. Because the research is based on genetic varietal development, progress is developing new potato varieties takes from 5 to 10 years.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Beginning in fiscal year 1997, these funds have been awarded on a competitive basis using a scientific peer review. In addition, CSREES conducts a formal meeting with representatives from the potato industry to review research needs and provide input to the agency on the merits of the proposals.

PRECISION AGRICULTURE, KENTUCKY

Question. Please provide a description of the research that has been funded under the Precision Agriculture, Kentucky grant.

Answer. The Cooperative State Research, Education and Extension has requested the university to submit a grant proposal that has not yet been received. Research will evaluate site-specific practices for production of corn and soy beans under field conditions. The work will compare various combinations of management practices using site-specific technology and evaluate economics of its application.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to provide objective information about precision agriculture technologies to assist farmers in the development of management systems that are productive, economical, and environmentally benign.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to evaluate site specified technologies and develop recommendations for their use in crop management systems.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999 and the appropriation for fiscal year 1999 was $500,000 and 2000 is $850,000, total of $1,350,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. This is a new project which has not yet began and, therefore, no non-federal funds have been used.

Question. Where is this work being carried out?

Answer. The research will be conducted at the Kentucky Agriculture Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for this project is 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project will be evaluated upon receipt of the required grant proposal.

PRE-HARVEST FOOD SAFETY, KANSAS

Question. Please provide a description of the research that has been conducted under the Pre-Harvest Food Safety, Kansas grant.

Answer. Longitudinal studies on the fecal shedding of Escherichia coli 0157:H7 (E. coli 0157:H7) by cattle on beef cow-calf ranches are being done to determine the impact of various routine management practices on the shedding rate. The purpose of the research is to develop an understanding of the management factors that contribute to the incidence of E. coli 0157:H7 in beef cattle. During the past year, the project has been enlarged to included more monitoring of environmental and wildlife samples to determine reservoirs for E. coli 0157:H7.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for the research?

Answer. The presence of E. coli in beef animals sent to slaughter can contribute to the contamination of meat products produced from such animals. This has increased the need for control measures that could reduce the incidence of such foodborne human pathogens in food animals during the production cycle. With the implementation of mandatory Hazard Analysis Critical Control Point programs for E. coli 0157:H7 in slaughter plants, there is increased pressure for the livestock producer to deliver animals to slaughter with reduced prevalence of E. coli 0157:H7. This type of research has been identified as critical by all food animal commodity groups as well as public health officials and consumers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was to determine the incidence of E. coli 0157:H7 in large versus small beef cow-calf operations and describe the management factors that contribute to or affect the rate of shedding of organisms in the feces of such animals. E. coli 0157:H7 has been detected in 3.11 percent of monthly fecal samples (n=3152), with 4.57 percent of the 2058 animals having at least one positive sample. Fecal shedding was normally transient; only one animal was positive on more than one sampling date. In addition, there was a difference in prevalence between farms. Sources of drinking water were also examined and 3.5 percent of 199 water samples were positive. Of particular interest was that 8.3 percent of 24 creek/stream samples and 2.9 percent of 103 pond samples were positive. In addition, isolates of E. coli 0157:H7 have been obtained from wildlife, especially deer. Management practices on the ten farms are being examined to determine if there are specific risk factors that can be identified.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1996. The appropriations for fiscal years 1996 through 2000 was $212,000 per year. A total of $1,060,000 has been appropriated.

Question. What is the source and amount of non-federal funds by fiscal year?

Answer. Non-Federal funds have been contributed to this project as follows: In fiscal year 1996 non-federal funds were $150,000 in state appropriations and $91,450 in contributed indirect costs; 1997 non-federal funds were $165,000 in state appropriated funds and $90,300 in contributed indirect costs; 1998 non-federal funds were $175,000 in state funds and $91,500 in contributed indirect costs; 1999 non-federal funds were $109,957 in state funds and $90,800 in contributed indirect costs.

Question. Where is this work being performed?

Answer. This research is being conducted at Kansas State University, University of Nebraska-Lincoln, and at ranches in Kansas, Nebraska, and Colorado.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date was October 1, 1998 for the original objectives. However, the project was not initiated until several months after the expected start date of October 1,1995 and the original objectives were completed in late spring of 1999. As the project has progressed, the Principal Investigator has added other important questions to the original research plan and has planned to

look more closely at management interventions that could help reduce the incidence of E. coli shedding in beef cattle. During the past year, the project has added objectives which are focused on environmental issues such as prevalence of E. coli 0157:H7 in wildlife as well as in various water supplies used by the cattle. Thus the project is expected to continue for some time after the original expected period of time.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project was evaluated by an on-site visit on October 28–29, 1997. The evaluation noted that the project team was doing an excellent job and the interactive collaboration was outstanding. The research team has been successful in bringing other participants into the program. The project leader provided a very comprehensive written report on November 3, 1998, including manuscripts currently under review for publication, which has permitted a further assessment of the continued progress on this important project. Several scientific papers have been given at scientific meetings and manuscripts are being published as rapidly as data are assembled, analyzed, and prepared for publication.

PRESERVATION AND PROCESSING RESEARCH, OKLAHOMA

Question. Please provide a description of the research that has been funded under the Preservation and Processing Research grant.

Answer. Research has focused on the effects of preharvest and postharvest factors on the market quality of fresh and minimally processed horticultural products, including marigolds, pecans, watermelons, peaches, and sage. Researchers are developing harvester prototypes for marigold flowers and drying and threshing systems for marigold petal drying and separation. A fruit orienting mechanism is being developed for incorporation into an on-line grading system. An integrated harvesting and postharvest handling system is being developed for fresh market and processing market horticultural products. Research continues on methods to determine textural properties of pecans, determine optimum operating parameters for supercritical carbon dioxide and other alternative extraction technologies, and develop and optimize modified atmosphere packaging techniques and partial oil extraction for pecan shelf life extension.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that technological improvements in fruit, nut and vegetable handling systems are needed to supply domestic markets and support continued participation in international commerce, which is a national need. New environmentally friendly processing systems have been developed and are being commercialized in Oklahoma, with broad application to numerous crops with international marketing potential. Processing systems under development for commercial adaptation will support market expansion of pecans and sage, affecting product market potential and value regionally. Improvements in postharvest handling and processing are necessary to support growth of the state and national horticulture and related agricultural industries and ensure competitive involvement in national and international commerce of commodities uniquely suited for production in Oklahoma. New extraction facilities will continue to have a positive impact on local economies, incorporating a new value added processing industry, providing local employment opportunities and providing a new local market for Oklahoma produced commodities.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research has been to define the major limitations for maintaining quality of harvested fruits, vegetables and tree nuts and prescribe appropriate harvesting, handling and processing protocols to extend shelf life and marketability of harvested horticultural commodities, thus maintaining profitability of production systems and assuring an economic market niche for Oklahoma producers and food processors. A systems approach to develop complementary cropping, harvesting, handling and processing operations has resulted in development of improved handling systems for cucurbit, tree fruit and herb crops. Nondestructive processing systems for partial oil reduction of tree nuts have been developed to extend shelf life and lower the calorie content for the raw or processed product. A new food extraction facility has started operations in Oklahoma.

Question. How long has the work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1985, $100,000; fiscal year 1986, $142,000; fiscal year 1987, $242,000; fiscal years

1988 and 1989, $267,000 per year; fiscal year 1990, $264,000; fiscal year 1991, $265,000; fiscal year 1992, $282,000; fiscal year 1993, $267,000; fiscal year 1994, $251,000; and fiscal years 1995–2000 $226,000 each year. A total of $3,703,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year 2000?

Answer. State funds have been provided as follows: fiscal year 1991, $126,900; fiscal year 1992, $209,783; fiscal year 1993, $219,243; fiscal year 1994, $308,421; fiscal year 1995, $229,489; year 1996, $366,570; fiscal year 1997, $397,881; fiscal year 1998, $205,662; and fiscal year 1999, $206,334. The State also invested $16,100,000 for development of an Agricultural Products and Food Processing Center and approximately $2 million dollars annually to staff and operate the facility.

Question. Where is the work being carried out?

Answer. This work is being conducted at the Oklahoma State Agricultural Experiment Station, in conjunction with ongoing production research at the Wes Watkins Agricultural Research and Extension Center and the South Central Agricultural Research Laboratories.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. It is expected that ongoing research will be completed in 2002. Additional related objectives beyond this date would address further opportunities for horticulture industry growth, innovative food processing technologies and associated economic development.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. A review of the proposal supporting the fiscal year 1999 appropriation was conducted on March 31, 1999. The project was evaluated as part of a comprehensive site review in the fall of 1995, with a recommendation by the review team to continue and expand the value-added product development.

RANGELAND ECOSYSTEMS, NM

Question. Please provide a description of the research that has been funded under the Rangeland Ecosystems, NM grant?

Answer. Current research is focused on the ecology of noxious and invasive weeds that are endemic to New Mexico's rangelands. Competitive research grants have been awarded that deal with studying the physiological and toxicological effects of these weeds on livestock.

Question. According the research proposal, or the principal researchers, what is the national regional, or local focus for this research?

Answer. Noxious weeds are a serious problem in the southwestern United States About one-fifth of the rangeland in Texas and more than one-half in the New Mexico is infested to some degree. Under this program, researchers are working to develop an integrated weed management approach in rangeland ecosystems for that region.

Question. What has the original goal of this research and what has been accomplished?

Answer. Accomplished research led to understanding of broom snakeweed and other noxious weeds including a better understanding of plant's strategy for invasion and persistence. The primary focus of research at this time is addressing the need for an integrated weed management approach for noxious weeds, especially broom snakeweed.

Research is addressing three general areas which are ecology and management, biological control and toxicology and animal health. One specific accomplishment is the biological control arena; several plant pathogens and insects are proving to be effective in broom snakeweed's control.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $100,000; fiscal year 1990, $148,000; fiscal year 1991, $150,000; fiscal years 1992 and 1993, $200,000 per year; fiscal year 1994, $188,000; fiscal years 1995 and 1996, $169,000 each year; fiscal year 1997, $175,000; fiscal year 1998, $185,000; and for fiscal years 1999 and 2000, $200,000 per year. A total of $2,084,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $249,251 state appropriations in 1991; $200,110 state appropriations in 1992; $334,779 state appropriations in 1993; $302,793 state appropriations in 1994; $294,451 state appropriations in 1995; and an estimated $300,000 in state appropriations in each fiscal year of 1996, 1997, 1998 and 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at New Mexico State University and throughout the State of new Mexico in actual field conditions.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initiated in 1991. Considerable progress has been made on many of the original objectives. Currently, additional and related objectives have evolved and anticipated completion date for these is 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Each year the grant is peer reviewed with oversight by an administrative executive committee within the College of Agriculture and Home Economics at New Mexico State University. Additionally, CSREES' senior scientific staff review the progress of the grant. Those reviews indicated progress in achieving the objectives.

RED SNAPPER RESEARCH/ALABAMA

Question. Please provide a description of the research that will be funded under the Red Snapper Research grant, Alabama.

Answer. The agency is in the process of requesting the university to submit a grant proposal for this new research activity.

Question. According to the research proposal, or the principal research, what is the national, regional or local need for this research?

Answer. The researchers indicate that there is a regional need for red snapper research because of its importance to the Gulf states and the fact that it is presently considered to be an over-fished species by commercial and recreational interests. Current harvest limitations mandated by Federal actions have resulted in economic losses to coastal communities. Research will provide critical knowledge in efforts to restore native populations and stimulate the development of aquaculture enterprises in the Gulf region.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This is a new research grant to be funded in fiscal year 2000.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $510,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The university estimates that significant non-federal funding will be provided in fiscal year 2000 primarily from state sources to cover salaries of the principal investigators. As the program develops, additional non-federal funding is expected.

Question. Where is this work being carried out?

Answer. The research will be conducted through the Alabama Agricultural Experiment Station at the Claude Peteet Mariculture Center located in Gulf Shores in collaboration with the Alabama Marine Resources Division.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is fiscal year 2001. The project will be initiated in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency will evaluate the progress of this new project on an annual basis. The university will be required to submit an accomplishment report each year when the new proposal is submitted to the agency for funding. Since this is the first year of the program, the agency will conduct an external peer review of the proposal. The fiscal year 2000 review will be completed within three weeks of submission of the proposal. The researchers will be requested to develop a research proposal consistent with the National Science and Technology Council's Strategic Plan for Aquaculture Research and Development.

REGIONAL BARLEY GENE MAPPING PROJECT

Question. Please provide a description of the work that has been funded under the Regional Barley Gene Mapping Project grant.

Answer. The Regional Barley Genome Mapping Project is a multi-disciplinary, multi-institutional project to develop a genome map of barley. Specific objectives are to: construct a publicly-available medium resolution barley genome map; use the map to identify and locate loci, especially quantitative trait loci controlling economically-important traits such as yield, maturity, adaptation, resistance to biotic and abiotic stresses, malting quality, and feed value; provide the framework for efficient molecular marker-assisted selection strategies in barley varietal development; identify chromosome regions for further, higher resolution mapping with the objective of characterizing and utilizing genes of interest; and establish a cooperative mapping project ranging from molecular genetics to breeding that will be an organizational model for cereals and other crop plants. All funds are awarded on a competitive basis.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes barley breeders nationwide need information about the location of agriculturally-important genes controlling resistance to biotic and abiotic stresses, yield, and quality factors in order to rapidly develop new, improved cultivars and respond to disease and pest threats. This project provides that information along with appropriate molecular markers to track these traits through the breeding and selection process.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this project has been to develop a restriction fragment length polymorphism map for barley and associated important genetic traits to provide closely linked molecular markers for barley breeders. The project has developed comprehensive linkage maps defining the entire barley genome in three experimental populations and determined the location, number, effect, and interaction of genes determining a range of economically-important traits. Additionally, the project has supported the development and use of an array of genomics tools that are publicly available. Technical papers have been published to report research results to the scientific community.

Question. How long has this work been under way and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1990, $153,000; fiscal year 1991, $262,000; fiscal years 1992–1993, $412,000 per year; fiscal year 1994, $387,000; fiscal years 1995–1998, $348,000 each year; fiscal year 1999, $400,000; and fiscal year 2000, $425,000. A total of $3,843,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $203,760 from industry in 1991; $212,750 from industry in 1992; $115,000 from industry in 1993; and $89,000 from industry in 1994; and $35,000 from the State of Washington and $108,000 in other non-federal funding, for a total of $143,000 in 1995. Non-federal funds were $163,000 for 1996 and $178,240 in 1997. In 1998, the project received $35,000 from industry. Non federal for 1999 were estimated at $156,000.

Question. Where is this work being carried out?

Answer. Research is being conducted in the following state agricultural experiment stations; Oregon, Colorado, Washington, Montana, Idaho, North Dakota, Minnesota, New York, Virginia and California.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objective was to produce a genetic map of agronomically-important traits of the barley genome. The anticipated time to complete this task was estimated at ten years with completion in 1999. The initial goals have been exceeded; however, maps are never "done". The next step will be physical mapping of gene rich regions in order to study the genes and understand pathways. Researchers will focus on quality and disease resistence. This phase is projected for completion in 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. In 1998, the special grant proposal was subjected to the project approval process at Oregon State University, which is the lead university, and reviewed by an agency scientist. This project is made up of many competitively-awarded mini grants. A subgroup of the National Barley Improvement Committee, which is composed of elected representatives of research, growers, and industry, serves as the peer panel to review and select proposals based on relevance to the original objectives and scientific merit. Multi-disciplinary, multi-institutional, and continuing projects are given the highest priority. The overall project and its mini-grants have been judged to be scientifically sound and appropriate for the stated objectives, based on comments and rating from peer scientists which is done on each support prior to selection.

REGIONALIZED IMPLICATIONS OF FARM PROGRAMS

Question. Please provide a description of the research that has been done under the program on Regionalized Implications of Farm Programs grant.

Answer. The University of Missouri continuously provides regionalized analysis of alternative farm program designs. This includes providing farm level analysis of national changes in agriculture policy.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to give farm-level or micro view of macro-level changes; and to provide as accurate and robust an analysis as possible in order to point out regional differences in policy alternatives.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original, as well as current, goal was and continues to be to provide the farm community, agribusiness groups, and public officials information about farm, trade, and fiscal policy implications by developing regionalized models that reflect farming characteristics for major production regions of the United States. The researchers have developed a farm level policy analysis system encompassing major U.S. farm production regions. This system interfaces with existing agricultural sector models used for farm, macroeconomic, and trade policy analysis. The universities have expanded the number and types of representative farms to 80. Typical farm models also are being developed for Mexico and Canada under a collaborative agreement for use in analyzing impacts of the North American Free Trade Agreement.

Policy studies completed this past year at the request of policymakers and farm groups included analysis of the impacts of marketing loan provisions on farmers' economic viability; drought on farm income and farm viability; early provision of Agricultural Marketing Transaction Act (AMTA) payments, risk management accounts; and other crop insurance and disaster assistance alternatives.

Results of these analysis were presented to more than 60 different groups across the U.S., including, of course, both congressional agriculture committees. The Agricultural Food Policy Center (AFPC) web site, which contains copies of all Working and Briefing Papers, was visited more than 345,000 times during May-November, 1998.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1990 and the appropriation for fiscal year 1990 was $346,000. The fiscal years 1991–1993 appropriations were $348,000 per year; $327,000 in fiscal year 1994; and $294,000 in each of the fiscal years 1995 through 1999. The fiscal year 2000 is $294,000. A total of $3,481,00 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $288,843 State appropriations and $46,773 industry for a total of $335,616 in 1991; $45,661 State appropriations in 1992; $33,979 State appropriations in 1993; $40,967 State appropriations in 1994; $161,876 State appropriations in 1995; $187,717 State appropriations for 1996; and $137,100 for 1997; and $161,400 for 1998.

Question. Where is this work being carried out?

Answer. Research is being conducted by the Texas A&M University and University of Missouri at Columbia.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This program is of a continuing nature for the purpose of assessing the impacts of existing policies and issues and proposed policy and program changes at the individual firm level for feed grain, wheat, cotton, rice, oilseed and livestock producers. In addition, the representative farms are constantly being updated as farming practices change. Currently the researchers are making adjustments for the increasing use of Bt and Round-Up Ready seeds.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. No formal evaluation of this project has been carried out; however, the CSREES representative is in frequent communication with the principal investigator concerning policy analysis procedures and studies.

RICE MODELING, AR

Question. Please provide a description of the research that has been funded under the Rice Modeling grant.

Answer. The purpose of this research project is to develop a regional, national and global rice industry model for use in analyzing the impact of changes in domestic and foreign public policies on production, trade, stocks, substitute crops, farm prices and domestic as well as global consumption.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Research is needed to assist both the U.S. rice industry and national policymakers in assessing the impact of existing and proposed changes in public policies for rice. This research enables improved analysis of both international and domestic policy changes on rice production, stocks, prices of substitute crops and consumption. It has been, and is being used to analyze the impacts of farm policy proposals on the U.S. rice industry, to analyze the impact of WTO and the Uruguay Round agreements on U.S. trade, to analyze the impact of emerging rice importing and exporting countries on U.S. rice exports, and to analyze the market for different rice types (qualities) and seasonal demand and supply factors that affect the global rice market. The principal researcher believes this research addresses national, regional and local needs.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to develop international, national and regional models to analyze the impact of foreign and domestic policy changes, and forecast changes in production, trade, stocks, prices of substitute crops, farm prices, and consumption.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work actually began about four years ago and federal research grants from various sources have totaled roughly $2 million prior to this year. The work supported by this grant began in fiscal year 1996. The appropriation for fiscal years 1996 and 1997 was $395,000; for fiscal years 1998, 1999, and 2000, $296,000, for a total appropriation of $1,678,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds over the 4 years prior to this year totaled approximately $500,000. For the 1996 fiscal year, state appropriations were $178,000; and for 1977 and 1998, $150,000.

Question. Where is the work being carried out?

Answer. The research is being carried out at the University of Arkansas-Fayetteville and the University of Missouri-Columbia.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The domestic portion of the rice model has been completed. The international modeling research is a little over half completed and the researchers estimate another 5 years is required. The purpose of constructing the models, however, is to provide on-going analysis of the impact of various policy proposals on the U.S. rice industry.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. We have conducted no formal evaluation of this project. However, annual proposals are peer reviewed for relevance and scientific merit. Also, each annual budget proposal is carefully reviewed for adherence to stated objectives and annual progress is discussed with the principal investigators.

RURAL DEVELOPMENT CENTERS

Question. Please provide a description of the research that has been funded under the Rural Development Centers Program grant.

Answer. The overall objectives of the research agenda of the five rural development centers are to: Improve economic competitiveness and diversification in rural areas; support management and strategic planning for economic development; create community capacity through leadership; assist in family and community adjustments to stress and change; and promote constructive use of the environment. The function of the Centers is to increase the productivity of regional faculty both in doing research on rural issues and in using that research to do effective outreach with rural communities. These projects have undergone a merit review.

Question. According to the research proposal, or one of the principal investigators, what is the national, regional or local need for this research?

Answer. In the context of a global society, rural communities and rural economies are increasingly complex and multi-dimensional. People living in rural America face an ever increasing number of public issues and problems needing resolution. Yet the number of research faculty addressing broader rural issues is declining in many places. The multi-disciplinary, multi-state work supported by the Centers is even more crucial in this context. The four Centers initiate, facilitate, and evaluate research that has direct, positive impacts on the social and economic well-being of individuals, families, communities, small towns and rural places. Center-supported research addresses such rural development issues as rural economic diversification, workforce preparation, the changing demography of rural places, transitions in agriculture, small business and retail trade opportunities, the impacts of welfare reform, the capacity of state and local governments to meet changing public assistance needs, management of natural and environmental resources, public lands policy, water quality, physical infrastructure, food assistance issues among vulnerable populations, education and strengthened human capital, forest stewardship, and access to vital community services. Specific research priorities emerge from on-going dialog with stakeholders and clients in each region and are reviewed annually by the Centers and their Boards of Directors. In addition, in 1999 the Center Directors began a collaborative process to identify critical rural development issues shared across regions and to establish a collaborative national rural research agenda. Together the Centers enhance the capacity of people and communities to carry out expanding responsibilities in the design, management, and financing of government programs and in building healthy, viable communities and families across rural America.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The Rural Development Center mission is to strengthen rural families, communities, and businesses by facilitating collaborative research and extension education through land-grant institutions and their partners in the various regions. Research programs are undertaken after evaluating broader regional and national priorities. Following are some accomplishments of selected research activities conducted under the auspices of various centers.

The Southern Regional Development Center (SRDC) is nationally recognized for its Information Briefs, prepared to shed light on the host of challenges and opportunities facing governments, communities and people in the South. In a special 1998–71999 series, for example, SRDC sponsored research by land-grant faculty on the South's experience of major welfare reform in the United States. The "Welfare Reform Briefs" now help national, state, and local leaders and officials understand and respond to the devolution of government services, rural transportation issues and welfare reform, family economics and individual development accounts, the cost of living, rural earnings capacity, job opportunities for low-income people, and child care issues. Most recently, SRDC launched its "Millennium Series," research on persistent problems in the rural South as well as optimistic trends. Research underway addresses wage levels, strategies to strengthen the economic health of agricultural and non-agricultural firms, rural racial and ethnic diversity, rapid urbanization and its effects on natural and environmental resources, the demand for better educated workers, progress advancing labor force skill levels, entrepreneurial opportunities and strategies to diversify the rural economy, the changing structure of families and related family services needs, and barriers to health care quality and access. The planned series of 35 policy briefs will stimulate public dialogue needed to create vibrant, healthy rural communities in the rural South.

Like the other Centers, the SRDC links the research sponsors with extension education in several ways. For example, with land-grant faculty in the southeast, the SRDC developed and sponsors the Southern Regional Community Development Institute. Diverse extension educators (agriculture, natural resources, family and

youth development, community development, and middle management) spend five days attending sessions on understanding community, strategic planning, asset-mapping, social infrastructure, local government, problem-solving, economic and sustainable development, and leadership skills. Started in 1998, demand for the training is strong, and SRDC has scheduled its third Institute for summer 2000. Another initiate begun in 1999, the Mid-South Delta Institute, is an on-going participatory research and training program designed to help community leaders of northwest Mississippi expand their understanding of themselves and their communities through asset-mapping, strategic planning, building partnerships, and consensus-building.

The North Central Regional Center for Rural Development (NCRCRD) has an extensive repertoire of research informing policy and community development programs. Its contributions have won national recognition in the areas of workforce preparation, state of the art community visioning and strategic planning, social indicators for community and economic planning, and federal program assessment including the Empowerment Zone/Enterprise Community initiative and national workforce preparation programs. NCRCRD supported research also enhances the scientific methods land-grant faculty use in applied research on rural development. For example, land-grant faculty supported by NCRCRD demonstrates the power and utility of clustering geographic and demographic data and linking geodemographic clusters to Agriculture Census and Decennial data. Other research analyzes the future of small rural trade centers as providers of public services, th dynamics of rural retail trade, and the most critical needs of rural business communities. Through its workshops, conferences, training programs, and newsletter, Rural Development News, NCRCRD provides research results and related educational materials to rural development professionals in land-grant and partner institutions and organizations across the country.

Industrial recruitment has been one of the most popular methods of economic development in the U.S. But increasingly, the cost effectiveness of this strategy is being questioned by researchers and practitioners. With the help of research and related training programs, communities are capitalizing on an alternative strategy called Business Retention and Expansion (BR&E). This builds on local economic development efforts by creating teams of local leaders to help communities improve their business climate and identify and address impediments to growth and retention of existing businesses. The Northeast Regional Center for Rural Development (NERCRD) supported the development of BR&E materials that are now used in training workshops across the country, sponsored by Business Retention and Expansion International. Economic development professionals across the U.S. and in Canada have purchased these materials and use them locally to retain and expand existing businesses and reduce the high costs associated with industrial recruitment strategies. Shared internationally, the materials also have been translated into French and Polish.

NERCRD also funded research to assess the consumer credit knowledge of rural poor and ethnic minorities and determine their use of credit and management practices. Based on the research, an educational program that focuses on the wise use of consumer credit has been developed and offered to a diverse extension audience. This program also contributed to a video that promotes the MONEY 2000 program, encouraging participants to save and/or reduce debt by $2,000 by the end of the year 2000. The video is distributed widely by extension personnel within the region and nation and is used by financial counselors at several military bases. It helps families living paycheck-to-paycheck and struggling with low savings or high household debt. Since it was launched in 1996, MONEY 2000 has helped over 7,000 people in more than 30 states increase their net worth by more than $3 million.

New programs underway at the Western Rural Development Center (WRDC) include research to enhance home-based and micro business opportunities and a "rapid growth toolkit" to help communities address land and natural resource use issues in the midst of economic growth. This builds on the Center's long-standing support for research on the impacts of tourism and its economic impact and promise in the west. In addition, WRDC has been active in BR&E related research. Using a WRDC supported BR&E expansion program, New Mexico State University Extension has helped communities expand their economic base by saving and creating local jobs, and BC Hydro in Burnaby, British Columbia recently requested and received permission to adapt the Business R&E program materials for use in rural Canada.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1971, $75,000; fiscal year 1972, $225,000; fiscal year 1973, $317,000; fiscal years

1974–1981, $300,000 per year; fiscal years 1982–1985, $311,000 per year; fiscal years 1986–1987, $363,000 per year; fiscal year 1988, $475,000; fiscal year 1989, $500,000; fiscal year 1990, $494,000; fiscal years 1991–1993, $500,000 per year; fiscal year 1994, $470,000; fiscal years 1995–1998, $423,000 per year; fiscal year 1999, $523,000; and fiscal year 2000, $523,000. A total of $11,164,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds available to the four Regional Centers for Rural Development were: fiscal year 1991, $1,117,000; fiscal year 1992, $790,000; fiscal year 1993, $900,000; fiscal year 1994, $776,591; and fiscal year 1995, $710,0050; for a total of $4,293,641 across the five years for which there are complete data. Non-federal partners sponsoring research and related extension programs through the Centers since 1995 include the Farm Foundation, the University of Kentucky's Tennessee Valley Authority Rural Studies Program, the W. K Kellogg Foundation, the Upjohn Institute, the Kerr Center for Sustainable Agriculture, the National 4–H Council, and the Heartland Center. Other federal partners include the EPA, Small Business Administration, and in USDA—Rural Development, Economic Research Service; Agricultural Research Service; Forest Service; SARE; and National Resource and Conservation Service. In short, in recent years the Centers have established an impressive record of brokering partnerships with private foundations and non-governmental organizations, as well as other federal partners, to meet their goals and extend the impact of their allocated federal dollars.

Question. Where is this work being carried out?

Answer. The regional rural development centers include the following: Northeast Regional Center for Rural Development; Pennsylvania State University; North Central Regional Center for Rural Development at Iowa State University; Southern Rural Development Center at Mississippi State University; and Western Rural Development Center at Oregon State University. There is also a rural development project at North Dakota State University which receives funding from the annual Rural Development Centers appropriation. Most of the research sponsored by the four regional centers is actually performed by resident faculty at land-grant universities in the respective region through subcontracts from that center's grant.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives.

Answer. The regional rural development centers were established to provide an on-going "value added" component to link research and extension and by doing so to increase rural development under the special conditions in each region. The work of the Centers is being carried out in all 50 states and in some territories. The Centers compile a report of annual accomplishments and share those with the states in the region. Accomplishments are now shared through sophisticated, interactive web sites. The list of needs is constantly evolving and is being addressed through projects that are matched to the constantly shifting local agenda. The current phase of the program will be completed in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Centers enlist the help of academic and private/public foundations personnel on advisory committees and boards of directors to help establish operating rules and provide professional, technical counsel and peer evaluation of Center projects and the investigators. The projects are evaluated annually by the advisory committees and the boards of directors against the five key issue areas and the objectives of each project for relevance, achievement, and initial impacts. Follow-up evaluation is carried out by the Center staffs in order to assess long-term impacts of these projects on local communities.

RURAL POLICIES INSTITUTE

Question. Please provide a description of the research that has been funded under the Rural Policies Institute grant.

Answer. The Rural Policy Research Institute is a consortium of three universities designed to create a comprehensive approach to rural policy analysis. The Institute conducts research and facilitates public dialogue to increase public understanding of the rural impacts of national, regional, state, and local policies on rural areas of the United States.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. There is a need to estimate the impacts of changing state and national programs and policies on rural people and places. Objective public policy analysis can provide timely and accurate estimates of the impacts of proposed policy changes to allow more reasoned policy discussions and decisions. The principal researcher believes this research meets national, regional and local needs.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the Rural Policy Research Institute (RUPRI) was to create a new model to provide timely, accurate, and unbiased estimates of the impacts of policies and new policy initiatives on rural people and places. During the past four years, RUPRI has analyzed the impact of market-driven health reform and impacts of specific health policy alternatives on rural people; the impact of implementing the Telecommunications Act of 1996, including use of the Universal Service Funds; the impact of welfare reform on rural communities. RUPRI has developed complex models to provide quantitative estimates of economic, demographic, and fiscal effects of policy alternatives on local communities of different types and in different regions. During those same four years, RUPRI has provided 30 analyses for congressional hearings and briefings on critical issues affecting rural America, 100 policy research papers, and developed a popular website. RUPRI's work is published and cited in numerous academic journals, discussed in the media, and widely used by policy decision makers at all levels of government.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by these grants began in fiscal year 1991 and the appropriation for fiscal year 1991 was $375,000. The fiscal year 1992 appropriation was $525,000; for fiscal year 1993, $692,000; for fiscal year 1994, $494,000; and fiscal years 1995–2000, $644,000 each year. A total of $5,950,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Aggregated non-federal funds to support the Rural Policy Research Institute across the three universities involved include unrecovered indirect costs, salary support from university and other non-federal sources, and various other grants, contracts, and reimbursable agreements. They amounted to $316,458 for fiscal year 1991; $417,456 in fiscal year 1992; $605,302 in fiscal year 1993; $537,834 in fiscal year 1994; $584,516 in fiscal year 1995, for fiscal year 1996, $576,782; $186,859 in 1997; $153,614 for 1998; and an estimated $168,450 for 1999. Total to date including the 1999 estimate, is $3,547,271.

Question. Where is this work being carried out?

Answer. The Institute's member universities are: the University of Missouri-Columbia; the University of Nebraska-Lincoln; and Iowa State University, Ames.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1991 was for a period of 24 months, however, rural communities continue to be impacted by major socio-economic changes as well as state and federal policy changes. The current phase of the program will be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in February 1999, as it evaluated the 1999 project proposal, and determined that: "RUPRI is an effective interdisciplinary, multistate effort that supports the mandates for collaboration in the Agricultural Research, Extension and Education Reform Act of 1998. Its work supports CSREES strategic goals of enhancing economic opportunity and quality of life. The principal investigator and participants are well qualified to conduct the project."

RUSSIAN WHEAT APHID, COLORADO

Question. Please provide a description of the research that has been funded under the Russian Wheat Aphid grant.

Answer. Funding will support two key areas of research that are needed to assure long-term and sustainable Russian wheat aphid management. These are:

—Discovering new crop genes which provide resistance to the Russian wheat aphid and incorporating them into commercially acceptable wheat varieties, and
—Integrating the available control tactics into the most effective, efficient, and environmentally sound production systems for the Great Plains.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The Russian wheat aphid is an exotic pest that entered the western United States without its normal complement of biological control agents. This insect has rapidly become the most important insect pest of wheat in the western United States. From 1986–1991, the total economic impact was estimated to be in excess of $657 million. In the same period, some 17.5 million pounds of insecticides were used nationally for Russian wheat aphid control. The cost to American farmers of insecticide treatments was over $70 million. In addition, the intense use of insecticides on a crop that previously received little insecticide treatment raised concerns about the impact on water quality, human health, food safety, non-target organisms, and general environmental quality. Direct losses in Colorado have been as high as $27 million in a single year with an average direct loss of above $11 million per year, since 1987.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goals of the research are to:

—Discover new crop genes which provide resistance to the Russian wheat aphid and incorporate them into commercially acceptable wheat varieties, and

—Integrate the available control tactics into the most effective, efficient, and environmentally sound production systems for the Great Plains. The techniques of molecular genetics are being employed to reach the goal of identifying new genes for resistance to Russian wheat aphid and incorporating them into commercially acceptable wheat varieties. Several DNA marker technologies used in other plant species have been successfully adapted for mapping Russian wheat aphid resistance genes in wheat. These include restriction fragment length polymorphism and amplified fragment length polymorphism techniques as well as microsatellite markers. Restriction fragment length polymorphism markers were initially used to map two Russian wheat aphid resistance genes—Dn4, the one used in 19Halt' and Dn2, an additional resistance gene that might be suitable for inclusion in a cultivar containing two resistance genes.

A new Russian wheat aphid resistance gene (Dn7), identified by other researchers in South Africa, 94M370, has been crossed with susceptible wheat to generate materials for use in molecular genetic analysis of Dn7 and to incorporate the gene into wheat. Dn7 is one of the resistance genes that is being targeted for molecular cloning in the Colorado State program.

Two kinds of DNA libraries were developed from 94M370 as additional sources of clones for RFLP mapping: a Pst-I genomic library and a cDNA library. These libraries are very useful because they allow screening for clones in such a way that the DNA from rye can be distinguished from wheat DNA.

In another set of experiments, a cDNA library was made from mRNA extracted from leaf tissues of 94M370. One thousand randomly picked clones from this library are being sequenced. The sequenced clones from the 94M370 library also will be used in the mapping effort.

In addition, the mapping effort of this project will be strengthened by access to cDNA libraries that will be produced under a National Science Foundation grant awarded to a team of U.S. wheat researchers for the purpose of developing tools for wheat genomics.

Once a genetic map is developed, the next step in positional cloning is to determine the physical location of the markers on the chromosomes and the physical distance between the markers. This step is being accomplished by the use of fluorescence in situ hybridization (FISH) techniques.

In order to routinely detect DNA markers on chromosomes by fluorescence in situ hybridization, clones containing large DNA inserts are required. Bacterial artificial chromosomes will be used to meet this requirement. Two Bacterial artificial chromosome libraries are available from other research teams as sources of probes for the FISH experiments. These were screened with five markers linked to either Dn2 or Dn4 and positive Bacterial artificial chromosomes were identified for all five markers. Fluorescence in situ hybridization using these Bacterial artificial chromosome clones to wheat metaphase chromosomes are underway.

A critical factor in the success of fluorescence in situ hybridization is the routine availability of complete chromosome spreads that are flat and free of cytoplasmic material. Procedures have been developed for preparing wheat chromosome spreads that are flat and intact.

Another critical factor in the fluorescence in situ hybridization experiments is the ability to distinguish the target chromosome from the rest of the wheat chromosomes. Target chromosomes include 1RS/1BL, which contains Dn7; 1D, which

contains Dn4; and 7D, which contains Dn2. Several techniques are being used to distinguish the desired chromosomes.

Progress has been made in Integrating Tactics for Management of the Russian wheat aphid. In 1998, experimental dryland cropping systems were established in eastern Colorado. To be as realistic as possible, two of these are located in growers fields and have been designed with grower input and are managed jointly with the grower-cooperator. Long-term studies were initiated to compare the experimental systems with typical wheat production systems in the area. The experimental systems were designed to optimize the effects of environmentally sound pest management tactics (particularly resistant cultivars, the effects of cultural practices, such as planting date, harvesting date, grazing, et cetera., and biological control, such as reducing Russian wheat aphid numbers through the actions of predators and parasites. In addition, the experimental systems were designed to optimize water use efficiency and other agronomic and profitability factors.

At each location, wheat and other adapted dryland crops are grown in proximity to each other so that interactions among various crops and various production practices can be studied. Rotations over time of wheat with other crops also are being investigated. These large-scale experimental systems will be ideal arenas in which to determine the best way to apply the knowledge already gained about specific aspects of Russian wheat aphid biology and ecology, production practices, and the effectiveness of naturally occurring Russian wheat aphid parasites and predators. These large-scale experimental cropping systems also will provide valuable information on Russian wheat aphid management to wheat growers who are considering adding additional crops to their dryland cropping systems.

In 1999 data were collected on a wide variety of agronomic and pest variables. Initial observations on Russian wheat aphid indicated enhanced biological control in the more diverse, experimental cropping systems. The enhancement occurred just prior to planting the fall wheat crop which is one of the most critical points in Russian wheat aphid seasonal dynamics.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 and the appropriation for fiscal years 1998, 1999 and 2000 is $200,000 for a total of $600,000.

Question. What is the source and amount of non-federal funds provided by fiscal year.

Answer. State appropriations and the Colorado Wheat Administrative Committee have demonstrated strong support for this effort. The total per year is approximately $775,000 in new funding from the state of Colorado and redirected funds from within the university.

Question. Where is the work being carried out?

Answer. Research will be conducted on the campus of Colorado State University, at Colorado State University research stations, and on the farms of cooperators throughout Colorado. Outreach and extension activities will be focused on wheat growers in Colorado, Nebraska, Wyoming, Kansas, New Mexico, Texas, and Oklahoma.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This project is anticipated to continue for a total of five years with a completion date of July 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project was evaluated by a Cooperative State Research, Education and Extension Service site visit on February 4 and 5, 1999. Laboratory, greenhouse and field research facilities available for the research program are considered to be excellent. Greenhouse space appears adequate for the work and the units are well adapted for the wheat breeding program. Rearing facilities and the support personnel for maintaining a source of aphids used for bioassays are excellent. Research laboratories are very well equipped for the studies, either proposed or underway and there is strong technical support for the research which involves application of techniques of molecular genetics to wheat breeding. The research scientists represent strengths in both classical or traditional wheat breeding and new molecular genetics-based wheat breeding. The group also has strong, well recognized expertise in Russian wheat aphid biology, ecology and management as well as in dryland wheat production systems used in the Great Plains states. The project is a multifaceted, multi-disciplinary program which is directed toward long-term solutions for Russian wheat aphid management utilizing a viable combination of approaches which requires the type of facilities and equipment available at this location.

SEAFOOD HARVESTING, PROCESSING, AND MARKETING, ALASKA

Question. Please provide a description of the research that has been funded under the Seafood Harvesting, Processing, and Marketing grant.

Answer. This is a new project to be started in fiscal year 2000. Research related to seafood safety, quality and by-product utilization will be supported by this grant. CSREES has requested the University to submit a proposal, which has not yet been received, in support of fiscal year 2000 funds.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This will be determined after the proposal is received from the principal investigator.

Question. What is the original goal of the research and what has been accomplished to date?

Answer. This will be determined after the proposal is received from the principal investigator.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This is a new project for fiscal year 2000. For fiscal year 2000 $552,500 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year 2000?

Answer. This will be determined as the project progresses.

Question. Where is this work being carried out?

Answer. Research will be conducted by scientists at the University of Alaska, Fairbanks.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. This will be proposed by the principal investigator(s) soon.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. As this is a new project, no evaluation has been conducted at this time.

SEAFOOD HARVESTING, PROCESSING, AND MARKETING, MISSISSIPPI

Question. Please provide a description of the research that has been funded under the Seafood Harvesting, Processing, and Marketing grant.

Answer. Research related to seafood safety, quality and by-product utilization has been supported by this grant. Research conducted included: (1) microbial population changes during retail display of shrimp,

(2) development of an impedance-based method to rapidly detect microorganisms on shrimp, (3) determine physical, chemical, microbiological, and sensory differences between pond and tank aquaculture tilapia, and (4) evaluate processes for utilization of uncooked shrimp processing by-products for production of flavor extracts. Funds from the fiscal year 1999 grant are supporting research through September 30, 2000. A proposal in support of fiscal year 2000 funds will be requested to (1) evaluate the potential of the xanthene colorant phloxine B to control Listeria monocytogenes on ready-to-eat shrimp and (2) determine the survival of organic acid exposed Listeria monocytogenes in a simulated gastrointestinal model.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes that national needs reflected in the project include providing consumers with affordable alternative seafood products. Alternative sources of seafood protein are needed because of a drastic decline in natural harvests due to overexploitation. Other national needs addressed in this project include reducing pollution during seafood and aquaculture food processing by converting byproducts into value-added food ingredients or materials. Regionally, much is unknown about the short and long-term effects of the new seafood HACCP regulations on the livelihood of Mississippi seafood and aquaculture food producers and processors who are typically small and lack sufficient resources to remain competitive. Continuation of this project will provide continued assistance to Gulf-Coast seafood processors in meeting new U.S. regulations as well as new international regulations that are important for Mississippi export products. Locally, catfish processors are a major employer of the severely economically depressed Delta region of Mississippi. By further enhancing the value of catfish products, this project seeks to improve the livelihood of individuals both on the Gulf coast and in the aquaculture region of the state.

Question. What was the original goal of the research and what has been accomplished to date?

Answer. The original goals of the research were to improve the quality and safety of catfish and improve the utilization of catfish byproducts and underutilized marine species. Due to successes of the original project, subsequent efforts are focusing on additional uses of seafood and aquaculture foods by improving processing strategies and providing alternative products from waste materials. The project has thus expanded to include crab, shrimp, oysters, freshwater prawns, hybrid striped bass, tilapia, and crawfish.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1990 when $368,000 was appropriated for this project. The appropriations for fiscal years 1991–1993 were $361,000 per year; fiscal year 1994, $339,000; and fiscal years 1995–1999, $305,000 each year. For fiscal year 2000 $305,000 has been appropriated. A total of $3,867,500 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year 2000?

Answer. The State of Mississippi contributed $1,949 to this project in fiscal year 1991; $41,286 in fiscal year 1992; $67,072 in fiscal year 1993; $91,215 in fiscal year 1994; $147,911 in fiscal year 1995; and $61,848 in fiscal year 1996. Product sales contributed $7,044 in 1991, $13,481 in 1992, $13,704 in 1993, and $5,901 in 1994. Industry grants contributed $14 in 1992 and $31,796 in 1993. Other non-federal funds contributed $80 in fiscal year 1991, $838 in 1992, and $17,823 in 1993. The total non-federal funds contributed to this project from 1991 through 1996 was $501,962. In fiscal year 1998, $151,286 in state funds, $8,790 in self-generated funds, and $23,877 in other non-federal funds were obtained. Information on funding in 1999 and 2000 is not currently available.

Question. Where is this work being carried out?

Answer. Research is being conducted by scientists in the Departments of Food Science and Technology and Agricultural Economics of the Mississippi Agricultural and Forestry Experiment Station at Mississippi State University and at the Coastal Research and Extension Center, Seafood Processing Laboratory, in Pascagoula, Mississippi.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The original, scheduled date of completion of the objectives will be September 30, 2000. The work for fiscal year 1999 is still in progress. A progress report on the achievement of the objectives was due by March 15, 2000. It should be noted that the work on this project over the last fiscal year was severely curtailed due to extensive damage to the seafood processing pilot plant and destruction of the office facility, both located in Pascagoula, due to a hurricane.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. The last review of the proposal was conducted on June 28,1999. At that time, the agency science specialist believed that the projects addressed needs and interests of the regional seafood and aquaculture industries.

SEAFOOD SAFETY/MASSACHUSETTS

Question. Please provide a description of the research that has been funded under the grant.

Answer. The agency is in the process of requesting the university to submit a grant proposal for this new research activity.

Question. According to the research proposal, or the principal research, what is the national, regional or local need for this research?

Answer. The researchers indicate the need to strengthen the local and Northeast region fisheries industry by addressing and solving priority seafood safety issues critical to assuring public health and maintaining consumer confidence in a variety of economically important fisheries products.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This is a new research grant to be funded in fiscal year 2000.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $255,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The university estimates that significant non-federal funding will be provided in fiscal year 2000 primarily from state sources to cover salaries of the principal investigators. As the program develops, additional non-federal funding is expected.

Question. Where is this work being carried out?

Answer. Research will be conducted at the University of Massachusetts—Amherst, Chenoweth Laboratory of the Department of Food Science through the Agricultural Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is fiscal year 2002. The project will be initiated in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency will evaluate the progress of this new project on an annual basis. The university will be required to submit an accomplishment report each year when the new proposal is submitted to the agency for funding. Since this is the first year of the program, the agency will conduct an external peer review of the proposal. The fiscal year 2000 review will be completed within three weeks of submission of the proposal.

SMALL FRUIT RESEARCH, OREGON

Question. Please provide a description of the research that has been funded under the Small Fruit Research grant.

Answer. Funding for this special grant has been used to enhance the production and quality of small fruits-blackberry, blueberry, caneberry, cranberry, marionberry, raspberry, strawberry and grape in the Pacific Northwestern states of Idaho, Oregon, and Washington. Research has been focused on crop genetics, production/physiology, pest management, berry/grape processing, marketing, and wine production. Proposals are selected after examination of their relevance to priorities identified within the region.

Question. According the research proposal, or the principal researcher, what is the national, regional and local need for this research?

Answer. There is a considerable demand for fresh and processed berry products in the United States. The demand is also high in urban Asian markets where consumer interest for berry products is strong. Currently, international marketing of Northwest small fruit commodities involves the sale of traditional products. Research on international consumer preferences, packaging, and products continues to be essential. The importance of berry and grape crops to the region has long been recognized by the three Northwest states: Washington, Idaho and Oregon. These crops are mainstays of high-value, specialty horticulture. The universities and small fruits industry have made a strong commitment to the improvement of these crops as evidenced by the high level of internally developed resources for research and marketing. Thus, the Northwest Center for Small Fruit Research has developed effectively over the last 8-10 years into its present fully established form.

Question. What was the original goal of this research, and what has been accomplished to date?

Answer. Genetic improvement of small fruit cultivars continues to be a powerful tool using germplasm collection and identification, field evaluation of new germplasm and advanced selections from breeding programs, virus identification and elimination, and approaches that utilize genetic engineering. Research is identifying cultivars and developing cultural practices that growers can utilize to reduce crop losses. Research is evaluating and investigating nutritional factors, cultural management, temperature stress, effects of pruning, micro propagation, cold hardiness/low temperature injury and effects of viticulture practices on wine quality of winery processing on wine quality. Small fruit research continues to reap acclaim for its components involving industry-driven cooperation between industry, state and federal research. Its genesis as a small-fruits program reflects the contributions of plant biology, the commitment to facilitating the efficiency of research and the coordination of marketing throughout a multi-state region. The Center represents an innovative organization which has created a cooperative strategy for university, USDA's—Agricultural Research Service, and industry small fruit programs.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000.

Answer. The initial support for this grant was an appropriation in fiscal year 1991 for $125,000. The fiscal appropriation for 1992 and 1993 was $187,000 per year; fiscal year 1994 was $235,000; fiscal years 1995–1998 were $212,000 each year; fiscal year 1999 was $300,000; and was $300,000 for fiscal year 2000. A total of $2,182,000 has been appropriated.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This project involves the use of OSU administrative personnel, equipment, utilities and facilities that are indirect costs to the project. These costs constitute an OSU contribution to this research project, which is not allowable as a reimbursable expense under this project. The recent passage of Oregon's tax limitation laws reduce revenues that restrict our ability to cost share. Thus, our policy is that we do not provide any cost sharing or matching funds for this or other agreements in which we receive no indirect costs. We are committed to providing the required collaborative efforts by Oregon State University scientists and administrators to complete the work described in this proposal.

Question. Where is the work being carried out?

Answer. The research is being conducted at Oregon State University, Washington State University and the University of Idaho. Oregon State University is the lead institution for this project.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives of small fruit research are still valid researchable issues because they encompass research focused on such diverse topics as: crop genetics, production/physiology, pest management, berry/grape processing, marketing, wine production, international consumer preferences, and specialty horticulture. Much progress has taken place in meeting the research objectives in these topics but this is a continuing process with priorities annually re-evaluated to appropriately adjust research direction within the project objectives as well as their relevance to priorities identified within the region.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. There has not been an overall agency evaluation of this project. However, the project evaluation process is accomplished annually by peer reviewers whom are chosen and organized by expertise according to the five technical working groups with input from the designated Agricultural Experiment Station Representatives in Washington, Oregon and Idaho. In fiscal year 1999, for example, there were 19 project reports which were evaluated for each of the recipients of grants. Each submitted proposal is peer-reviewed by a panel of five individuals (three scientists and two industry representatives) and is grouped into one of the Center Technical Working Groups, namely genetics, pest management, production/physiology, processing/packaging, and marketing. Each proposal is evaluated on the following criteria: (1) The nature of the proposed research and its relevance to the needs of the small fruit industries; (2) The relevance of the proposal to current small fruit research designated priorities; (3) The scientific expertise of the scientists involved—training, experience, and accomplishments relative to specific areas of small fruit research; (4) The appropriateness of the level of funding requested, vis-a-vis, availability of funds; and (5) The likelihood of success. Reviewers complete an evaluation sheet for each proposal, rating the five criteria on a scale of one to ten, with ten being the best. Previously awarded projects are given special consideration in order to allow for funding for up to three years (when appropriate progress is demonstrated). Compilation of evaluations are distributed to the three Agricultural Experiment Station Directors and the USDA–ARS Horticultural Crops Research Laboratory Research Leader, who make the final determination of funding for each proposed project. Notification of awards are made in December. The peer review of all proposals is coordinated and processed through the Northwest Center for Small Fruit. An agency-level site review of the Small Fruit Research project will be performed in the coming year.

SOUTHWEST CONSORTIUM FOR PLANT GENETICS AND WATER RESOURCES

Question. Please provide a description of the work that has been funded under the Southwest Consortium for Plant Genetics and Water Resources Program grant.

Answer. New Mexico State University, Los Alamos National Laboratory, Texas Tech University, the University of Arizona, and the University of California at Riv-

erside entered into a cooperative interdisciplinary research agreement constituted as the Southwest Consortium for Plant Genetics and Water Resources to facilitate research relevant to crop adaptation to and semi-arid regions. The overall goal of the Consortium is to bring together multi-disciplinary scientific teams to develop innovative advances in plant biotechnology and related areas to bear on agriculture and water use in and semi-arid regions. All grants made to the participating Institutions are awarded competitively by a scientific peer review process.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This research is highly significant to national, regional, and local needs. The Consortium is conducting an integrated program that identifies specific problems of southwest agriculture, coordinates water and biotechnology research aimed at solving these problems, and facilitates the transfer of this information for commercialization. The specific research objectives of the Consortium include the development of crops with resistance to drought and temperature extremes, adverse soil conditions, and pests and parasites.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to enhance the adaptation of agricultural crops to and semi-arid crop environments. Five participating institutions have developed research plans consistent with the Consortium's goals. Mini-grants to support research that would solve problems unique to southwest agriculture are awarded competitively following peer review. Specific attention is given to interdisciplinary agricultural research. Since its inception in 1985, the Consortium has provided essential support for the establishment of baseline data on new, forward thinking research relevant to the improvement of and lands agriculture. Accomplishments include the identification of chromosome regions conferring water use and transpiration efficiency in wheat, an analysis of the impacts of water stress on host plant resistance to aphids and whiteflies on melon, and an evaluation of genetic variation of water-soluble carbohydrates in spring wheat and salt-tolerance mechanisms.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1986 and has been provided with appropriations of the following amounts: fiscal year 1986, $285,000; fiscal years 1987 through 1989, $385,000 per year; fiscal year 1990, $380,000; fiscal years 1991 through 1993, $400,000 per year; fiscal year 1994, $376,000; and fiscal years 1995 through 2000, $338,000 per year. A total of $5,424,000 has been appropriated since fiscal year 1986.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The Consortium's lead institution, New Mexico State University, reports matching non-federal funds of $80,000 in state appropriations in 1992 and $100,000 in 1993 through 1998. Non-federal funds spent on this project originate from the five institutions that participate in the Consortium and support researchers' salaries, facilities, equipment maintenance, and administrative assistance.

Question. Where is this work being carried out?

Answer. Research is being conducted by the member institutions of the consortium, which includes New Mexico State University; Los Alamos National Laboratory, Texas Tech University; the University of Arizona, and the University of California at Riverside.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initiated in 1986 and accomplished significant results in the first five years. Additional and related objectives have been developed and anticipated completion date for these is 2001. The Consortium is successfully achieving its objectives through the funding of new interdisciplinary projects each year.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Mini-grants are awarded competitively to support research that will solve problems unique to agricultural production in the Southwest. The mini-grant selection process is competitive. Proposals are evaluated by external peer reviewers, the Consortium Steering Committee, and the Consortium Scientific Committee. The review process includes pre-proposal screening by the Consortium Steering and Scientific committees, and review of all new proposals by external and internal panels. An internal review of a progress report on each project is completed before the second year of funding is released.

SOYBEAN CYST NEMATODE

Question. Please provide a description of the research that has been funded under the Soybean Cyst Nematode grant.

Answer. The research being funded by this grant is crucial to the development of effective management strategies to understand host parasite relationships of the pathosystems and each of its components. Work has dealt mainly with identifying Heterodera glycines-resistant genes and incorporating them into agronomically superior cultivars. Basic studies elucidate the fundamental biology of the cyst nematode in regard to new management strategies. Applied work dealt with evaluating production systems and to new management strategies. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES.

Question. According to the research proposal, or the principal investigator, what is the national, regional, or local need for the research?

Answer. The principal researcher believes that although this research is focused on the soybean cyst nematodes in Missouri, the problems are of regional and national significance. The soybean cyst nematode, Heterodera glycines is the most serious pest of soybean in the United States. The problems continue to increase in the Midwest where 12 states have yield reductions in soybean because of this nematode. Due to the nematodes ability to adapt to resistant varieties over time, new varieties are continually needed.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research is managing soybean cyst nematode through the various management strategies including the development of new resistant soybean varieties. To date, several nematode resistant soybean lines have been or will be released. The need for breeding soybean lines to develop resistant varieties with a broad spectrum of resistance continues. More fundamental research involves the utilization of new molecular technologies to identify genes responsible for resistance. DNA fingerprinting of 118 soybean lines have identified several different genes for soybean cyst nematode resistance. Other aspects of the work relates to field management strategies for these nematodes. Studies on nitrogen fertilizers and tillage have indicated that these may not be important in management of soybean cyst nematode.

Question. How long has work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1979, $150,000; fiscal years 1980–1981, $250,000 per year; fiscal year 1982, $240,000; fiscal years 1983–1985, $300,000 per year; fiscal years 1986–1989, $285,000 per year; fiscal year 1990, $281,000, fiscal year 1991, $$330,000; fiscal years 1992–1993, $359,000, fiscal year 1994, $337,000; fiscal years 1995–1997, $303,000 per year; fiscal year 1998, $450,000; fiscal year 1999, $475,000 and fiscal year 2000, $475,000. A total of $6,880,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $105,012 state appropriations in 1991; $84,368 state appropriations in 1992; $168,017 state appropriations in 1993; $118,725 state appropriations in 1994; $33,498 in 1995 and 1996; $33,723 in state appropriations in 1997; $37,445 in state appropriations in 1998; $201,994 in 1999; and an estimated $200,000 in 2000.

Question. Where is this work carried out?

Answer. This research is being conducted at the Missouri Agriculture Experiment Station and the University of Missouri.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Many objectives are being met but genetic interaction of the soybean cyst nematode/soybean is extremely complex. The anticipated completion date of the continuing research is 2004–2006.

Question. What was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last evaluation of this project was a merit review in January, 1999 and the renewal project will be evaluated in 2000. In summary, continued development of new management strategies for the soybean cyst nematode is extremely important. Progress continues with new varieties with nematode resistance being released yearly as well as excellent progress in other management strategies. Certified seed of MPV437–NRR was made available to farmers in 1999. A new soybean vari-

ety, 19Anand' was released this year. Another high yielding soybean strain, S96–1908 was developed that is resistant to all races of soybean cyst nematodes and is being evaluated in the uniform tests. More fundamental research involves the utilization of new molecular technologies to identify genes responsible for resistance. Seven genetic markers associated with loci controlling resistance to soybean cyst nematode were found in Peking which may be useful in marker assisted selection for resistant lines. Other aspects of the works relates to field management strategies for these nematodes including effects of nutrient uptake on nematode development. A seven year study of the effects of soybean cyst nematode on soybean growth and development was recently completed. It showed among other things, that a grower's choice of tillage methods and date of planting are relatively unimportant in their strategy to control soybean cyst nematodes. Another study indicated that nitrogen accumulation and fixation are limited under high soybean cyst nematode infections.

STEEP—WATER QUALITY IN PACIFIC NORTHWEST

Question. Please provide a description of the research that has been funded under the STEEP—Water Quality in the Pacific Northwest grant.

Answer. The STEEP III study was established in 1996 as the third phase of the tri-state STEEP Program entitled "Solutions to Environmental and Economic Problems," to meet the needs of farmers and ranchers in the Pacific Northwest in solving severe problems with soil erosion and water quality, while maintaining economically and environmentally sustainable agricultural production. An open call for research proposals is held by three cooperating states, Idaho, Oregon, and Washington. Awards are made competitively after both internal and external peer reviews within the states, and merit review by the agency. The project is in a new phase, and is just known as STEEP, as the STEEP III objectives have been completed.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. According to the research proposal, the soils of the Pacific Northwest wheat region are subject to severe wind and water erosion, which has taken a heavy toll of the topsoil in a little more than 100 years of farming. Due to the hilly terrain, water erosion has reduced potential soil productivity in the high rainfall areas of the region by about 50 percent. Wind erosion has reduced productivity on the sandy soils in the lower rainfall areas. Also, off-site environmental costs of water erosion are large. Although many of these are difficult to measure, they include damage from sediment to recreational areas, roadways, and other areas which costs taxpayers millions of dollars annually. Wind erosion, which occurs mostly in the spring and fall, also can be costly and environmentally damaging to air quality, and causes increasing concerns for human health and safety from blowing dusts. Water quality degradation is of increasing concern in the agricultural areas of this region, since sediment is a major pollutant of surface water runoff which may also carry potential chemical contaminants. The complex hydrology of the region's landscape has made it difficult to identify the sources of these chemicals in surface and ground waters. A new major emphasis has been the funding of direct seed research in combination with a reduction in summer fallow and more complex crop rotations. Direct seed is synonymous with no till where tillage is eliminated or reduced to a very minimum. Consequently soil and wind erosion are reduced significantly, improving soil and water quality and contributing to salmon recovery.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The primary goals are: to obtain and integrate new technical/scientific information on soils, crop plants, pests, energy, and farm profitability into sustainable, management systems; to develop tools for assessing the impacts of farming practices on soil erosion and water quality; and to disseminate conservation technology to the farm.

The original STEEP and following STEEP II and STEEP III projects for erosion and water quality control, have provided growers a steady flow of information and technologies that have helped them meet economic, environmental, and resource conservation goals. Through the adoption of these technologies, the researchers believe that growers of wheat, barley, and other alternative crops have been able to reduce soil erosion by water and wind, improve water quality, and maintain or increase farm profitability. This has been accomplished through a tri-state, multi-disciplinary, multi-agency approach of basic and applied research, along with technology transfer and on-farm testing to assist growers with applying these research findings on their farms. The on-farm testing program has directly involved growers and stakeholders in the planning and conduct of the research and educational ef-

forts—and has helped growers evaluate conservation options, such as residue management, to meet conservation compliance requirements.

STEEP programs have helped position farmers with new conservation technologies, such as direct seeding management systems, well in advance of deadlines to meet current and anticipated policy requirements. This preparation protects farmers against potential penalties and loss of government program benefits. The new emphasis on direct seeding has significantly reduced summer fallow through more annual cropping, and through more emphasis on alternative crops.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991, and the appropriations for fiscal years 1991–1993 were $980,000 per year; in fiscal year 1994, $921,000; in fiscal year 1995, $829,000; and in fiscal years 1996–2000, $500,000 per year. A total of $7,190,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $938,812 state appropriations, $63,954 product sales, $156,656 industry, and $16,994 miscellaneous in 1991; $1,025,534 state appropriations, $75,795 product sales, $124,919 industry, and $88,696 miscellaneous in 1992; $962,921 state appropriations, $62,776 product sales, $177,109 industry and $11,028 miscellaneous in 1993; $1,069,396 state appropriations, $46,582 product sales, $169,628 industry, and $22,697 miscellaneous in 1994; and $1,013,562 state appropriations, $31,314 industry, and $107,151 miscellaneous in 1995. In 1996, Washington received $231,724 state appropriations; Oregon passed Measure 5 which reduced revenues and imposed funding restrictions so they were unable to provide any non-federal cost-sharing or matching funds; and Idaho contributed $81,525 state support, and $86,242 in estimated non-federal grant support, for a total non-federal contribution of $167,767. In 1997, Washington received $197,234 state appropriations; Oregon continues to have Measure 5 as law and continues to be unable to provide any non-federal cost-sharing or matching funds; and Idaho contributed $27,235 state support and $24,525 in estimated non-federal grant support for a total non-federal contribution of $51,760. In 1998 and 1999, these same general levels of support have been continued.

Question. Where is this work being carried out?

Answer. The work under STEEP will be done at laboratories and field research sites at the University of Idaho, Oregon State University, and Washington State University. Cooperative on-farm testing will be conducted in cooperation with growers on their fields in Idaho, Oregon and Washington.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The STEEP II project was completed in 1995, and the results were compiled in a final, 5-year report in January 1997, showing that the original objectives have largely been met. The STEEP III project started in 1996 and will continue through the year 2000 as a 5-year project.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency's program manager annually reviews progress reports, proposes new research on the STEEP Program, and attends the annual meetings to assess progress. The program is evaluated within the states each year by three committees: grower, technical, and administrative. Annual progress is reported at an annual meeting and compiled into written reports. These reports and the meeting are reviewed annually. Grower and industry input is solicited at the annual meeting on research objectives and accomplishments. The most recent evaluation was made at the January 2000 annual meeting which highlighted direct-seeding technology. This successful meeting attracted many growers, scientists, and agricultural experts from the tri-state region. Farmer surveys are also distributed at each annual meeting, and results compiled to assess whether objectives are being successfully achieved.

SUSTAINABLE AGRICULTURE, CALIFORNIA

Question. Please provide a description of the research that has been funded under the grant.

Answer. CSREES has requested the university to submit a grant proposal that has not yet been received.

Question. According to the research proposal or the principal researcher, what is the national, regional, or local need for this research?

Answer. Since this is the first year of funding for this project, and the research proposal has not yet been received, that question cannot be Answered at this time.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. Since the research proposal has not yet been received, and the project has not yet been funded, there are no stated goals nor accomplishments to report at this time.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $255,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Since the project has not yet been funded, there are no non-federal funds to report at this time.

Question. Where is this work being carried out?

Answer. The specific locations for this work in California are not yet available.

Question. What was the anticipated completion date for the original objectives of this project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The objectives and completion date have not yet been determined.

Question. When was the last agency evaluation of this project? Provide a summary of the last agency evaluation conducted.

Answer. No evaluation has yet taken place since the project has not yet begun.

SUSTAINABLE AGRICULTURE, MICHIGAN

Question. Please provide a description of the research that has been funded under the Sustainable Agriculture, Michigan program grant.

Answer. This project is intended to develop agricultural production systems that are highly productive and profitable and which provide high quality ecosystem services to local communities and to the environment. It examines how to achieve a high nutrient flow from soil to crops and animals, and back to soil, with low loss to ground and surface waters. The grant is allocated, by the Michigan Agricultural Experiment Station, to priority areas within the general area of sustainable agriculture. Grants are awarded based on research merit and proposal submission.

Question. According to the research proposal or the principal researcher, what is the national, regional, or local need for this research.

Answer. The principal researcher believes there is a need to better understand the biological processes occurring Michigan's high-nutrient-flow crop and animal systems. With high water tables, networks of lakes and slow-moving streams, and concern about environmental standards, field contamination by agricultural production materials is a high priority.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The objective of this research is the identification, quantification and description of production ecology information to permit its use in a significant way in farm management decision making. Key areas addressed include soil carbon and nitrogen flows, soil nematode population management and weed seed predation and seedbank management.

Accomplishments to date include the development of on-farm compost demonstration sites, collection of research data and computer software models on water table management, completion of initial research trials on rotational grazing at three sites in Michigan, widespread testing of cover crops in several crop rotation systems, and tests of the use of nematology community structure as a method of detecting difference among farming systems. Findings from this project have demonstrated that rotational grazing reduces production costs, and increases net profits, compared to traditional cow management. This project has also shown that composting is an effective way of stabilizing livestock waste, controlling odor, and improving nutrient composition for later land application. Cover crop development as an integrated tool is becoming quite advanced. Frost seeding of wheat with clover is increasingly used; approximately one-third of Michigan's wheat acreage, by some estimates, is overseeded. Results are being integrated into a series of practical publications partially supported by this grant. The first in the series, "Michigan Field Crop Ecology," received an American Society of Agronomy award in 1998 for excellence as an Exten-

sion publication. A second volume, on field crop pest ecology, and similar volumes for fruit and vegetable ecology are under development.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1994 with an appropriation of $494,000; $445,000 were appropriated in fiscal years 1995 through 2000, bringing total appropriations to $3,164,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Matching funds were provided at the state level for $511,900 in fiscal year 1994, $372,319 for fiscal year 1995, and $359,679 in fiscal year 1996. Matching support was not reported in fiscal years 1997 through 1999.

Question. Where is this work being carried out?

Answer. This work is being carried out in Michigan at several locations by Michigan State University. Locations include the Kellogg Biological Station, the Upper Peninsula Experiment Station, and farms around the state.

Question. What was the anticipated completion date for the original objectives of this project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original project, begun in 1994, was proposed through April of 1997. Its specific objectives were met, with additional objectives addressed in subsequent related proposals. The current project is currently scheduled to go through June 30, 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last agency evaluation conducted.

Answer. A formal evaluation of the Principal Investigator's program was concluded in 1997, commissioned by the C.S. Mott Foundation through an independent consultant. The project continues to have annual peer review. According to the Principal Investigator, the proposal has gone through the normal Michigan State University review process. First, all teams and collaborators of the project have met and reviewed the entire proposal with several suggestions and changes being incorporated. Secondly, research administrators in the fields of agronomy/soil science and entomology/pest management covering the major dimensions of the proposal have reviewed it for scientific appropriateness and accuracy as well as for overall balance and likelihood of achieving objectives. Their comments have been included as revisions to the proposal.

SUSTAINABLE AND NATURAL RESOURCES, PENNSYLVANIA

Question. Please provide a description of the research that has been funded under the Sustainable Agriculture and Natural Resources, Pennsylvania project.

Answer. This project studies the cycling of nutrients in soil and crops with special emphasis on the development of indices for measurement of soil health. Specific goals are to identify indicators of a soil ecosystem that maintains a high level of active soil organic matter, and to develop nutrient and carbon budgets for managing on-farm cropping systems.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Degradation of soil health/quality is a most serious problem for agriculture both in the mid-Atlantic region and throughout the nation. State governments both regionally and nationally are attempting to address the issue of soil and water degradation in cropping systems and in intensive animal agriculture. Traditional soil test results are not providing the needed answers for effective nutrient management.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to understand the cycling of nutrients and to use that knowledge to develop practical indicators of soil quality and health. If farmers are to manage their farm lands properly, indicators of soil quality and health must be developed that can be used by agricultural producers and consultants. Efforts under this project have been devoted to this goal with significant accomplishments to date. Management practices have been found to affect soil microbiology, and the fate of nutrients from crop residues and legume cover crops is being elucidated. A significant indicator of soil quality has been identified: measurement of the decomposition of filter paper has been shown to be an effective indicator of plant residue decomposition, which in turn has been shown to be highly correlated to nitrogen mineralization and also shows promise as an indicator of soil biological activity. Experiments are underway to refine this approach.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported under this grant began in fiscal year 1993. The appropriation for fiscal year 1993 was $100,000; $94,000 in fiscal years 1994 through 1998; $95,000 in fiscal years 1999 and 2000, for a total of $760,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. According to the principal investigator, non-federal funds from university, state, and private industry sources were as follows: $195,901 in 1996, $369,574 in 1997, $324,724 in 1998, and $36,469 in 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted by the Pennsylvania State University with cooperators throughout the state, at the Hunter Rotation Experiment at Penn State's R.E. Larson Research Center near Rock Springs, Pennsylvania, at the Rodale Institute Research Center near Kutztown, Pennsylvania, and on farms around the state.

Question. What was the anticipated completion date for the original objectives of this project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project has met the specific objectives set forth in the original project which began in 1993 with an ending date in 1995. The continuing project addresses additional objectives related to the overall goal. The ending date for the current project objectives is June 30, 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last agency evaluation conducted.

Answer. There has not been a formal evaluation of this project, but progress reports have been submitted to the agency and reviewed by our scientific staff. The project undergoes regular internal evaluation and assessment as part of Penn State's major effort in soil quality and nutrient management research.

SUSTAINABLE AGRICULTURE SYSTEMS, NEBRASKA

Question. Please provide a description of the research that has been funded under the integrated crop and livestock research program for Nebraska.

Answer. This project is aimed at integration of field crops, animal production, agroforestry, livestock waste management, and diversified enterprises to meet production, economic, and environmental quality goals.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Farmers and ranchers in Nebraska and throughout the Midwest face increasing difficulties in maintaining profitable operations that are sustainable under increased production costs and more stringent environmental regulations. They continue to seek alternative production systems, integration of crop and animal enterprises, value-added products, including those from woody perennials, and new marketing approaches to secure more of the food dollar. Work on crop residue utilization is highly important to assess the loss of erosion mitigation when grazing occurs as well as the benefits of winter forage to production of lean beef. Erosion is still a major problem with monoculture cropping, and work with contour strips, residue management, and animal grazing is essential to provide good recommendations to farmers for how to manage fragile lands.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This project has addressed a number of questions related to the management of integrated crop and livestock enterprises. The work on composting has Answer.ed questions about the costs of composting, improved the nutrient content of compost, and evaluated different spreading technologies. The work on contour strip cropping, residue management, no-till planting, and cover crops has demonstrated ways to reduce erosion on highly erodible land. Studies of grazing on corn residues under different tillage and management systems are determining the forage value of residue and the impact of grazing on subsequent crop production.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. This project began in fiscal year 1992, with an appropriation of $70,000; subsequent appropriations are as follows: $70,000 in fiscal year 1993; $66,000 in fiscal year 1994; and $59,000 in fiscal years 1995 through 2000. Total appropriations to date are $560,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Matching funds provided for this research include state funds in the amount of $25,313 for fiscal year 1992; $26,384 for fiscal year 1993; $27,306 for fiscal year 1994; $36,091 in fiscal year 1995; and $24,267 in fiscal year 1996. No matching funds were reported in fiscal years 1997 through 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted by the University of Nebraska at several locations in Nebraska, with the major part of the project at the Agricultural Research and Development Center near Mead, Nebraska.

Question. What was the anticipated completion date for the original objectives of this project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original project proposed work through March of 1994. The current project proposes work addressing additional related objectives through March 31, 2002. It is expected that current objectives of the project will be met by this time period.

Question. When was the last agency evaluation of this project? Provide a summary of the last agency evaluation conducted.

Answer. There has not been a formal evaluation of this project, but progress reports have been submitted to the agency and reviewed by our scientific staff. The grant was awarded competitively within the University of Nebraska, and the integrated farm project has been reviewed annually for technical merit and progress toward goals by the internal review process of the university.

SUSTAINABLE BEEF SUPPLY, MONTANA

Question. Please provide a description of the research that has been funded under the Sustainable Beef Supply, Montana grant.

Answer. The Sustainable Beef Supply, Montana project is a cooperative effort between Montana State University and the Montana Stockgrowers Association to develop a system to provide information feedback among various segments of the beef industry. This may be one of only a very few joint efforts between a university and a commodity group currently in progress in the United States. A systems approach is being utilized to monitor and track calves from ranches in Montana to feedlots in other states and eventually to the packing plant. Information collected throughout the production cycle is shared among all owners of the cattle.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is to develop a reliable and predictable supply of safe, consumer-friendly beef of high quality. The beef industry is becoming more consumer focused, and specific quality and consistency targets are being established in all segments of the industry. To meet consumer needs and return additional revenue to cattle producers, a systems network must be in place to ensure that a high quality and consistent product is being produced. Central to this networking approach is the exchange of information among all segments of the industry from producer to consumer.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goals of this project are: Develop and conduct educational programs on how to attain beef quality assurance standards, provide certification of feeder calves that have met defined management protocols, and provide information feedback from the feedlot and packing plant to the cow-calf producer to determine if the feeder calves met requirements for quality, consistency, safety, and red meat yield. A training manual was developed and 1,000 copies were distributed. Thirty-five quality assurance educational programs were conducted in Montana and county extension agents were trained to deliver this program to producers. Approximately 25,000 calves were certified. A statewide audit of ranchers has been initiated to determine what value-added practices are being utilized related to breeding, health management, nutrition and marketing. A research project involving 2,000 calves at 12 ranches has been initiated to determine if a standardized weaning protocol of vaccinations and nutrition can reduce the morbidity of calves after they enter the feedlot.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999. The appropriation for fiscal year 1999 was $500,000 and for fiscal year 2000 was $637,500 for a total appropriation of $1,137,500. There are no other sources of funding available from other CSREES programs.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The Montana Department of Agriculture has contributed $15,000 and the Montana Stockgrowers Association has contributed $5,000 in fiscal year 2000.

Question. Where is this work being carried out?

Answer. Research will be conducted at Montana State University and on cooperating Montana ranches.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. It is anticipated that it will take three to four years of funding to fully achieve the objectives of this project. Progress to date has been very encouraging. Approximately 1,000 producers have received quality assurance training and 25,000 calves were certified as being managed under specified best management practices. The goal is to certify 75,000 calves annually in this program.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This is a new project and is not far enough along to be effectively evaluated. The project was peer-reviewed at the University before submission. The proposal was also merit reviewed by the agency prior to funding.

SUSTAINABLE PEST MANAGEMENT FOR DRYLAND WHEAT, MONTANA

Question. Please provide a description of the research that has been funded under the Sustainable Pest Management for Dryland Wheat, Montana grant.

Answer. Montana State University researchers are studying the influence of four cropping sequences and two tillage systems on insects, weeds, plant pathogens, nutrient management, physical and biological properties of soil, economic profitability, and environmental benefits. The research is being conducted on large experimental blocks in the three different dryland farming regions of northern, central, and eastern Montana. Each site differs climatologically and agronomically from one another yet represents a significant production area within the state.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. This project addresses pest management issues under different cropping sequences and tillage practices utilized in the Northern Great Plains for dryland wheat production. The wheat-fallow-wheat system used by many farmers in the region favors the build up of many pests. Dollar losses due to insects, competitive weeds, and plant pathogens in dryland wheat production in Montana alone are staggering. For example, annual losses attributed to wheat stem sawfly exceeds $25 million; wild oat infestations causes an estimated $50 million in harvest losses and management costs; and wheat streak mosaic has a monetary loss of $37.5 million. These and other pests also increase reliance on pesticides for crop protection which impacts environmental quality, increases production costs, and causes secondary pest outbreaks and resistance. The agronomic, environmental, and economical benefits of diversified crop rotations are numerous, but these benefits are largely unknown or not documented in dryland wheat production. As a result of this multidisciplinary project, we can significantly reduce the economic impact of agriculturally important pests, improve soil health, reduce production costs, and improve production efficiency.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The second cropping season was completed at the northcentral site in 1999. Data were collected from 26 different cropping sequences grown under two tillage systems. Crops grown included spring wheat, pea, chickpea, and lentil, cool oilseed, for example, mustard, warm oilseed, or safflower, and sunflower. Numerous physical and chemical attributes of the soil were measured again in 1999 including available nutrients, soil aggregate characteristics, pH, forms of nitrogen, bulk density, salinity, water flow rates and water holding capacity. There was no detectable wheat streak mosaic virus and there was no evidence of foliar fungal diseases in any of the wheat plots. Crop data taken included dates of plant emergence, vegetative dry matter, yield components, and straw residue. Above ground insects in different crop rotations were estimated by sweep samples, sticky traps and pheromone traps. Soil-inhabiting arthropods were sampled by removing soil cores from selected cropping sequences.

The first cropping season was completed at the central location in 1999. The crop rotations include 5 sequences of cereals, oilseeds, legumes and forages grown under high and low input systems. High input treatments included seeding at the rec-

ommended times for maximizing yields, seeding at recommended rates, band applying nitrogen fertilizer, and implementing a standard herbicide program. Low inputs were characterized by delaying seeding of cereal until annual weeds have emerged, seeding small grains at 90 lb/ac, and applying herbicides only as needed. Data were recorded throughout the growing season at this site in 1999 on physical and chemical attributes of soils, plant pathogens, insects, weeds, and crop emergence, vegetative dry matter, yield components, and residue cover.

The main treatment effects and cropping sequences at the third research site in northeast Montana are currently being established. Ground preparation through mechanical tillage and herbicide applications at this site began in fall 1998. The entire 25 acre site was cropped to spring wheat in 1999.

Related investigations currently supported by this project include a weed science study delineating the spatial distribution of wild oats and wheat stem sawfly in dryland spring wheat. A second project focuses on the chemical ecology of wheat stem sawflies. We now have convincing evidence that male and female sawflies produce different compounds that are vital in locating mates. Experiments have been designed to collect, isolate and identify chemical volatiles released by sawflies. A dozen compounds have been identified as components of pheromones released by sawflies. An experimental trap design with a synthetic pheromone lure was field tested in 1999 and proven to be effective in attracting sawflies. Thus, the feasibility of using sawfly pheromones to manage this ubiquitous pest appears achievable.

Question. this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $200,000, for fiscal years 1998 and 1999, $400,000 per year and for fiscal year 2000, $425,000. A total of $1,425,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds of $42,000, $80,000 and $80,000 from the Montana Wheat and Barley Committee were provided for project support during 1997, 1998 and 1999, respectively. The Montana Agricultural Experiment Station provided $25,000 in state support. Private industries provided $5,000 during 1999.

Question. Where is the work being carried out?

Answer. Research is being conducted in three distinct dryland areas of Montana in the north, central and northeast, located on producer owned land. Each field site is within 45 miles of a Montana State University Agriculture Experiment Station research center.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initially proposed for a duration of 3 years. However, this project is envisioned as a long term project and will require a total of 12 years to see it to completion.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Yearly progress reports will be used to track the effectiveness of the program of research with the first agency evaluation scheduled for October 2000. Assessment of the precision of biological control organisms and estimates of profitability, marketability, and risk will be used to assess progress.

SWINE WASTE MANAGEMENT, NORTH CAROLINA

Question. Please provide a description of the research that has been funded under the Swine Waste Management, North Carolina, grant.

Answer. During the past year, this multi-disciplinary project has expanded existing university efforts that have included plans to develop a prototype system for the treatment of animal waste which will be used to study and optimize new and innovative swine waste treatment processes. Specifically, the current project is focusing on the following topics: biological safety and nutrient quality of phosphoric acid-preserved animal mortality products processed by rendering, extrusion, and fluidized-bed cooking/dehydration; beneficial effects of swine manure biosolids on plant disease suppression; evaluation of alternative compost products; use of processed animal waste as a nitrogen and phosphorus source for Fraser Fir Christmas trees; production of a commercially viable feed ingredient from animal wastes, cull sweet potatoes and soybean hulls; routine techniques for monitoring the nutritional value of processed animal waste; residual dietary phytase activity; and phosphorus, calcium and nitrogen content in fresh and composted manure.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The urgency for addressing environmental concerns relative to the intensive production of livestock and poultry continues to intensify in the United States. This is reflected by strategies currently proposed jointly by the U. S. Environmental Protection Agency and U. S. Department of Agriculture. In North Carolina, where livestock and poultry production account for approximately $5 billion in farm gate income annually, issues of adequate land area for recycling animal manures for crop uptake of nitrogen and phosphorus in some counties of intensive animal agriculture is especially sensitive. North Carolina is also currently in the process of implementing odor rules that will impact animal agriculture. Several other states and local regions are facing the same concerns. It is anticipated that deliverables from this research project will have a local, state and national impact.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The specific goals for this project include the following. Utilize the North Carolina State University Animal Poultry Waste Management Center waste processing facility to develop optimum methods processing animal waste-based nutrients for use as value-added products. Installation of solid separation system at the Animal Poultry Waste Management Center waste processing facility. Collect samples and establish supply sources of various types of animal waste by-products for conducting commercial scale processing and end-product evaluations. Evaluate materials processed for plant nutrients or feedstuffs. Set up and conduct field demonstration involving potential market use for value-added products produced. Complete summary of data for publication and presentation at workshops, conferences and professional meetings

These goals required assimilation of a multidisciplinary research team, and completion of facilities that are able to heat treat, dehydrate, blend, extrude, compost and pelletize the by-products to produce potentially valuable organic fertilizers or feed supplements. These tasks have been completed, and the individual projects described previously are underway.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $215,000; fiscal year 1998 was $300,00; fiscal year 1999 was $500,000; and fiscal year 2000 is $500,000. A total of $1,515,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. This federally funded project has helped leverage funds procured from the state as well as private sector. For example, during the past fiscal year approximately $735,000 in state funds have been provided—for the development and demonstration of alternative swine waste treatment technologies—plus approximately $150,000 from industry and commodity groups in support of objectives related to this project.

Question. Where is this work being carried out?

Answer. This work is being conducted at North Carolina State University in Raleigh, North Carolina.

Question. What was the anticipated date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original anticipated completion date was February 1999. Project objectives were not completed by this date. The time to complete processes associated with equipment, facilities and safety plans required for this project, coupled with unavoidable administrative delays in the secondary award process from federal and university level for this project, required a request for extension of the completion date to February 2000. It is anticipated that most project objectives will be completed by February 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The CSREES conducted an evaluation of the progress of this work during January, 2000. The project has made significant progress towards meeting the original goals.

TILLAGE, SILVICULTURE, AND WASTE MANAGEMENT, LOUISIANA

Question. Please provide a description of the research that has been funded under the Tillage, Silviculture, and Waste Management Research Grant?

Answer. This research has six components: Rice and Cotton Tillage, Bald Cypress and Water Tupelo Silviculture, and Dairy and Poultry Waste Management. More specifically, the Rice Scientists are looking for ways to improve stand establishment; the Cotton Scientists are focusing on the use of tillage systems to combat harmful insect populations; the Waste Management Scientists are quantifying the environmental and economic effectiveness of approved dairy and poultry waste disposal systems; and the Silviculturists are conducting a problem analysis on factors affecting Bald Cypress and Water Tupelo regeneration. The project is annually subjected to the university's merit review process.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researchers hypothesize that the crops, forests, and waste issues addressed by this project extend beyond the state borders, thus this research has, at a minimum, multi-state to regional application.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals were to: improve conservation tillage in rice and cotton farming; determine the effectiveness of no-discharge dairy waste treatment facilities; determine acceptable land treatment levels for poultry waste disposal; and to evaluate wetland forest regeneration processes. All components of the project have established research studies and are monitoring progress. For fiscal year 1998 the silviculture component was placed on hold and a sweet potato project was added. This decision was prompted by a staffing change in the Department of Forestry and Wildlife. Prior to this decision, an annotated bibliography of Bald Cypress Silviculture was completed and the responsible scientists had begun work on Water Tupelo regeneration.

Question. How long has the project been underway, and how much has been appropriated, by fiscal year, through fiscal year 2000?

Answer. The work began in fiscal year 1994. The appropriation for fiscal year 1994 was $235,000. For fiscal years 1995–2000 the appropriation was $212,000. This sums $1,507,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. State funding in support of these areas of research exceeds $750,000 annually.

Question. Where is the work being carried out?

Answer. Investigations are being conducted on the main campus at Louisiana State University—LSU—as well as the LSU's Experiment Stations at Calhoun, Crowley, Chase, Winnsboro, St. Joseph, and Washington Parish, Louisiana.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related projects?

Answer. The original work was scheduled for completion in 1999. Early term objectives have been met. The added experiments have closing dates ranging from fiscal years 1999 to 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted?

Answer. The last field evaluation was completed on December 12, 1995. The evaluation summary complimented the scientists on the interdisciplinary components associated with this project, along with their investigative procedures, report writing, and external networking.

TOMATO WILT VIRUS, GEORGIA

Question. Please provide a description of the research that has been funded under the tomato wilt virus research program grant.

Answer. This project supports research to help in the reduction of major crop losses in the southeastern United States due to Tomato Spotted Wilt Disease. Research focuses on vector biology and the virus transmitted by the vector. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES.

Question. According to this research proposal, or the principal investigator, what is the national, regional, or local need for this research?

Answer. Tomato Wilt Virus has become a major yield-limiting constraint on a number of very important food crops. This is a problem world-wide, but in the last ten year spread throughout the Southeastern states. Since this virus was first observed in Georgia in 1986, it has caused an estimated $100 million crop loss to the state. The wide host range of the virus and its vector make this a disease that is

difficult to manage. The new strategies to manage this virus in Georgia will be applicable to all states where it occurs.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research is to reduce losses in the major crops grown in the Southwest due to spotted wilt. This requires identifying the sources of virus and vectors, determining the dynamics of the thrips species that transmit the virus, elucidating how the virus is acquired by thrips to identify possible genes to enhance virus resistance in plants, and adapting to crops in the Southeast the Risk Assessment Index for spotted wilt that is currently in implementation and refinement at the University of Georgia for peanut.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This grant began in 1999 and has been supported at the level of $200,000 in fiscal years 1999 and 2000. A total of $400,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds provided for this grant are $84,736 for 1999.

Question. Where is this work being carried out?

Answer. Research is being carried out at the University of Georgia and The Coastal Plain Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives have not been met since this is a complex research area. The anticipated completion date for the continuing research is 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project has undergone peer review at the University level and an agency merit review in January, 1999. In summary, some progress has been made on all objectives of this research. Some progress has been made in understanding the relationship of cellular receptor proteins in the guts of the vector. This will aid in the identification, characterization and eventually cloning of these genes that then could be modified against the virus. Progress was also made in investigating the source of inoculum and seasonal dynamics of the vector. This included identification of several weed species that are alternative virus hosts. The Risk Assessment Index for management of spotted wilt disease was used to evaluate peanut cultivars and determine how they fit better into management of the virus on peanut.

TROPICAL AQUACULTURE/FLORIDA

Question. Please provide a description of the research that has been funded under the grant.

Answer. The agency is in the process of requesting the university to submit a grant proposal for this new research activity.

Question. According to the research proposal, or the principal research, what is the national, regional or local need for this research?

Answer. The researchers indicate that the ornamental fish industry is unique and important to the local economy where 69 percent of the total domestic production of ornamental fish occurs in Hillsborough County and 95 percent of the total production of ornamental fish is in southern Florida. At a national level, the United States imports 60-70 percent of the ornamental fish sold. This results in a significant trade deficit that can be reduced by increased domestic production.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. This is a new research grant to be funded in fiscal year 2000.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $170,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The university estimates that significant non-federal funding will be provided in fiscal year 2000 primarily from state sources to cover salaries of the principal investigators and operating expenses for the laboratory. As the program develops, additional non-federal funding is expected.

Question. Where is this work being carried out?

Answer. Research will be primarily conducted at the University of Florida's Tropical Aquaculture Laboratory located in Ruskin with some work to be done also at the main campus.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is fiscal year 2001. The project will be initiated in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency will evaluate the progress of this new project on an annual basis. The university will be required to submit an accomplishment report each year when the new proposal is submitted for funding. Since this is the first year of the program, the agency will conduct an external peer review of the proposal. The fiscal year 2000 review will be completed within three weeks of submission of the proposal. The researchers will be requested to develop a research proposal consistent with the National Science and Technology Council's Strategic Plan for Aquaculture Research and Development.

TROPICAL AND SUBTROPICAL RESEARCH

Question. Please provide a description of the research that has been funded under the tropical and subtropical research program grant.

Answer. Tropical and Subtropical Research—T STAR—Program is operating in coordination with the T STAR Caribbean and the T STAR Pacific Administrative Groups. State Agricultural Experiment Stations that are members of the Caribbean group are Florida, Puerto Rico, and the Virgin Islands; members of the Pacific group are Hawaii and Guam. The proposals are peer reviewed and are then selected for funding by the administrative groups.

Non-member institutional interests are represented by the Executive Director of the Southern Region Agricultural Experiment Station Directors, who is a member of the Caribbean group, and the Executive Director of the Western Region Agricultural Experiment Station Directors, who is a member of the Pacific group. The Agricultural Research Service also has representation on the two groups, as does the CSREES scientist who manages the T STAR grant program.

Funds for the program are divided equally between the two Basin Administrative Groups. The research objective of the program developed by the principal is to improve the agricultural productivity of many of the subtropical and tropical parts of the United States. Special research grants have been awarded for research on controlling insect, disease, and weed pests of crops; increasing the production and quality of tropical fruits, vegetables, and agronomic crops; promoting increased beef production through development of superior pastures; detection of heartwater disease of cattle and the influence of heat stress on dairy cattle reproduction; better use of land and water resources; developing computer models for efficient crop production systems and animal feeding systems; developing computer models for land-use decisions; using biotechnology methodologies for improving plant resistance to viral and bacterial diseases; using biotechnology to develop non-chemical, or biological, strategies for controlling insect pests; and potential for growing new speciality crops.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes this program provides research-generated knowledge that enables informed choices in the responsible use of natural resources, facilitates the health and well being of American citizens through improved food safety and nutrition, provides frontline protection for the rest of the nation's farms and ranches from serious plant and animal diseases and pests, and enhances the ability of U.S. farmers to produce crops efficiently and economically and/or to introduce new crops and agricultural products with export potential to gain market share abroad. On a regional basis, the T STAR program addresses the unique challenges of practicing tropical agriculture, that is, presence of pests year-round, heat stress, post-harvest processing to meet regulatory requirements for export, etc. The local need of Americans living in tropical regions of the nation for T STAR knowledge-based products is to design and implement sustainable agricultural development within fragile tropical agroecosystems—particularly on tropical islands—and to develop new crops and niche markets.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to increase the production and quality of tropical crops; control pests and diseases of plants and animals; promote

increased beef production; and conserve land and water resources. Grants have supported research on control strategies for Melon thrips; the biochemical nature of resistance to rust in nutsedge; development of bioherbicides for nutsedges; development of tomato cultivars with resistance to the spotted wilt virus; development of pheromones for monitoring and controlling the citrus root weevil; reducing the effects of heat stress in dairy cattle; development of a decision support system for vegetable production; finding cucurbits with resistance to silverleaf, developing a computer program for optimal supplementation strategies for beef and dairy cattle on tropical pastures; characterizing new strains of citrus tristeza virus in the Caribbean basin; determining the economic threshold for the citrus leaf miner on limes; using viral replicase genes to engineer rapid detection methods for geminiviruses; developing makers of bacterial spot resistance genes in tomato; breeding snap and kidney beans for resistance to golden mosaic virus and for heat tolerance; searching for resistance to papaya bunchy top disease; developing weed control for yam production; and bioengineering ringspot virus resistance in papaya.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The operation of the tropical and subtropical research program was transferred from the Agricultural Research Service to the CSREES, with funding being first provided in fiscal year 1983. Funds in the amount of $2,980,000 per year were appropriated in fiscal years 1983 and 1984. In fiscal year 1985, $3,250,000 was appropriated. In fiscal years 1986, 1987, and 1988, $3,091,000 was appropriated each year. $3,341,000 was appropriated in fiscal year 1989. The fiscal year 1990 appropriation was $3,299,000. The fiscal years 1991–1993 appropriations were $3,320,000 per year; $3,121,000 in fiscal year 1994; $2,809,000 in fiscal years 1995–1996 per year; and $2,724,000 per year in fiscal years 1997 through 2000. A total of $54,718,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. For fiscal year 1997, more than $1 million of non-federal funds were provided to the T STAR program from state appropriations; for 1998 $856,000; and for 1999 $158,500. These state funds were in the form of faculty salary time commitments and indirect costs covered by the institutions.

Question. Where is this work being carried out?

Answer. This research is being conducted in Florida, Puerto Rico, Virgin Islands, Hawaii, and Guam. Work is also being done in other Pacific and Caribbean countries through agreements between institutions but not using Federal funds.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional re related objectives?

Answer. Research on tropical crop and animal agriculture to increase productivity net profits, decrease harmful environmental impacts, conserve water, and natural resources. Objectives for some projects have been completed and new objectives addressing new issues are being developed in this ongoing project.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The projects that are funded by the T STAR Special Research Grant have been peer reviewed by panels of scientists in the United States to assure that good science is undertaken. Also, as part of the grant renewal process, progress reports are reviewed by the two Administrative Groups and by the grant manager at the national level. Workshops in which research results and their application for agricultural production are developed are conducted every two years. Research papers are published in the appropriate regional, national, and international forums available.

The development in 1995 of the Strategic Plan for T STAR provided a mechanism to define priorities, examine program direction, and recommend operational changes. One of the principal points considered was to bring the Caribbean and Pacific Basin components closer and better coordinated. T STAR and the coordination which it implies was an outcome that will make this program better. Each sub project is peer reviewed annually at the initiating institution by the T STAR panel and by the agency National Program Leaders.

TURKEY CARNAVIRUS, INDIANA

Question. Please provide a description of the research that has been funded under the Turkey Coronavirus, IN grant.

Answer. The objectives of the research will be to:

—develop enzyme-linked immunosorbent assays for detecting antibody to turkey coronavirus and turkey coronavirus antigen in turkey flocks,
—elucidate immune responses in turkey poults infected with turkey coronavirus, and
—determine which immunity, humoral and /or cellular, will provide the most effective protection for turkey poults against turkey coronavirus infection.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need for this research is that the turkey industry plays a major role in animal agriculture in the U.S. This enteric disease of young turkey poults, called turkey poult enteritis or poult enteritis mortality syndrome, has contributed to significant economic losses by producers in Indiana, North Carolina, South Carolina, Virginia and other states. The cost to the industry is in the millions. Currently, no effective medication or vaccination is available for control and prevention of the disease. Although turkey poults that recover from the coronaviral enteritis may develop long-term immunity, little is known about the specific immunity. The proposed research will lead to further study on the understanding of immunological interaction between turkey poults and individual turkey coronaviral proteins and subsequent development of recombinant or a deoxyribonucleic acid vaccine for effective prevention of the disease. The enzyme-linked immunosorbent assays that will be developed in this research will provide an efficient tool for diagnosis and control of turkey poult enteritis.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research was to develop enzyme-linked immunosorbent assays for monitoring antibody to turkey coronavirus and turkey coronavirus antigen in turkey flocks during acute outbreaks or recovery and in routine health monitoring and to develop effective vaccines to protect turkey poults against turkey coronavirus infection.

The investigators' laboratories have successfully propagated turkey coronavirus from intestines of infected turkey poults in 22-day-old turkey embryos, purified turkey coronavirus from the embryo intestines and have demonstrated an acute enteritis with decreased body weight gain in 7 or 10-day-old turkey poults by oral inoculation of the purified turkey coronavirus. This establishes an infection model to study immunology, pathogenicity, and pathogenesis of turkey coronavirus.

Turkey coronavirus has failed to adapt to grow in cell cultures after numerous attempts, hindering the development of antibody-capture enzyme-linked immunosorbent assay—ELISA—for antibody to turkey coronavirus that requires a large amount of highly purified turkey coronavirus antigens. Nevertheless, another alternative antigen source for ELISA has been investigated. Antibody to turkey coronavirus was found to be cross-reactive with infectious bronchitis virus antigen. An antibody-capture ELISA for detection of antibody to turkey coronavirus utilizing commercially-available ELISA plates coated with infectious bronchitis virus antigens is being developed. Since large numbers of clinical samples can be handled by ELISA rapidly and accurately, successful development of ELISA for antibody to turkey coronavirus will provide the turkey industry with a sensitive and specific tool for the diagnosis and control of turkey coronavirus infection.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999. The appropriation for fiscal year 1999 was $200,000 and for fiscal year 2000 was $200,000, for a total of $400,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds expended on this project in fiscal year 1999 were $72,311.06. These funds included $25,200 from state funds and $47,111.06 from a private commodity group.

Question. Where is this work being carried out?

Answer. Research is being conducted at Purdue University in the Department of Veterinary Pathobiology and the Animal Disease Diagnostic Laboratory.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is December 31, 2001. At present the project is on target to meet its stated objectives in the designated time period.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project was initially funded on July 19, 1999 and no evaluation has been performed since that time.

URBAN PESTS, GEORGIA

Question. Please provide a description of the research that has been funded under the Urban Pests, Georgia grant.

Answer. This research is focused on urban pests with specific emphasis on termites and ants. This project has been evaluated annually by CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes subterranean termites and ants are significant economic pests in the Southeastern United States. Damage and control costs for termites in Georgia were estimated at $44.5 million in 1993. It is estimated that professional pest control operators apply over 23 million pounds of active ingredients in and around homes each year. Chemicals currently registered for controlling these pests are less efficacious than desired and applied at an intensity that exceeds most agricultural settings.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the termite research is to better understand the biology of subterranean termites and their responses to selected environmental cues in order to design monitoring, risk assessment, and precision-targeting control strategies using conventional and alternative methods. Additionally, an objective is to improve the identification of subterranean termites to the species level through studies of the termite genome, cuticular chemistry, morphometric characteristics and termite behavior. Specific accomplishments in the termite research are as follows: Multi-disciplinary research using morphometric comparisons, agonism bioassays, chemotaxonomic phenotypes, mark-release-recapture and genetic analysis shows that subterranean termite populations display a multiple-queen colony organization. This field research also proved that termite movement between established feeding sites is not random. It demonstrates that current understanding of termite population structure must be reconsidered. It is clear from this work that termite population structure cannot be determined using only a single technique, like the current industry standard of mark-release-recapture, and that the organization of termite populations is dynamic. This work raises questions concerning the implementation of termite baiting control tactics and claims of structural protection using the current termite baiting technology which in the past four years has become a multi-million dollar industry in the United States. This same multi-disciplinary research approach has demonstrated that the Formosan termites from 7 separate sites in the Atlanta, Georgia, Metro Area were from a single maternal line and that this maternal line originated from New Orleans, Louisiana not, Charleston, South Carolina as originally suggested. The research also provided strong evidence that the subterranean termite species that is infesting areas in and around Paris and Southwestern France is from the United States, not southern Europe. Research on new chemistries demonstrated that the currently registered non-repellent termiticides require longer than 10 minute exposure times at concentrations at least twice the current registered application rates to effect greater than 90 percent mortality in the termites tested in bioassay. This work cannot explain the purported field efficacy of the new termite control concept of the "treatment zone" which allows termites to penetrate the soil but kills them before they breach the barrier and infest a structure. Field and laboratory research with insect pathogenic fungi used as a biological control agent indicate that multiple soil applications are required and that population impacts are likely limited to the area of application not disparate feeding sites. Laboratory research on wood treatments using borate materials indicates that these materials discourage termite feeding but not exploration for additional, untreated wood. Tests designed to treat infested structural wood using a new insecticide chemistry provided evidence of killing termites at sites untreated by the insecticide but known to be visited by the population of termites in the treated area.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal years 1991–1993 was $76,000 per year. In fiscal year 1994 the appropriation was $71,000 and in fiscal years 1995 through 2000 the appropriation was $64,000 each year. A total of $683,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant by fiscal year were as follows: 1991—none, 1992—$26,000, 1993—$18,000, 1994—$59,530, 1995—$59,539, 1996—$30,000, 1997—$80,00, 1998—$50,000, and 1999—$100,000.

Question. Where is the work being carried out?

Answer. This research and technology transfer program is being conducted at the University of Georgia, Department of Entomology, Athens, Georgia.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The grants have been processed on a year to year basis pending the availability of funds, however, the original objectives were essentially a five-to eight-year plan of work. CSREES entomologists judge that excellent progress has been made in meeting the objectives, especially on foraging behavior and the identification and development of termite baits.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project has been evaluated on an annual basis by CSREES through progress reports and by evaluation of contributions presented through the Entomological Society of America meetings in December of 1999.

VIDALIA ONIONS, GEORGIA

Question. Please provide a description of the research that has been funded under the Vidalia Onions, Georgia grant.

Answer. The research has concentrated on developing pungency testing procedures to improve quality and sensory consistency of Vidalia onions.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for the research?

Answer. Vidalia onions are a specialty crop of extreme importance to the economy of certain areas of Georgia. The project is directed toward improving product quality and the nationally and internationally economic competitiveness of this production system.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The research has demonstrated that chemical tests can be used to accurately predict the pungency of onions prior to harvest, and perhaps flavor categorization, to consumers. The results have also indicated that several diseases affecting onions are the most serious problem in regard to quality and production.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The project was funded for $84,000 for 1998; for $100,000 in fiscal year 1999; and for $100,000 in fiscal year 2000. A total of $284,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year.

Answer. The non-federal funding for this project for the last two years was $193,137 from the state of Georgia and $251,427 in private funding.

Question. Where is the work being carried out?

Answer. The work is being conducted at the Coastal Plain Experiment Station in Tifton, Georgia and in test plots in several commercial field sites.

Question. What was the anticipated completion date for the original objections of the project? Have those objectives been met? What is the anticipated completion date of additional objectives?

Answer. The anticipated duration for the original project was five years. The initial objective of establishing procedures for pungency testing has proceeded ahead of schedule. The plant disease problems that have emerged will likely require several additional years, although the incidence and severity of these diseases are highly variable from year to year.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project is in its second year and a CSREES review has not yet been done.

VITICULTURE CONSORTIUM, NEW YORK AND CALIFORNIA

Question. Please provide a description of the research that has been funded under the Viticulture Consortium grant.

Answer. The University of California and Cornell University in New York conducted research on varietal responses of grapes, modeling of water requirements,

management of diseases including Phyloxera and other cultural aspects of grape production. Funds were used by the lead institutions to fund projects in the various grape producing states within their region. Grants were made based on peer reviewed proposals and selected competitively by regional groups based on priorities developed by researchers, extension, and industry personnel.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The research being carried out is designed to help the viticulture and wine industries remain competitive in the U.S. and in the global market. Further, disease and insect problems are a concern of the industry, especially in new strains of phyloxera while overall improvement in all cultural management approaches to grape production need to continue.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research is to maintain or enhance the competitiveness of the U.S. Viticulture and wine industry in the global market.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1996–1997, $500,000 per year; fiscal year 1998, $800,000; fiscal year 1999, $1,000,000 and $1,000,000; in 2000. A total of $3,800,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Each year the viticulture industry provides matching contributions in excess of the appropriated federal funds.

Question. Where is the work being carried out?

Answer. Research is being carried out in 8 eastern states and California through 18 grants.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The research priorities set by the guidance group have not been met. The research is varied and complex and will take many years to complete.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project underwent merit review in January, 1999. The research proposals are peer-reviewed in both regions before selection. The review group is composed on industry, research, and extension personnel that are experts in viticulture.

WATER CONSERVATION, KANSAS

Question. Please provide a description of the research that has been funded under the water conservation program grant.

Answer. This research program is designed to develop and disseminate technical and economic information on the efficient use of water for irrigated crop production in western Kansas. The program has the following objectives: 1. Develop regression models to estimate the longevity of subsurface drip irrigation systems using calculations of annual system performance deterioration based on 13 years of operating pressures and flow rates; 2. Evaluate utilization of livestock effluent with subsurface drip irrigation and its effect on water redistribution and corn water use patterns; 3. Develop best management practices for nitrogen fertigation using subsurface drip irrigation systems for corn; 4. Estimate the long run economic impacts of irrigation efficiency improvements for irrigated corn, wheat, and grain sorghum in the farm sector and affiliated sectors of the High Plains economy; 5. Disseminate irrigation research information and best management practice recommendations to Kansas irrigators through a series of extension bulletins and updates based on research-based information.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The need to conserve water has focused attention on more efficient alternatives such as subsurface drip irrigation. This research will be of particular significance within the state and region. However, it also has national and international applications as advanced irrigation systems, such as subsurface drip irrigation, will be needed to improve irrigation water use efficiency in the next century. Economic research initiated in 1998 is examining the impact of adoption of improved water conservation techniques on the entire regional economy rather than just on the short term economics faced by the individual irrigator. This research will help soci-

ety determine whether society should have a role in providing incentives to increase adoption rates of water conservation technology.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The research goal is to determine the feasibility of subsurface drip irrigation and other alternative irrigation systems in western Kansas to sustain irrigated corn production to support the beef feedlot industry. The project also supports an educational effort through collection and dissemination of information on efficient irrigation methods. Subsurface drip irrigation acreage is increasing in Kansas and farmers are obtaining results on their own farms.

The computer program Irrigation Economics Evaluation System—IEES—was distributed by the Kansas State University Cooperative Extension Service and is being used by Kansas irrigators. A report has been published which documents the data requirements and algorithms used in the model. A users guide is also available.

A report entitled "Economic Analysis of Alternative Irrigation Systems for Continuous Corn and Grain Sorghum in Western Kansas," has been completed. The results of this study indicate that a low drift nozzle, center pivot system is the most profitable center pivot system to use for irrigation of corn and grain sorghum. Overall, a surge flood system was the most profitable because of its relatively low ownership costs. Although the subsurface drip system shows some potential, it is only economically feasible when above-average crop yield and price conditions exist.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1993 with an appropriation of $94,000; $88,000 in fiscal year 1994; and $79,000 in fiscal years 1995–2000 each year. The total funds appropriated are $656,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal state of Kansas funds provided to this project were as follows: 1997, $119,659 state funds; 1998, $135,993 state funds; and 1999, $129,850 state funds.

Question. Where is this work being carried out?

Answer. The research is being conducted at Kansas State University. The field portion of the research is being conducted on Research Centers at Colby and Garden City, Kansas. Additional work is being carried out on campus at the Departments of Agronomy and Agricultural Economics in Manhattan, Kansas.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original anticipated completion date for the project was 1998. One of the most important objectives of the study is to evaluate longevity of the subsurface drip irrigation systems. These sites are unique to the region and very little information is available on system longevity. Pressing water quality problems of a regional and national scope has necessitated a change in the objectives to developing nutrient management practices under subsurface drip irrigation and utilization of livestock wastewater with subsurface drip irrigation. Additionally, changes in the federal farm program which allow greater planting flexibility has an effect on how irrigators make water/land allocation decisions. Field and economic studies related to allocation strategies, nutrient management, and wastewater utilization should be completed in three years. The projected completion date is 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project has been peer reviewed in January 2000. The reviewers felt the project concept to be valid and the timetable for accomplishments to be on target.

WEED CONTROL, NORTH DAKOTA

Question. Please provide a description of the research that has been funded under the Weed Control, North Dakota grant.

Answer. A major focus has been developing and evaluating systems to reduce herbicide use in crop production. The experiments of longest duration are field evaluations of sustainable, reduced tillage and conventional crop rotation systems to ascertain changes in weed species and densities and in economic returns over time when weed management is reduced. Another emphasis has been weed biology, particularly understanding the unique physiological and genetic traits of herbicide-resistant kochia and wild oat in an effort to recommend the most cost-effective management alternatives. Another goal has been to improve the efficiency of postemergent herbi-

cide use by utilizing additives that maximize weed control with reduced amounts of herbicide and by reducing spray volume and adapting new nozzle designs that improve application techniques.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The research address new methods to control weeds using systems control. The principles concerning effective use of additives with postemergent herbicides are being applied to improving the efficiency of postemergent herbicide use across the nation. Similarly, adaptation of herbicide application technology that allows reduced spray volumes while sustaining herbicide effectiveness is of nationwide benefit. The increased understanding of the inheritance and management of herbicide resistance in kochia and wild oat will be beneficial to management of these weeds in the central and northern regions of the United States where these weeds are abundant and cause major losses annually. The long-term field experiments should provide useful information on the positive and negative impacts of reduced weed management systems wherever spring-sown small grains are the primary crop.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The initial major activity was a long-term series of experiments to evaluate changes in weed species and populations and the economic returns in conventional, sustainable and reduced tillage systems with rotations that are up to four years long. The research was initiated in 1993, but atypical wet conditions occurred for the first three years. It is felt that at least two complete cycles of crop rotations (eight years) will be necessary to accurately assess what farmers can expect from adopting new management systems.

The research to improve the efficiency of herbicides lead to development of the principle that effectiveness of many postemergent herbicides can be improved by using additives that dissolve the herbicide. This principle was utilized to develop a basic pH adjuvant that improves the effectiveness of several postemergent herbicides.

The research with genetics of herbicide-resistant kochia has determined that inbreeding depression occurs when this naturally cross-pollinated plant is self-pollinated to develop genetically uniform plants, which are desirable for many research objectives related to inheritance of genetic traits. However, this discovery also demonstrates that cross-pollination must be maintained in kochia for research intended to accurately simulate genetic changes and competition with crops that may occur in a field.

Resistance of wild oat to many of the major herbicides used for its control in the United States has been documented, including resistance to imazamethabenz which has not been reported previously. Molecular biology and physiological studies have been initiated to better understand the cause of imazamethabenz resistance in wild oat, so management strategies can be recommended. Initial research has demonstrated that weed control by herbicides applied to weeds of recommended size has been equally effective when spray-drift-reducing or conventional nozzles are used. Because drift-reducing nozzles produce large droplets, the next step of evaluation is being initiated to determine whether small weeds are treated and controlled effectively when drift-reducing nozzles are used.

Question. How long has this work been underway and how much has been appropriated by fiscal year through year 2000?

Answer. The support by this grant began in fiscal year 1992 and appropriation for fiscal years 1992 and 1993 was $500,000 per year; $470,000 in fiscal year 1994; and $423,000 per year in fiscal years 1995 through 2000. A total of 4,008,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $27,030 state appropriations in 1992; $48,472 state appropriations in 1993; $41,969 state appropriations in 1994; $71,847 state appropriations in 1995; $62,134 state appropriations in 1996; $78,579 state appropriations in 1997; and an estimated $70,000 state appropriations in 1998 and 1999.

Question. Where is this work being carried out?

Answer. Research is being conducted at the North Dakota State University.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original completion date for the long-term rotation experiment, utilizing the conventional, reduced tillage and sustainable management systems, was

anticipated to be a minimum of five years, but the experience with atypically environmental conditions suggest that 8 to 10 years will be necessary to attain a relatively steady state or logical end of the research. The current intent is to continue the research until at least 2002. The problems encountered due to the inbreeding depression in kochia suggests that it will be difficult to determine the true genetic nature of inheritance of herbicide resistance in this weed as quickly as projected. Due to the discovery of herbicide resistance of wild oat to imazamethabenz, the genetic and molecular biology research to characterize the nature of this resistance is just getting a good start. It is anticipated that the genetic and biology research with kochia and wild oat will need to continue until at least fiscal year 2002.

Question. When was the last Agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. A scientific peer review of the written proposal was conducted in fiscal years 1998 and 1999 by CSREES prior to awarding the grant. Based on comments from the reviewers, CSREES is planning to conduct an onsite scientific peer review of this grant.

WETLAND PLANTS, LOUISIANA

Question. Please provide a description of the research that has been funded under the Wetland Plants, Louisiana, grant.

Answer. CSREES has requested the university to submit a grant proposal that is currently in preparation.

Question. According to the principal researcher, what is the national, regional or local need for this research?

Answer. There is local, regional, and national need for this research. Coastal wetlands erosion is a serious environmental problem in many coastal locations around the United States. The problem is particularly severe in Louisiana where an acre of coastal wetlands is lost to erosion every 20 minutes. Current technologies, even at great expense, can only slightly reduce these losses. The research this grant is funding has the potential to provide a significant improvement with respect to both the magnitude and expense of future coastal erosion control efforts.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to develop an economically-feasible approach to controlling coastal wetlands erosion that would utilize vegetation to retain areas threatened by erosion and to rebuild lost land. To accomplish this, a system that incorporates agricultural principles involved in crop production is required. Specifically, a seed-based system utilizing appropriate planting material is required. While last year was the first year of funding for this project from CSREES, progress has been rapid in developing this seed-based system, and field trials in the marsh were initiated in 1999.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999, and the appropriation for fiscal years 1999 and 2000 was $600,000 per year for a total of $1,200,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant are as follows: $18,391 state appropriations, $5,319 industry grants, and $8,691 miscellaneous in 1999. In addition, the university had $110,081 in unrecovered indirect costs.

Question. Where is the work being carried out?

Answer. Research is being conducted at the Louisiana Agricultural Experiment Station.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Since this is a new program, the original objectives have not yet been met.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This is a new project, and there has been no prior agency evaluation. An agency evaluation is planned for fiscal year 2000 following one year of project operation.

WHEAT GENETICS, KANSAS

Question. Please provide a description of the research that has been funded under the Wheat Genetics, Kansas grant.

Answer. This project provides partial support for the Wheat Genetics Resource Center at the University of Kansas. The Center focuses on collection, evaluation, maintenance, and distribution of exotic wheat-related germplasm needed to develop new wheat cultivar resistant to disease, insects and environmental stress.

Question. According to the research proposal or the principal research, what is the national, regional or local need for this research?

Answer. The principal researcher believes most cultivated varieties of wheat are derived from common sources. They lack the rich genetic diversity needed to develop resistance to diseases, insects, and environmental stress. The replacement of genetically-rich primitive cultivar and land races by modern, more uniform cultivars all over the world is causing erosion of wheat germplasm resources. New pests or those that have overcome varietal resistance pose a constant threat to the Nation's wheat production. Genetic resistance often resides in wild relatives of wheat. The researchers believe this program, which was established in Kansas, is providing service to wheat breeders nationally and internationally.

Question. What was the original goal of this research and what has been accomplished?

Answer. The original goal of this research was to enhance the genetic diversity available to wheat breeders nationally and internationally by collecting, evaluating, maintaining, and distributing germplasm derived from wild relatives of wheat. To date, 39 germplasm releases have been made containing new genes for resistance to such pests as Hessian fly, greenbug, leaf rust, soil-borne mosaic virus and Russian wheat aphid. Germplasm stocks with resistance to leaf rust and powdery mildew are under development. Evaluation of germplasm for important resistance genes was carried out by Center scientists and cooperating institutions. Center scientists have introduced antifungal protein genes into the wheat plant to enhance its survival against pathogen attacks. One transgenic wheat line gave enhanced resistance to wheat scab, a devastating disease of wheat. In 1998, the Center filled 20 requests from U.S. wheat breeders for seed from the germplasm collection and 10 requests for seed of germplasm releases, as well as 34 requests from international breeders.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Work supported by this grant began in fiscal year 1989. Appropriations were for fiscal year 1989, $100,000; fiscal year 1990, $99,000; fiscal year 1991, $149,000; fiscal years 1992–1993, $159,000 per year; fiscal year 1994, $196,000; fiscal years 1995–1997, $176,000 each year, and $261,000 for fiscal years 1998, 1999, and 2000. A total of $2,173,000 has been appropriated.

Question. What is the source and amount of nonfederal funds provided by fiscal year?

Answer. The nonfederal funds provided for this grant were as follows: $609,309 in 1991; $531,167 in 1992; and $730,082 in 1993, $468,960 in 1994; $563,671 in 1995; $457,840 in 1996; $495,820 in 1997; $155,279 in 1998 and $452,600 in 1999. Sources include state appropriations, product sales, and other organizations, such as state commodity associations.

Question. Where is this work being carried out?

Answer. This research is being conducted at Kansas State University at the Wheat Genetics Resource Center. The principle investigator also reports collaborative projects with other departments at Kansas State University, as well as other institutions in the U.S.

Question. When was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The collection, evaluation, and enhancement of wheat germplasm is a continual process. Therefore, this project does not have a defined completion date. Some objectives related to germplasm evaluation have been completed in fiscal year 1999 and other objectives which are related to other genetic sources are still in the developmental stage.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project was peer reviewed by the institution, Kansas Agricultural Experiment Station, and was found to address important issues in the winter wheat industry in Kansas and other states. The research has been productive based on

germplasm releases and peer-reviewed journal articles and other publications. Additionally, each annual proposal is reviewed by an agency scientist.

WOOD UTILIZATION RESEARCH

Question. Please provide a description of the research that has been done under the wood utilization grant.

Answer. The research includes: developing processes to upgrade wood products made from small-diameter or low quality trees to higher value structural applications; catalyzing the formation of new business enterprises; reducing environmental impact while improving systems for timber harvesting and fores products manufacturing; increasing the life of wood in use through preservation and good design; and assisting industry to be more innovative.

Question. According to the research proposal, or the principal researchers, what is the national, regional, or local need for this research?

Answer. The forest products industry is very fragmented with many small firms which benefit from publicly-sponsored research. Research provides the woodworking machinery and tooling industry with the technology needed to be more competitive in the global economy. Most of the companies helped by this research are too small to afford in-house research groups. Shifts in resource availability and increased costs of the timber that is still available demand more complete utilization in order for wood to remain competitive.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to generate new knowledge that will benefit the wood industry and the environment. New scientists are trained. Consumers benefit from better and more environmentally-sound products. Among the major accomplishments of the eight centers are (1) design of glue-laminated beams that are reinforced with plastics to save 25–40 percent of the wood fiber that would otherwise be needed, (2) technology to apply wood preservatives using super fluids to reduce environmental problems associated with present commercial treatments, (3) better harvesting systems that are efficient and environmentally acceptable, (4) increase of wood machining speeds and reduction of saw blade width to increase productivity and save raw material, (5) a patented system to apply pressure and vibration to prevent enzymatic sapstain which degrades hardwood lumber by $70 to $200 million per year, (6) reduction of quantity of wood bleaching chemicals needed by wood pulp producers, (7) design and strength of wood furniture frames to minimize wood requirements, (8) adoption of European frame saw technology to composite lumber to provide a new raw material source for industry, (9) improved technology to nondestructively scan standing trees for mechanical properties of the wood, (10) reduced warp in structural lumber produced from small-diameter trees, (11) characterization of the wood products industry, (12) heartwood formation, (13) recovery of preservatives from treated wood, (14) installation of a statistical process control system has been installed in one sawmill with impressive cost savings, and (15) development of cost effective and environmentally-friendly processes for removing high value chemicals from bark.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1985, $3,000,000; fiscal years 1986 through 1989, $2,852,000 per year; fiscal year 1990, $2,816,000; fiscal years 1991 and 1992, $2,852,000 per year; fiscal year 1993, $4,153,000; fiscal year 1994, $4,176,000; fiscal years 1995 and 1996, $3,758,000 per year; fiscal years 1997 and 1998, $3,536,000 per year; fiscal year 1999, $5,136,000, which provided a half million increase for the six existing centers, and $1,000,000 for the two new centers; and $5,136,000 in fiscal year 2000, which provided $577,000 to establish a new center in Alaska. Total appropriations are $56,117,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The following are non-federal funds provided by state:

—Mississippi State University non-federal funds were: State appropriations, $2,498,800, $2,178,725, $2,353,225, $2,331,691, $2,778,535, $2,582,617, $2,543,017, and $2,717,448 for 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, and 1999, respectively. In addition, industrial funds averaged $876,057 for the 5 years from 1995 to 1999 in support of the Mississippi Forest Products Laboratory.

—Oregon State University state appropriations were: $1,337,962, $1,394,304, $1,256,750, $1,252,750, $1,417,755, $1,117,000, $1,100,000, $1,352,000, and

$1,337,000 for 1991, 1992,1993, 1994, 1995, 1996, 1997, 1998, and 1999, respectively. Estimated non-public support was $731,000 this year.

—Michigan State University non-federal contributions were $605,000, $590,000, and $700,000 for 1997, 1998, and 1999, respectively.

—Three new locations were added in 1994: University of Minnesota-Duluth non-federal match was $590,000, $550,000, $560,000, $371,930, $307,532, and $510, 939 for 1994, 1995, 1996, 1997, 1998, and 1999, respectively.

—North Carolina State University was $126,000, $165,000, $135,000, $163,216, $323,134, and $518,258 for 1994, 1995, 1996, 1997, 1998, and 1999, respectively.

—University of Maine was $600,000, $445,723, $459,100, $477,464, $526,210, and $148,032 for 1994, 1995, 1996, 1997, 1998, and 1999, respectively.

—Two new centers were added in 1999: The University of Tennessee non-federal funds for 1999 were $150,987. The consortium of the Universities of Idaho and Montana and Washington State University non-federal funds for 1999 were $305,000.

Question. Where is the work being carried out?

Answer. There are nine locations. The initial three—Oregon State University, Mississippi State University, and Michigan State University—were joined by the University of Minnesota-Duluth, North Carolina State University, and the University of Maine in fiscal year 1994. In 1999, they were joined by a center at the University of Tennessee, and a second center at the University of Idaho, which includes a consortium of Idaho, Montana, and Washington State. In 2000, funds for a wood utilization center in Alaska were appropriated. This center is just getting organized now.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objective was to build and maintain three strong regional centers of wood utilization research. These centers have been established, and six more centers have been added. Projects begun in 1999 will be completed by 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. On site reviews of centers are conducted on a rotating basis. Each center's plans are reviewed yearly or more frequently. Progress reports are reviewed yearly. Center directors met together for joint planning in June 1996 and in February 1999. Centers all have advisory committees or research committees which meet periodically. CSREES conducts informal on-site reviews periodically. The Minnesota and Oregon sites were visited in 1996, and the North Carolina site was visited in 1997. Oregon State was visited in 1998. A Departmental panel reviewed the original three centers in 1992 and 1993. At that time, the original objectives were broadened to address environmental concerns. The centers are helping industry meet environmental objectives by conducting research leading to sustained timber production; extending the timber supply through improved processing; developing new structural applications for wood; and developing wood extractives to substitute for pesticides, preservatives, and adhesives.

WOOL RESEARCH

Question. Please provide a description of the research that has been funded under the wool research grant.

Answer. The overall goals for this research are to develop objective measures of wool, mohair, cashmere and other animal fibers to improve the quality of wool products while enhancing the profitability of the U.S. sheep and Angora goat industries. Specific objectives include: develop and evaluate measurement techniques for rapid objective evaluation of wool, mohair, cashmere and other animal fibers; increase the use of objective measurements to increase fiber production, quality and income to producers, and increase consumer acceptance of fabrics made from these fibers. The fiscal year 1999 grants terminate between August 2000 and June 2001. The 2000 grant proposals will soon be requested by the agency. All grants are reviewed for relevance to industry needs and undergo scientific peer review.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. Collaboration exists among researchers in Texas, Wyoming and Montana associated with this grant and other federal, university and industry scientists to assure responsiveness to the needs of those involved in wool and mohair production, marketing and processing. The sheep and goat industries and the principal researchers believe that this research to be of national, regional and local need. The

research on wool, conducted by means of this grant, represents the only research efforts in the U.S. focused on improving the efficiency of measuring and assuring wool, mohair and cashmere quality for garments made from these fibers.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The overall goal for this research is to develop objective measures of wool, mohair, cashmere and other animal fibers with a focus on improving the efficiency of determining the quality of products made from these fibers while enhancing the profitability of the sheep and Angora goat industries. Research accomplishments included the development of rapid and inexpensive measurements of fiber diameter, distribution of animal fibers, and other fiber properties such as fiber length and color. Each of these properties are very important for grading and processing to determine ultimate softness, durability, dye characteristics, comfort, and garment price. Within the past year, evaluation of laser and near-infrared spectroscopy techniques have been completed by the three cooperators in this project in collaboration with Yocom-McColl Testing Labs, the main animal fiber testing lab in the United States. Two of the principal investigators authored an article in the American Society for Testing and Materials on standard methods of test for these instruments that are now in the final stages of acceptance by the Society, and therefore, the U.S. textile industry. In part, due to our efforts of this grant, all animal fibers tested for fiber diameter distribution by this commercial laboratory are now tested using one or the other of these new instruments. This has resulted in labor savings, thereby a reduction in the price for some associated fiber tests. Producers, traders, and processors now receive more accurate fiber data at reduced cost and with shorter turnaround times. Because this form of testing is also recognized by the international textile community, U.S. animal fibers are now more readily accepted and accessible as international commodities. Additional instruments, primarily for measuring length and strength, have also been evaluated with the ultimate objective of better describing domestic wool that will eventually permit electronic trading of animal fibers. These measurements impact the efficiency of the sheep and Angora goat industries, the effectiveness of monitoring the quality and consistency of imported products, and the satisfaction of buyers of wool, mohair and cashmere textiles. Other experiments aimed at enhancing our ability to establish the value of specialty animal fibers were successfully completed and reported for mohair, cashmere and other fibers. Experiments were also conducted to identify more productive rams and billie goats; to select for finer and more valuable mohair in Angora goats; to establish the genetic, nutrition, and management requirements for the concurrent production of lean lamb meat and high quality wool; and to demonstrate the economic advantages to producers of skirting and classing their raw wool prior to marketing. Research and education efforts have kept U.S. processors and producers current on the status of the wool markets world wide. It is important that the U.S. producers of wool, mohair, and cashmere are competitive in the world market and that consumers are assured high quality textiles.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Grants have been awarded from appropriated funds in the amount of $150,000 per year for fiscal years 1984–1985; $142,000 per year for fiscal years 1986–1989; $144,000 for fiscal year 1990; $198,000 for fiscal year 1991; and $250,000 per year for fiscal years 1992–1993; $235,000 for fiscal year 1994; $212,000 per year for fiscal years 1995–1997; and $300,000 per year for fiscal years 1998–2000. A total of $3,481,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $150,913 state appropriations, $11,800 product sales, $5,817 industry, and $3,556 miscellaneous in 1991; $111,394 state appropriations, $25,451 product sales, $41,442 industry contributions and $3,068 miscellaneous in 1992; $152,699 state appropriations, $39,443 product sales, $40,804 industry contributions and $3,556 miscellaneous in 1993; $150,094 state appropriations, $35,284 product sales, $36,484 industry contributions and $3,556 miscellaneous in 1994; $67,345 state appropriations, $10,000 product sales, and $34,325 industry contributions in 1995; $39,033 non-federal support in 1996; $174,486 non-federal support in 1997; $200,307 state appropriations and $13,000 industry contributions in 1998; and $202,854 state appropriations, $14,385 industry contributions, and $34,000 miscellaneous in 1999.

Question. Where is this work being carried out?

Answer. The research is in progress at the Texas A&M University, Texas Agricultural Experiment Station at San Angelo, the University of Wyoming at Laramie, and Montana State University at Bozeman.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The original objectives to improve the efficiency and profitability of wool, mohair and cashmere production and marketing are still valid and subject to further research.. Specific objectives for individual laboratories and experiments are continually revised to reflect the changing research priorities for the wool, mohair, and cashmere industries and to satisfy consumer demands for products from these fibers. It is anticipated that current research will be completed by fiscal year 2005.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An external review of the overall wool research program was conducted in 1998 in Las Cruces, New Mexico by a team consisting of industry experts and peers from the scientific community. The review team concluded that the program was very productive and beneficial to the United States wool, mohair, and cashmere producers as well as the allied fiber industries. Research achievements, noted by the review team, included program input for testing methods and standards used to buy and sell wool for international trade.

In addition to the program review, grant proposals are annually reviewed and the research facilities are periodically visited. The principal investigators meet annually to evaluate progress and re-evaluate research priorities according to industry needs. Because the research encompassed in this grant is a component of a regional research project, accomplishments are reported annually to scientific peers and representatives from the sheep, goat, wool, mohair, and cashmere industries. In addition, the overall regional research project is peer reviewed every third year.

RESEARCH FEDERAL ADMINISTRATION PROJECTS

AGRICULTURAL DEVELOPMENT IN THE AMERICAN PACIFIC

Question. Please provide a description of the research that has been funded under the Agricultural Development in the American Pacific program.

Answer. The Agricultural Development in the American Pacific (ADAP) is a primary means for land-grant research, extension, and instruction programs of the five participating institutions of American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and University of Hawaii, to collaborate and cooperate to enhance their impact on Pacific tropical agriculture and communities. ADAP is a mechanism to address common regional client-based issues while maintaining cultural, rural, economic, and environmental integrity. This research grant is awarded noncompetitively to a program planned and approved by the five involved land-grant institutions.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the five participating institutions are geographically dispersed yet facing many similar issues which can best be served through extensive networking and communication. ADAP facilitates communications and seeks to raise levels of academic achievement and improve the quality of education. ADAP's most unique feature is that twice each year it brings together the five Deans/Directors to discuss agriculture and human resources issues facing isolated, tropical ecosystems in the Pacific, and to plan and implement activities to address those issues. Priorities are categorized in three areas: sustainable systems, collaborations/partnerships, and communication systems. Activities range from joint and collaborative efforts to overcome taro leaf blight in the Pacific, to seeking recognition of Pacific tropical agriculture by the National Association of State Universities and Land-Grant Colleges.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. ADAP's goals are to develop human resources within the institutions, to manage more effectively agricultural programs within and among the institutions, and to focus available resources on critical agricultural issues of the Pacific. Ongoing projects include animal health surveys, livestock waste management, dietary guidelines for Pacific foods, youth-at-risk assessment, artificial insemination demonstration/education, and market information collaboration with "state" Departments of Agriculture. ADAP is now working jointly with the 22-nation Secretariat of the Pacific Community in developing a paraveterinary program. This program will use distance learning and site visits to train students from the cooperating nations and territories in animal health. This is a critical need for the Pacific region. Both ADAP and the Secretariat of the Pacific Community will contribute money as well as skilled personnel to assist in this project. In another regional cooperative

effort, ADAP led a retreat for strategic planning among the "state" and national Departments of Agriculture in the Pacific region in July 1999. That retreat identified food insecurity as a major issue for Pacific island nations, and ADAP is formulating a forum in collaboration with the Secretariat of the Pacific Community to address the issue.

Question. How long has this work been underway and how much has been appropriated, by fiscal year, through fiscal year 2000?

Answer. This work was funded for seven years with an annual appropriation of $650,000 to the former Extension Service. In fiscal year 1994, an appropriation of $608,000 was made to CSREES to continue the ADAP program. In fiscal year 1995 the appropriation was $527,000. The fiscal years 1996 and through 2000 appropriations were $564,000 each year. The appropriation total to CSREES is $3,955,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds are not provided. Unspecified in-kind support, such as facilities, equipment, and administrative support, are provided by each institution and, in some specific projects, by non-ADAP collaborating institutions.

Question. Where is this work being carried out?

Answer. This work is being carried out by American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and the University of Hawaii.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The ADAP program has been achieving original program objectives, particularly in the areas of improvement in institutional capacity and communications. It is anticipated that an additional 5 to 10 years will be needed to fully achieve collaborative integration of the American Pacific land-grant programs.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. A formal review of the ADAP program was conduted July 1–10, 1997, and included visits by review team members to American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and University of Hawaii. ADAP incorporated review recommendations in preparing and adopting a new five-year 1997 strategic plan. An agency specialist conducts a merit review of the proposals submitted in support of the appropriation annually. In a review of the April 1999 proposal, progress was judged satisfactory.

AGRICULTURAL WASTE UTILIZATION, WEST VIRGINIA

Question. Please provide a description of the research that has been funded under the Agricultural Waste Management, West Virginia grant.

Answer. The West Virginia Department of Agriculture is conducting a project to validate the applicability and effectiveness of anaerobic filtration for treating municipal and agricultural wastes. POWER anaerobic filtration is a leading-edge technology specifically developed to biologically recover nutrients and energy from organic waste streams and produce an effluent which meets discharge permit requirements.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The current need for this technology is local, national, and international. The beneficiaries of this technology will be both the people and the environment anywhere in the world where problems of food, fertilizer, and energy shortages are currently in conflict with the preservation of environmental quality. The direct benefits include enhanced and expanded waste water capacity, creation of new jobs, and revenue from by-products and water quality improvement.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was to determine the applicability of anaerobic digestion to convert organic waste materials to energy in the form of biogas, thereby reducing the amount of organic matter for disposal. The goal will go beyond the testing of waste materials in the digester and proceed with a program to compare the microbiological loading of rivers, where known environmental pollution is measurable, and where the total bacterial concentration in the rivers could be determined in real-time with a bioprobe. Several demonstration tests have been conducted on municipal solid waste, municipal sludge, poultry mortality and poultry litter. These demonstrations have validated the applicability of this technology to a waste stream formulated to reduce measurable river and stream pollution.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 and the appropriation for fiscal year 1998 was $360,000; fiscal year 1999 was $250,000; and fiscal year 2000 was $425,000. A total of $1,035,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-Federal funds are not being expended.

Question. Where is this work being carried out?

Answer. Research is conducted at Moorefield, West Virginia and West Virginia State College, Charleston, West Virginia.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date of the original objectives is June 30, 2000. These objectives are within the original schedule. The additional objectives should be completed by June 30, 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An on-site evaluation of the project was conducted in January 2000. The pilot scale digester has been operating continuously since 1995, treating a variety of municipal and agricultural wastes. In 1999 it has primarily been used to treat poultry litter and poultry mortalities. The components of the primary digester are: mix tank, holding tank, grit removal trap, feed tank, insulated digester with mixing capability, screen separator for the effluent, biogas treatment to remove impurities, engine unit that runs on biogas, and a computer that controls the mixing and feeding of the digester. In June 1999 an anaerobic filtration unit was added to further treat the effluent of the primary digester. The anaerobic filtration unit operates at approximately 100 degrees Fahrenheit, while the primary digester operates at 130 degrees Fahrenheit. The anaerobic filtration unit is filled with pieces of plastic pipe to provide additional surface area for the bacteria to grow upon and thereby converting more of the organics into biogas. Data on treatment efficiencies for both digesters have been collected. The samples collected are analyzed at the laboratories of the West Virginia Department of Agriculture in Moorefield, WV. The typical analyses consists of: total solids, volatile solids, volatile fatty acids, total kjeldahl nitrogen, phosphorus, pH, and fecal coliform. The treated effluent is applied daily to nearby pasture land. The separated solids are collected and sent to West Virginia State College for use in field studies to determine plant growth response to the nutrients.

NATIONAL ALTERNATIVE FUELS LABORATORY

Question. Please provide a description of the research that has been funded under the National Alternative Fuels Laboratory (NAFL) grant.

Answer. Through a nationally-marketed collaboration program in which the NAFL matches about half of its USDA funding with nonfederal money to work on industry-relevant research, NAFL staff have (1) developed a U.S. Federal Aviation Administration-certified lead-free ethanol- and biodiesel-containing alternative to leaded aviation gasoline that should be commercially available at Midwest airports by March 2000, (2) resolved ethanol-in-gasoline performance and environmental issues to accelerate the use of ethanol, (3) initiated new biomass fuel developments including a process to produce butanol—a high octane gasoline additive that helps reduce automobile evaporative and tailpipe emissions—from agricultural resources, (4) initiated and coordinated the 27-member Red River Valley Clean Cities Coalition to increase the number of alternative fuel vehicles in regional public and private fleets, and (5) built E85 refueling sites in North Dakota.

Question. According to the research proposal or the principal researcher, what is the national, regional, or local need for this research?

Answer. As stated by former CIA director R. James Woolsey, our nation needs to develop commercially viable alternatives to fossil fuels to ensure energy security, improve air quality, and provide employment. It is crucial to national security and economic development that these new fuels are accurately represented in the marketplace and given an opportunity to compete fairly with traditional fossil fuels. The NAFL provides unbiased scientific data on fuel performance and environmental effects. Regional need for the research derives from the need to support regional agriculture and associated industries through (1) development of new biomass fuel industries based on new crops and conventional crop residues and (2) development of economic uses for agricultural co-products.

Question. What was the original goal of this research, and what has been accomplished to date?

Answer. The primary original goal was to develop a database of at-the-pump-sampled conventional, reformulated, and alternative transportation fuels sold in the upper Midwest and throughout the U.S. to enable comparison of current and historical fuels on the basis of chemical and physical properties. This fuels database is being expanded to include how gasoline chemistry affects air quality and fuel performance. Another original goal was to provide information on conversion of crop residues, agriculture processing wastes, high-cellulose-content municipal wastes, and other biomass materials to alternative fuels. The NAFL program supported North Dakota's first two public E85 refueling sites, initiated an ongoing industry-supported effort to develop and build a new ag co-product-to-lactic acid plant in the Grand Forks region—lactic acid is a building block for new bio-based polymers—helped resolve ethanol blend evaporative emissions issues and E85 engine cold-start problems, and initiated an ongoing industry collaboration to demonstrate the viability of producing and utilizing biomass-based butanol, a clean-burning gasoline and diesel fuel additive.

Question. How long has this work been underway, and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The NAFL work began in fiscal year 1991 and was, in part, sponsored by this grant. USDA appropriations in fiscal year 1991 through fiscal year 1993 were $250,000 per year. Later awards were $235,000 in fiscal year 1994, $204,000 in fiscal year 1995, and $218,000 per year in fiscal years 1996 through 2000. A total of $2,279,000 has been appropriated over 10 years.

Question. What is the source and amount of nonfederal funds provided by fiscal year?

Answer. To date in fiscal year 1999, $85,000 in nonfederal collaborative funding has been secured from the American Coalition for Ethanol, the South Dakota Corn Utilization Council, and the American Lung Association of Minnesota. A total of $1,160,000 in nonfederal funds has been secured for performance of NAFL program objectives over the duration of this grant. During fiscal year 1991 through fiscal year 1993, nonfederal funding from the State of Illinois totaled $630,000. For fiscal year 1994, nonfederal funding of $105,000 was secured from the American Corn Growers' Association, the Renewable Fuels Association, and others. For fiscal years 1995, 1996, 1997, and 1998, nonfederal funding totals of $50,000, $60,000, $140,000, and $90,000, respectively, were secured from corn grower organizations, state agriculture departments, alternative fuels technology companies, and regional economic development agencies.

Question. Where is this work being carried out?

Answer. The work is performed at the University of North Dakota Energy & Environmental Research Center—EERC—in Grand Forks. The EERC is a research, development, demonstration, and commercialization facility that employs about 200 scientists, engineers, and support personnel.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The completion date for the original objectives was April 30, 1992. The objectives were met. The work was then expanded to include partnerships with industry and agriculture. The NAFL has been established as a center of expertise for development and demonstration of bio-based fuels, investigating fuel chemistry effects on engine performance and air quality, dissemination of accurate and objective information regarding ethanol in gasoline, and ethanol feedstock assessment and process development. Additional tasks include commercializing an ethanol-based aviation gasoline, implementing industry collaborations to produce lactic acid and butanol from regional agricultural resources, and administering the Red River Valley Clean Cities Coalition. These tasks should be completed by 2002.

Question. What was the last agency evaluation of this project? Provide a summary of the last evaluation.

Answer. In June 1998, the USDA conducted an on-site evaluation, and the NAFL program was given a very favorable review. The program continues to be a model for federal-private sector collaborations. Personnel have continued to meet or exceed program objectives detailed at the initiation of each annual performance period.

ANIMAL WASTE MANAGEMENT, OKLAHOMA

Question. Please provide a description of the research that has been funded under the Animal Waste Management, Oklahoma grant.

Answer. This research project is designed to develop sustainable, environmentally safe, and ecologically-sound best management principles and practices for beneficial animal waste applications for "High Plains Agriculture" in support of rural economic development through a Federal-state-local partnership. Emphasis will be placed on the rapidly expanding hog industry in the semiarid region, but information gained will also be applicable to the beef and dairy industries which play major roles in agriculture production in the region. .

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The Oklahoma Panhandle region and contiguous counties in the states of Colorado, Kansas, New Mexico and Texas generated $2.9 billion in sales of agricultural products in 1997. The Oklahoma Panhandle is the most productive agricultural region in the state with agricultural receipts in excess of $937 million, which represents 31 percent of the receipts in the region. The majority of sales are related to livestock production and the rapid expansion of the hog industry in this semiarid region has only strengthened that position. Oklahoma has moved to 9th in position in the U.S. for swine sales and Texas County, has risen to 3rd nationally with nearly $200 million in swine sales from a position of 645th in 1992. The rapidly expanding swine industry was projected to add $650 million in pork and value added products in Oklahoma in 1997 with the slaughter and processing of over 4 million hogs per year. The semiarid agro-ecosystem is unique with climatic conditions consisting of low rainfall that promotes both dryland and irrigated agricultural practices; extremes in high and low temperatures; soils characterized with alkaline pH, low in organic matter, and high in calcium carbonate. This unique agro-ecosystem makes information gained from more humid environments inapplicable.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this research was to develop best management practices that will protect ground water supplies from pollution of nutrients, salts, and pathogens; maintain air quality; and minimize odors derived from the entire hog-house, lagoon, land-application, soil-cropping and or rangeland production system, thus maintaining the quality of life in the rural sector. Field work has been initiated and initial work shows a positive response to animal waste applications. Initial studies of ammonia loss from applications indicate there can be significant losses following land applications.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 and the appropriation for fiscal years 1998, 1999 and 2000 is $250,000 per year. A total of $750,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year 2000?

Answer. Non-federal funding from state and industry totals $659,000.

Question. Where is this work being carried out?

Answer. This work has been initiated at The Oklahoma Panhandle Research and Extension Center located in Goodwell, Oklahoma. Further work will continue to be done at this site. The Center will provide the land area and a portion of the facilities and equipment necessary to conduct the major portion of the study. Other study sites have developed on private land in cooperation with swine operations in the panhandle region.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original completion date was February 29, 2000. To document the results for these objectives more than one growing season will be needed. Completion of these objectives and additional objectives related to these will be February 28, 2003.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project was evaluated at the end of December 1999 when the summary report of the 1998–99 accomplishments was submitted. To date seven proceedings or abstracts have been published in national or regional forums. Results to date indicate: (1) Significant amounts of ammonia will be volatilized, lost as a gas, almost immediately following effluent application to bare soils, (2) Swine effluent applications to corn, sorghum and forages demonstrate that it is an acceptable method to supply nutrients for crop production, and (3) There is a significant increase in soil phosphorus levels from application of swine lagoon sludge to soil. This and other important technology was transferred at the High Plains Animal Water

Management Conference, hosted in conjunction with the Oklahoma Panhandle Research and Extension Center, at Goodwell, Oklahoma. Those in attendance included the general public, producers, governmental officials, extension personnel and researchers from Arkansas, Colorado, Kansas, New Mexico, Oklahoma and Texas.

BIOTECHNOLOGY RESEARCH, MISSISSIPPI

Question. Please provide a description of the research that has been done under the Biotechnology Research Grant, Mississippi.

Answer. The Agency has requested Alcorn State University to submit a grant proposal that has not yet been received. This is a new special grant for which there have been no previous awards.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The overall purpose of this project is to establish a Biotechnology Center at Alcorn State University that will focus on plant biotechnology research geared toward small farmers in Mississippi. Emphasis will be placed on improving the productivity and efficiency of crops and plants grown by small farmers in order to improve profitability and ensure long-term viability.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of the research is to enhance Alcorn State University's research efforts in biotechnology through genetic improvement research utilizing biotechnology techniques and to improve the livelihood and viability of limited-resource producers in Mississippi and the Southeast.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Preliminary work funded by the State has been underway for approximately six years. This is a new special grant and $425,000 has been appropriated for fiscal year 2000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. State funds and a $150,000 grant from the World Bank in fiscal year 1996 have supported this work in previous years.

Question. Where is this work being carried out?

Answer. The research is being conducted at Alcorn State University, Lorman, Mississippi, and at field locations in Preston and Mound Bayou, Mississippi.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigator anticipates completing the original objectives of the project in two years. Additional or related objectives have not been specifically identified at this time.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. As a new special grant for which a proposal has not yet been received, this project has not yet been evaluated. A merit review panel will be convened to evaluate the project upon receipt of a proposal for fiscal year 2000.

CENTER FOR AGRICULTURE AND RURAL DEVELOPMENT, IOWA

Question. Please provide a description of the research that has been done under the Center for Agriculture and Rural Development program.

Answer. The research monitors the final form and implementation of the Uruguay Round Agreement and evaluates its impacts on global trade and implications for U.S. agriculture.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. As the Uruguay Round—UR—Agreement implementation proceeds, researchers will monitor the development of these policy changes and analyze the likely impacts of these decisions with emphasis on obtaining differential impacts for developing economies, developed economies and those in transition. Researchers will also explore possible directions for the next Round or Mini-round of the World Trade Organization.

The original goal is to assess and evaluate various proposals affecting agricultural trade, to provide analytical support to the Office of the U.S. Trade Representative, and to provide information to farmers and agribusiness firms on the competitive implications of trade agreements. Theoretical studies and empirical and descriptive analyses of policy issues and technical problems pertaining to the Uruguay round

of negotiations were completed and provided to negotiators and the agribusiness community. Knowledge developed in this phase is now being used to monitor the effects of the Uruguay Round Agricultural Agreement—URA.

This grant supports six projects focusing on URA and the World Trade Organization—WTO—monitoring and implementation problems; implications of the URA and WTO for Eastern Europe, Baltic, and the Newly Independent States; development of a model to assess the North American Free Trade Agreement and its linkages with the General Agreement on Tariffs and Trade; trade implications of U.S. food and development aid in developing countries; integration of China into world agricultural markets; and special projects as requested for the U.S. Trade Representative's office. Major emphasis is placed on developing and improving international livestock and grain sector models.

Question. How long has this work been underway and how much has been appropriated, by fiscal year, through fiscal year 2000?

Answer. This research program was initiated in fiscal year 1989. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $750,000; fiscal years 1990 and 1991, $741,000 per year; fiscal years 1992–1993, $750,000 per year; fiscal year 1994, $705,000; fiscal year 1995, $612,000; fiscal year 1996, $655,000; and fiscal years 1997 through 1999, $355,000; fiscal year 2000, $355,000. A total of $7,124,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant are as follows: $111,210 State appropriations and $175,616 miscellaneous for a total of $286,826 in 1991; $113,779 State appropriations and $173,117 miscellaneous for a total of $286,896 in 1992; $120,138 State appropriations and $164,707 miscellaneous for a total of $284,845 in 1993; $161,000 State and $30,000 miscellaneous for a total of $191,000 in 1995; $70,000 State appropriations and $44,000 miscellaneous for a total of $114,000 in 1996; $60,325 in State appropriations and $61,5000 in miscellaneous funds for a total of $121,825 in 1997; and $72,000 in State appropriations and $75,000 in miscellaneous funds for a total of $147,000 in 1999.

Question. Where is the work being carried out?

Answer. The research program is carried out by the Center for Agriculture and Rural Development at Iowa State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives of the project envisioned the development of models capable of providing guidance to policymakers, researchers, and farmers and others of the impact of agricultural trade proposals on the U.S. agricultural sector. As such the objectives are on-going.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. We have conducted no formal evaluations; however, each annual proposal is peer reviewed for relevance and scientific merit. Also, an informal evaluation of this project takes place as a part of each annual project review and approval process.

CENTER FOR INNOVATIVE FOOD TECHNOLOGY, OHIO

Question. Please provide a description of the research that has been funded under the Center for Innovative Food Technology Grant.

Answer. Funds from the fiscal year 1999 grant are supporting research projects to (1) develop techniques for applying powdered material onto snack foods and shredded cheeses, (2) assess the usefulness of artificial intelligence to predict finished product quality from incoming ingredient attributes in vegetable and meat processing applications, (3) develop methods to convert the waste product whey from dairy operations into a saleable product, (4) refine the techniques for producing extended shelf life milk products in PET containers, and (5) evaluate applications for real time process control in the milling industry using Near Infrared reflectance systems. Fiscal year 1999 funds are supporting research from March.1999 through February 29, 2000. A proposal in support of the fiscal year 2000 appropriation will be requested.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The principal researcher believes the value-added food processing industry is the largest industry in Midwestern states, including Ohio where the industry contributes over $17 billion to the annual economy. From an economic development

point of view, processing and adding value to crops grown within a region is the largest possible stimulus to that region's total economic product. This program aims to partner with and encourage small and medium sized companies to undertake innovative research that might otherwise not be undertaken due to risk aversion and limited financial resources for research and development in these companies. The principal researcher believes that, although the initial impact of this research will be regional, the recipient organization of this grant is part of a technology transfer network and proactively seeks opportunities to deploy technologies developed through this research to the food industry on a national basis.

Question. What was the original goal of the research and what has been accomplished to date?

Answer. The original goal of the research was to develop innovative processing techniques to increase food safety and quality or reduce processing costs. The coatings project has developed methods to extend product shelf life while reducing costs, and the neural network project has developed a model for predicting the harvesting time that will optimize product quality and economic return to the grower, processor, and consumer. The dairy project has developed a method that allows fluid milk processors to lower their costs. The milling project has developed methods for improving quality of milled flours by developing improved process control systems.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1995. The project received appropriations of $181,000 in fiscal years 1995 through 1997, $281,000 in fiscal year 1998, and $381,000 each in fiscal years 1999 and 2000. A total of $1,586,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year 2000?

Answer. In fiscal year 1995, non-federal funds included $26,000 from state funds and $70,000 from industry memberships. In fiscal year 1996, non-federal funds included $26,000 in state funds and $80,000 in industry funds. In fiscal year 1997, non-federal funds included $35,000 in state funds and $95,000 in industry memberships. In 1998, $35,000 in state funds and $105,000 in private industry memberships contributed to the support of the project. In 1999, $62,000 in State of Ohio funds, and $115,000 from private industry were used to support the project.

Question. Where is this work being carried out?

Answer. Research is being conducted in the laboratories of the Ohio State University and at various participating companies in Ohio, Illinois, and Pennsylvania.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional related objectives?

Answer. The principal investigator anticipates that some projects supported by the fiscal year 2000 grant will be completed by February 28, 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. The last review of the proposal was conducted on April 15, 1999. At that time, the agency science specialist believed that the projects addressed issues relevant to food manufacturing, were scientifically sound, and that satisfactory progress was being demonstrated using previously awarded grant funds.

CENTER FOR NORTH AMERICAN STUDIES, TEXAS

Question. Please provide a description of the research that has been done under the Center for North American Studies program.

Answer. The purpose of this grant is to develop linkages with educational and other institutions in Mexico and Canada in order to share data and faculty, conduct research identifying trade opportunities and marketing problems, conduct policy analyses, and develop a broad range of training programs preparing agricultural firms for international marketing opportunities. The research proposal was peer reviewed at the university prior to submission to CSREES.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The program director believes that citizens of the United States, Mexico and Canada have some similar concerns about the impact of the North American Free Trade Agreement, and that new, innovative approaches involving international cooperation are needed to assess and evaluate these issues. Research and training

are needed to provide information to evaluate alternatives for expanding U.S. exports and to resolve potential social, economic, and environmental conflicts.

Question. What was the original goal of this research, and what has been accomplished to date?

Answer. The goal is to promote strong agricultural ties among the three North American countries, foster greater cooperation in resolving critical agricultural issues of common interest, and ensure the continued competitiveness of U.S. agriculture. Recent research results include an investigation of technical trade barriers; a study of the impact of El Niño and La Niña on fruit and vegetable production; impacts of the North American Free Trade Agreement on livestock, meat, feed, fruit and vegetable trade; a range management watershed study along both sides of the Rio Grande River; and competitive response of Texas food marketers to the Agreement. A new publication series was started in June 1998, and four research papers were published. Recent training and education programs include a televideo conference on International Marketing Opportunities for the 21st Century with participants in five states; and 37 seminars/workshops for producers and agribusinesses to increase the international capacity of U.S. firms was attended by over 2,600 people in 1998. Collaborative work included a workshop on International Strategic Alliances workshop developed jointly with a Mexican and a Canadian university; an expanded database on Mexican agriculture; and a video conference for a Mexican agribusiness audience.

Question. How long has this work been underway, and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Work supported by this grant began with an appropriation of $94,000 in fiscal year 1994; $81,000 in 1995; and $87,000 for 1996 through 2000. A total of $610,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and derived from the State of Texas for salaries and benefits. Amounts provided for this grant are as follows: $39,000 State appropriations in fiscal year 1994; $54,000 in 1995; $60,000 per year in 1996 and 1997; $84,500 in 1998; and $80,000 in 1999.

Question. Where is the work being carried out?

Answer. The program is being carried out at Texas A&M University through the Texas Agricultural Experiment Station in collaboration with other segments of the Texas A&M University System and Louisiana State University Agricultural Center.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1994 was for a period of 12 months. The current phase of the program will be completed in the year 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation.

Answer. CSREES performed a merit review of the project in January 1999 and concluded that "the project has sound objectives and procedures for helping U.S. firms to be successful in North American markets for agricultural products, thereby achieving CSREES goals of a highly competitive agricultural production system and enhanced economic opportunity for Americans." The principal investigator is well recognized for his leadership in the area of international trade.

CLIMATE CHANGE RESEARCH, FLORIDA

Question. Please provide a description of the research that has been funded under the Climate Change Research grant.

Answer. CSREES requested the University to submit a grant proposal which has not yet been received. Funds have not previously been appropriated for this research.

Question. According to the research proposal, or the principal investigator, what is the national, regional or local need for this research?

Answer. The need for this research will be described upon receipt of a formal project proposal.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The research is not yet underway.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 with an appropriation of $170,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Information on non-federal funds and sources is not available.

Question. Where is this work being carried out?

Answer. In the absence of a research proposal, location of the research can not be determined.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This will be determined upon receipt of an acceptable research proposal.

COTTON RESEARCH, TEXAS

Question. Please provide a description of the research that has been funded under the Cotton Research, Texas, grant.

Answer. CSREES has requested the university to submit a grant proposal for fiscal year 2000, that has not yet been received. Texas A&M and Texas Tech Universities have developed an integrated research effort to address cotton production issues using a comprehensive approach in order to strengthen the cotton industry in the high plains. Priority productions and marketing issues will be studied.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The proposed project is expected to help support a broad based program to address priority research needs of cotton grown on the Texas high plain. The specific issues will include production, processing, marketing, and utilization.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this project is to improve cotton production in West Texas and expand the demand for cotton grown in the area.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998. The appropriation for fiscal years 1998–1999 is $200,000 per year, and $170,000 for fiscal year 2000. A total of $570,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds are from the State of Texas and provide salaries and benefits for experiment station employees. Funds supporting the project were $156,000 in fiscal year 1998 and $149,000 in 1999.

Question. Where is this work being carried out?

Answer. The work will be conducted at the Texas A&M University Research and Extension Center, Lubbock and Texas Technical University Campus.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The principal investigators anticipate the developmental phase of this project, which will establish priorities and provide planning for a long-term comprehensive program, should be completed in fiscal year 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project received a comprehensive review and evaluation at its inspection by Texas A&M and Texas Tech Universities and the agency National Program Leader. It will be evaluated annually throughout its lifetime.

CURRICULUM DEVELOPMENT/MISSISSIPPI VALLEY STATE UNIVERSITY

Question. Please provide a description of the research that has been funded under the Curriculum Development and Strengthening-Mississippi Valley State University grant.

Answer. Funds were used to strengthen academic programs, including accreditation and re-accreditation. Of the ten programs eligible for accreditation, nine have been accredited. Assessment of the criteria has begun for the remaining eligible program. Academic programs have been broadened to include more agriculture-related courses consistent with the needs of students from the Mississippi Delta, students from other parts of the State, as well as out-of-state students. Curriculum additions have had a positive impact on student enrollment. Courses continue to be modified to reflect the needs of graduates as well as employers in the Mississippi Delta, with particular emphasis on those areas that employers have the greatest need. The funds continue to provide enhancements related to other program and administra-

tive support areas that positively impact program delivery and administration at Mississippi Valley State University.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this proposal?

Answer. The primary need for this project is to satisfy a local need. The need is for strengthening university capacity and curriculum development at Mississippi Valley State University. Degree programs in Accounting, Mass Communications and Public Administration have been added since the 1988 plan was developed. The Criminal Justice program has been developed into a departmental unit with social work in order to provide for improved administration and academic counseling. A master's program in Criminal Justice is now offered. The baccalaureate major in chemistry and the master's program in Elementary Education have been reinstated.

Question. What was the original goal of this project and what has been accomplished to date?

Answer. The original goal was to provide funding to strengthen the academic programs of the university. This funding has strengthened the fiscal and academic areas of the university. The University's cash flow and cash availability have remained steady and sufficient all year long. Student recruitment has improved to show a positive ratio between applications received and students admitted. Approximately one half of the applicants are enrolled. Increased quality of instruction and programs have benefitted students. This is reflected in the higher graduation rate, increased student enrollment, enriched faculty and improved community relationship.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. This program was initiated in fiscal year 1987. Grants have been awarded from funds appropriated as follows: fiscal year 1987, $750,000; fiscal years 1988 and 1989, $625,000 per year; fiscal year 1990, $617,000; fiscal year 1991, $642,000; fiscal years 1992 and 1993, $668,000 per year; fiscal year 1994, $593,000; fiscal year 1995, $544,000; fiscal years 1996–2000, $583,000 per year. A total of $8,647,000 was appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Mississippi Valley State University received State and private funding during the period of this grant. The State figures provided here are for enhancement funds gained above the University's standard formula generated funds. The sources and amounts are as listed:

SOURCE

Fiscal year	State	Private	Total
1997		$168,640	$168,640
1988		186,036	186,036
1989	$68,658	190,258	258,916
1990	207,879	369,358	577,237
1991	333,263	337,700	670,963
1992	349,427	470,220	819,647
1993	35,750	358,680	394,430
1994	590,890	568,970	1,159,860
1995	841,654	530,300	1,371,954
1996	1,197,917	590,824	1,788,741
1997	309,717	755,629	1,065,346
1998	313,738	538,423	852,161
1999	909,419	389,812	1,299,231

Question. Where is this work being carried out?

Answer. These funds are intended to strengthen programs at Mississippi Valley State University. The program has been carried out on the campus at Itta Bena and at off-campus sites in Anguilla and Greenville and the Greenwood Center since the Spring Semester of 1996.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives completion date was June 1992, and the primary objective of erasing the financial deficit was accomplished at that time. The univer-

sity has been operating on a sound financial basis as of July 1993. Academic program strengthening has progressed very well. The objectives of the current grant will be completed by September 30, 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The program staff in the agency conducts an annual evaluation of reports submitted by the principal investigator. The evaluation reflects steady enhancement in curriculum development and improved support for strengthening administrative units. The Department of Education doubled efforts to seek two new programs at the undergraduate level in the areas of Special Education and Early Childhood. The department enhanced the faculty through two fronts-technology upgrade and scholarship. A number of technology workshops were provided for faculty in collaboration with the Institute for Effective Teaching Practice. These workshops were aimed at helping faculty to incorporate technology into their teaching. In pursuance of the National Council of Accreditation of Teacher Education—NCATE—accreditation visit in year 2000, the department undertook a series of activities aimed at enhancing the teacher education programs as well as ensuring reaccreditation. These activities included: attending American Accreditation of Colleges for Teacher Education—AACTE—and NCATE national meetings, revisiting and reassessing curricular and programmatic requirements. Core Curriculum has received special attention during the year. Annual revisions were completed for all core courses in each discipline. Strong emphasis was placed on Writing Across the Curriculum. The University Testing Center has undergone significant growth. Staff development has continued in technology utilization skills. Since more standardized tests are becoming computer-based, the Center has developed a plan for increased computer testing.

DATA INFORMATION SYSTEM

Question. Please provide a description of system development activities that have been funded.

Answer. CSREES continues to fund activities under contract with a major information technology firm for the design and development of the Research, Education, and Economics Information System—REEIS. Previously funded tasks that have been completed include the conduct of an inventory of databases targeted for inclusion in REEIS; a comprehensive assessment of information needs and practices within the Research, Education, and Economics mission agencies and State partner institutions; design and development of a Web accessible catalog of databases identified in the inventory; a comprehensive review of state-of-the-art information technology systems available for use in developing the system; and design and development of a REEIS proof-of-concept prototype that is currently undergoing critical review and evaluation. An additional task was completed under a separate contract that provided for an outside expert to conduct a review and evaluation of Web interfaces to the REEIS Database Catalog. Also, a cooperative agreement with the University of Arkansas was also established to provide national leadership in coordinating the efforts a National Steering Committee charged with guiding the continuing development of the system. The Committee has met on a regular basis with the next meeting planned for August, 2000. Currently underway, and critical to the development of REEIS, is a comprehensive interagency data modeling effort designed to identify and describe data, data relationships, and sources of data from across the research, extension, education, and statistics domains of the Research, Education, and Economics mission agencies and State partner institutions. This will serve as the basis for the development of alternative system architectures and the population of the REEIS prototype with actual data from selected core databases that are to be included in REEIS. Funding has also been provided under the REEIS initiative for the design and development of an Evaluation and Accountability System for Extension—EASE—which has been targeted for linkage in REEIS.

Question. What is the national, regional or local need for this activity?

Answer. At present, USDA's Research, Education, and Economics—REE—mission agencies and their university partners lack a central, integrated, user-friendly electronic information system capable of providing access to thousands of programs and projects for which they are responsible that focus on food, agriculture, natural resources, and rural development. Such an information system is increasingly needed to enable the Department and its partners to readily conduct baseline and ongoing assessments and evaluations of research, education, extension, and economic programs and projects. In recent years, this need has become more urgent for several reasons. First, the United States needs a visionary publicly funded research and development program to produce essential knowledge and innovations for meeting growing competition in a global market—which is largely attributable to the ex-

panding research and development efforts of foreign nations. Second, a comprehensive information system is needed to serve as a primary reference source for development of new research and education programs on such diverse issues as increasing productivity in agriculture and processing, improving the safety and quality of food, and enhancing the sustainability of the environment and rural communities. Third, Federal/State policy makers and administrators are requiring empirical analyses to account for historical, current, and future use of public funds to provide a basis for redirecting funds to higher priority issues. Fourth, the Government Performance and Results Act—GPRA—has imposed reporting demands which current databases and decentralized information systems are not prepared to adequately satisfy. It is also envisioned that REEIS will play a key role in implementation of the Agricultural Research, Extension, and Education Reform Act—AREERA—of 1998. In this regard, REEIS would be well-positioned to:

—Provide linkages for decision making among REE agencies,
—Enable consistent reporting on identical or similar issues,
—Provide the public with understanding of the role and mission of REE agencies,
—Expand REE's outreach to a broader base of constituencies,
—Provide a better vehicle to facilitate interaction among REE agencies and their university partners,
—Link commonalities of research, extension, and teaching projects and programs through a single interface, and
—Foster global interactions.

Additionally, REEIS will serve to expand the Federal partnership by facilitating coalition-building with other Federal agencies.

Question. What was the original goal of this initiative and what has been accomplished to date?

Answer. The original goal of this initiative was to develop an information system that provides real-time tracking of research, extension and education projects and programs; has the capability to communicate vertically between field, State and Federal locations; enables the REE agencies and their partners to conduct rapid and comprehensive policy assessments and program evaluation analysis; facilitates assessment of technologies and practices employed in extension, education, economics, and research activities at the field and/or regional levels; provides clear and transparent public access to relevant parts of the information; and provides information management tools to enhance the timeliness and accuracy of REE-wide responses to inquiries about program objectives and expenditures.

Since launching of the REEIS initiative, substantial system planning and development work has been completed. Work accomplished under a series of multi-task contracts with a private sector information technology firm was instrumental in meeting major milestones considered to be critical components and a prerequisite to the design, development, and implementation of REEIS. Major tasks included the conduct of a comprehensive strategic information audit of information practices and needs within the REE agencies and partner institutions; the identification and inventory of major research, extension, education, and economics/statistics databases maintained or supported by the REE mission agencies; the design, development, and preparation of the REEIS Database Catalog Prototype that affords Web access to the inventory of 38 databases initially identified as candidates for inclusion in REEIS; the design and evaluation of the Web interface to the REEIS Database Catalog; a comprehensive review of state-of-the-art information technology systems available for use in developing REEIS; and the design and development of a Web accessible REEIS proof-of-concept prototype.

Plans in fiscal year 2000 include the development and assessment of alternative system architectures, development and testing of a REEIS prototype populated with actual data from selected core databases, updating and maintenance of the Information Systems Technology database and the REEIS Database Catalog, and initial implementation and operation of the REEIS system, including training of REEIS users and technical system operators.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Congress first appropriated $0.4 million for REEIS in fiscal year 1997 to begin planning its design and development. The fiscal year 1998 appropriation was $800,000. This was followed by appropriations of $1.0 million in fiscal year 1999 and $2.0 million in fiscal year 2000. A total of $2.25 million is requested in fiscal year 2001.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funding does not apply at this time.

Question. Where is this work being carried out?

Answer. Leadership responsibility for REEIS resides within the CSREES Science and Education Resources Development unit. This provides for effective linkage within the REEIS platform of the Current Research Information System, the Food and Agricultural Education Information System, and other appropriate research, extension, education, and statistics databases. The REEIS leadership works closely with the four Research, Education, and Economics mission agencies and the university system to ensure that primary users as well as key stakeholders are involved in the REEIS development process. A sizeable effort continues under contract with a major private sector information technology firm for the design, development, testing, and implementation of REEIS. One staff person assigned full time to manage and coordinate agency contracting activities currently serves as the REEIS technical information program manager. Plans are to recruit for the positions of a REEIS Director and a support staff person in fiscal year 2000, followed by computer and technical information specialists in future years to operate and maintain the system.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. It is anticipated that REEIS will become operational during fiscal year 2000. The requested increase for fiscal year 2001 is required to achieve broad implementation. Included is the need to conduct ongoing, iterative needs assessments within the mission area and with its partners to align information system products and services with strategic information requirements necessary for meeting agency mission and goals and satisfying GPRA reporting requirements. Updating and maintenance of technical system assessments, conducting ongoing information technology evaluations, and enhancements of REEIS user interfaces will be essential to ensure currency and responsiveness over the life of the system. The additional funding will allow also for the enlistment, training, and retention of essential personnel and staff and provide for the enhancement of several legacy systems and databases to permit effective inclusion in REEIS.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Progress and accomplishments stemming from the REEIS initiative have undergone and continue to undergo review and evaluation by the REE mission agencies, the REEIS National Steering Committee, our State partner institutions, and outside sources. The most recent evaluation of the project was conducted in December, 1999 by a Department-wide information technology review board which approved the project for continued support as a mission-critical system. Factors considered in the evaluation included REEIS system objectives, its support of mission area strategic goals, strategies for managing risk, the degree of return on investment, and the level of support for the Secretary's priorities. An earlier evaluation of this project was conducted at the June, 1999 meeting of the REEIS National Steering Committee, comprised of representatives of the REE mission agencies, university partners, and key stakeholders. Committee members were presented the opportunity to critique the REEIS proof-of-concept prototype in terms of its potential for responding to primary users, satisfying primary uses, and meeting priority system requirements. An interagency REEIS team is in the process of performing technical evaluations of a series of successive iterations of the prototype. In May, 1999 a two-day REEIS retreat was held to review project status and make recommendations as to future tasks for the development and implementation of the system. Based on participant recommendations, a comprehensive interagency data modeling effort is underway to identify and describe in detail data and sources of data that are to be included in REEIS and which reside within the research, extension, education, and statistics domains of the Research, Education, and Economics mission agencies and their State partner institutions. A review by REE agency policy officials, budget and GPRA staff, national program leaders, and senior managers of the final set of system requirements resulting from the needs assessment was completed in February, 1999.

GEOGRAPHIC INFORMATION SYSTEMS

Question. Please provide a description of the research that has been funded under the geographic information system program.

Answer. The purpose of this program is to promote collaborative and innovative transfer of systems technologies to state and local governments and others in the public and private sectors. The current program is being carried out by the non-profit National Consortium for Rural Geospatial Innovations in America—NCRGI. The directors and participants of the Consortium are the sub-contractors who are carrying out the program by working on agro-environmental problems at the national,

regional, state and neighborhood levels. They represent a wide spectrum of site-based expertise including six academic institutions, one regional development authority, and the Southwest Indian Polytechnic Institute site added by Congress in 1997. This institutional arrangement has helped fill a role in linking some of the otherwise disparate efforts of agencies and academic institutions to apply them in the now seven regions of the country.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher believes that local officials are facing increasingly complex land management issues that require rapid access to resource knowledge and databases for decision making. This project is needed to transfer relevant technology to state and local governments, including Native American communities whose limited training budgets and sometimes-isolated location, make it difficult to use the latest technology. The technology developed by the Consortium is useful in improving the management of natural resources. While concentrating on issues related to agriculture, the independent, non-profit nature of the National Consortium for Rural Geospatial Innovations in America facilitates linkages across disciplinary and institutional barriers, and makes it possible to use analyses at the state and local levels which were initiated at the federal level. While the early phases of the geographic information system concentrated on building information systems related to rural, physical, and natural resources, the current challenge is to integrate human economic, social and demographic information in order to better understand the relationship of human communities to the landscape. At the other end of the spatial scale, the role of the public sector in geographic information system-based precision farming technologies, data capture, and information synthesis is the subject of a current study group.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this work was to serve as a pilot project for the transfer of geographic information systems technology related to natural resources to local governments.

The Consortium has carried out this function. Economic and biological data are being presented in various formats to state and local governments and individuals. Through its 7 regionally distributed sites, including the new Southwest Indian Polytechnic Institute site in New Mexico, the Consortium has implemented a variety of geographic systems technologies to local governments—both rural and urban. These include the recent expansion of transfer of geographic information technology through various distance education and Internet technologies. It is anticipated that the fiscal year 2000 grant will support work under this program through March 2001. The proposal for this work in 1999 has been received and reviewed.

Question. How long has this work been under way and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1990, $494,000; fiscal year 1991, $747,000; fiscal years 1992 and 1993, $1,000,000 per year; fiscal year 1994, $1,011,000; fiscal year 1995, $877,000; fiscal year 1996, $939,000; fiscal years 1997 through 1999, $844,000 per year; and fiscal year 2000, $850,000. A total of $9,450,000 has been appropriated since the beginning of the program.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. For fiscal year 1990 through fiscal year 1997, to date, the work in this program had $5,009,834 in non-federal support. In fiscal year 1990, non-federal support was $714,940 consisting of equipment, databases, and other miscellaneous contributions from foundations, city, and state governments. In fiscal year 1991, non-federal support was $25,000 from county government. In fiscal year 1992, non-federal support was $366,016 from county government, computer companies, and state governments consisting of equipment, software, facilities, and miscellaneous support. In fiscal year 1993, non-Federal support was $713,900 consisting of financial and miscellaneous support from foundations, county and state governments. In fiscal year 1994, the non-federal support was $713,643. In fiscal year 1995, the non-federal support was $987,000. In fiscal year 1996, it was $567,173. It was $456,582 in fiscal year 1997. In 1998 and 1999, non-federal dollars exceeded $1,000,000, and it is anticipated that they will again in 2000.

Question. Where is this work being carried out?

Answer. The National Consortium for Rural Geospatial Innovations in America is administratively centered at the University of Wisconsin-Madison. The University of Wisconsin-Madison, functioning as the Great Lakes center, continues a long history of involvement in the application of this technology at the local level with

strong focus on soils/land-use and the institutional aspects of the integration of a new technology. The southeastern center in Valdosta, Georgia, in affiliation with the South Georgia Regional Development Center, has developed a comprehensive plan of the City of Adel as a model for other urban centers in the ten-county region. The southwestern center, in Fayetteville, Arkansas serves several local governments through its training facilities at the University of Arkansas, basing its technical approach on expertise and past experiences with the Federally developed system known as GRASS. They have developed pilot projects for some local jurisdictions and state level databases, which they have provided online. Central Washington University focuses on training for state planning and on three local governments and the Yakima Nation in the Yakima watershed. The north central center in Grand Forks, North Dakota, in affiliation with the University of North Dakota, focuses on relating real time weather data to other spatial attributes. The University of Wisconsin-Madison, functioning as the Great Lakes and Administrative center, continues a long history of involvement in the application of this technology at the local level with strong focus on soils/land-use and the institutional aspects of the integration of a new technology. Native American communities are being reached through the newly-developed Southwestern Indian Polytechnic Institute facilities in Albuquerque, New Mexico. Two new sites were added in fiscal year 99. They are Pennsylvania State University and the GIS Consortium at Wilkes University and Kings College in Pennsylvania. These two sites have replaced the NCRI-Chesapeake site and will be involved in providing GIS solutions to environmental problems that local government and regional planning commissions are dealing with in the Upper Susquehanna/Lackawanna Watershed.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objectives to build institutional frameworks for developing and disseminating geographic and related information to local decisionmakers is constantly evolving. Each site has developed approaches to addressing regional needs for modern technologies, and many innovative applications have been implemented. Technologies, including Internet-based educational and information exchange, have been developed to respond to the Consortium's customers. The Consortium has been asked to include these new technologies in order to bring its primarily rural users into new eras of public education and information management.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Proposals have been internally reviewed by Departmental personnel in different agencies. Beginning in 1995, the program has also been externally reviewed by local advisory committees and qualified professionals inside and outside of government. Their various comments and suggestions are sent to the agency and have helped with the favorable merit reviews.

GULF COAST SHRIMP AQUACULTURE

Question. Please provide a description of the research that has been funded under the Gulf Coast Shrimp Aquaculture grant.

Answer. The agency requested that the Oceanic Institute, and the Gulf Coast Research Laboratory submit a grant proposal that is currently under review. Recent research has addressed three major areas of research including: stock improvement; disease control; and sustainable culture technology. A number of important viral pathogens of marine shrimp have been identified and protocols have been established for the detection of viral pathogens that have decimated the shrimp industry world-wide. Improved viral detection techniques have led to the development of specific pathogen-free stocks of commercial importance. Researchers have responded rapidly to the multiple viral diseases that have significantly impacted the United States shrimp farming industry. Researchers will intensify efforts aimed at preventing new introductions of exotic viral pathogens both in commercial and wild shrimp stocks.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The principal researcher indicates that there is potential to enhance domestic production of marine shrimp through aquaculture in order to reduce the approximately $3 billion annual trade deficit in marine shrimp. Research continues to improve the supply of high quality seed, improve shrimp health management, improve biosecurity and environmental protection, and enhance production efficiency in shrimp culture systems. The United States has the opportunity to become a

major exporter of shrimp seed and broodstock, disease control and biosecurity technologies, products, and services.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal was to increase domestic production of marine shrimp through aquaculture. Researchers have responded to severe disease outbreaks caused by the introduction of exotic viral pathogens into United States shrimp farms and recent studies have focused on the prevention and detection of shrimp viral diseases which have decimated domestic commercial production. Production of specific-pathogen free and specific-pathogen resistant seed and broodstock, biosecure and environmentally compatible productions systems, and improved feeds and feeding strategies for broodstock maturation and larval production will all enhance United States production technology while preventing the introduction of exotic pathogens into commercial and wild shrimp stocks. Diagnostic and disinfection techniques for a number of important viral pathogens have been developed. In addition, scientists are developing high-health genetically improved stocks and evaluating these animals under commercial production conditions.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. Grants have been awarded from funds appropriated as follows: fiscal year 1985, $1,050,000; fiscal year 1986, $1,236,000; fiscal year 1987, $2,026,000; fiscal year 1988, $2,236,000; fiscal year 1989, $2,736,000; fiscal year 1990, $3,195,000; fiscal year 1991, $3,365,000; and fiscal years 1992–1993, $3,500,000 per year; fiscal year 1994, $3,290,000; and fiscal year 1995, $2,852,000; fiscal year 1996, $3,054,000; and fiscal years 1997 through 2000, $3,354,000. A total of $45,456,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The United States Marine Shrimp Farming Consortium estimates that non-federal funding for this program approaches 50 percent of the Federal funding for fiscal years 1991–2000. The source of non-federal funding is primarily from state and miscellaneous sources.

Question. Where is this work being carried out?

Answer. The work is being carried out through grants awarded to the Oceanic Institute in Hawaii and the Gulf Coast Research Laboratory in Mississippi. Research is also conducted through subcontracts with Tufts University, the Waddell Mariculture Center in South Carolina, the Texas Agricultural Experiment Station, and the University of Arizona.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original specific research objectives was 1987. The original specific objectives have been met, however new challenges to the United States farm-raised shrimp industry continue the need for shrimp culture research. Researchers anticipate that the specific research outlined in the current proposal will be completed in fiscal year 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project proposal is reviewed annually by the agency's Program Managers and the Program Specialist and is consistent with United States Department of Agriculture guidelines. Participating institutions are required to submit a detailed accomplishment report with the submission of each new grant proposal. The 1999 review of the program found that the progress during the last twelve months has been well documented and the proposal is well written. Research objectives are being met and the proposed research is consistent with the National Science and Technology Council's Strategic Plan for Aquaculture Research and Development. Facilities and expertise are very good and the close linkages between the researchers involved and the United States shrimp farming industry has greatly enhanced the commercialization of the research findings from this project. The United States Marine Shrimp Farming Project continues to address important research needs of the industry and has played a critical role in developing management strategies for protecting both wild and cultured stocks from the introduction of viral pathogens. The agency conducted an on-site review of this program in October, 1999. The agency is awaiting the final report of the review team.

LIVESTOCK MARKETING INFORMATION CENTER, COLORADO

Question. Please provide a description of the research that has been done under the Livestock Marketing Information Center program.

Answer. This is a new project and Colorado State University is submitting its first grant proposal in fiscal year 2000. The project will enhance the ability of the Center to provide objective analyses of livestock markets and make recommendations to livestock producers.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Recent changes in the structure of the livestock industry and in farm legislation have forced producers to pay more attention to market signals. Market prices have become more volatile because of changing domestic and international markets, thereby increasing producers' need for high quality market information and interpretation.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal is to increase the ability of livestock producers to make good business decisions in a changing global economy.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by the grant begins in fiscal year 2000 with an appropriation of $170,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The Center includes a consortium of faculty from 22 universities; participating universities contribute about $170,000 of non-federal funds a year.

Question. Where is this work being carried out?

Answer. The work will be carried at the Livestock Marketing Information Center, Denver, Colorado in cooperation with Colorado State University and 21 other universities.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The objectives and duration of the project will be specified in the grant proposal to be submitted in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This is a brand new project. CSREES will carefully review the proposal when it is received.

MARICULTURE, NORTH CAROLINA

Question. Please provide a description of the research that has been funded under the Mariculture, North Carolina grant.

Answer. The agency requested that the university submit a grant proposal that has yet to be received. The long-term goal of the project is to develop methods for mass propagation of marine finfish for commercial cultivation and possible stock enhancement. Specific objectives include development of growout technologies from juvenile to marketable stages and broodstock husbandry practices of selected marine species including the southern flounder and the black sea bass.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The Principal Investigators forecast an increasing need for the development of aquacultural production systems and methodologies for a variety of marine finfish. Results from this research will have broad application in the identification and development of marine species with commercial potential in the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research program is to develop sustainable aquaculture production systems for marine finfish. Captive mutton snapper were successfully matured and spawned and the resulting larvae reared through the juvenile stages. Juveniles were supplied to commercial and governmental organizations for commercial grow-out trials. Initial results appear promising with good survival rates and excellent feed conversion ratios. Captive-spawned mutton snapper are currently being raised to maturity and methods are being evaluated to control gonadal maturation through temperature and light manipulation and hormone treatment.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998. The appropriation for fiscal year 1998 was $150,000, and for fiscal years 1999 and 2000, $250,000 was made available. A total of $650,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The university estimates that approximately $115,000 of non-federal funds were provided for this project in fiscal year 1998 and $61,941 were provided for fiscal year 1999. These funds came primarily from state and private sources.

Question. Where is this work being carried out?

Answer. The research will be conducted at the Center for Marine Science Research at the University of North Carolina at Wilmington.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The project was initiated in fiscal year 1998. The original goals continue to be addressed. The anticipated completion date for the current proposal is fiscal year 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The Program Managers and Program Specialist evaluate the progress of this project on an annual basis and is consistent with United States Department of Agriculture guidelines. The proposal is well-written and the objectives are clearly stated. The methodology and experimental design are sound. The research is relevant and addresses a potential opportunity for the aquaculture industry. Facilities are excellent and have been enhanced through this program. The research team is well-qualified and has the appropriate background. Literature and justifications for research are provided.

NATIONAL CENTER FOR PEANUT COMPETITIVENESS

Question. Please provide a description of the research that has been done under the National Center for Peanut Competitiveness grant.

Answer. The grant supports an interdisciplinary research and education program to enhance the competitiveness of the U.S. peanut industry by examining alternative production systems, developing new products and new markets, and improving product safety.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. Peanuts are a very important crop in several southern states. In many counties, peanuts provide more than 50 percent of all crop income. Peanut producers have been major beneficiaries of government income protection programs, but Federal farm and trade policies are changing and producers must become more competitive and market oriented.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The project helps peanut producers be more competitive in the global market. Recent results include: economic feasibility analyses of alternative production and risk management practices; a computerized expert system adapted for hand-held computers to help farmers reduce pest control costs; the addition of economic factors to a computerized disease risk management system. The Center attracted some additional funding from other sources to purchase hand-held computers to run the pest management program for a number of producers.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998. Appropriations have been as follows: $150,000 in 1998; $300,000 in 1999; and $300,000 in 2000. Total appropriations to date total $750,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant are as follows: in fiscal year 1998, the state of Georgia contributed $141,181 and the state of Alabama, $15,000; in 1999, the state of Georgia contributed $504,354 and the state of Alabama, $67,553.

Question. Where is this work being carried out?

Answer. The Center is located at the University of Georgia at Griffen and involves cooperators from nearby peanut producing states, such as Auburn University in Alabama.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1998 was for a period of 36 months, however, the need to improve the competitiveness of U.S. peanut growers continues to grow. The current phase of the program will be completed in 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in August 1999, when it evaluated the current year's project proposal, and concluded that "the project has sound objectives and procedures for helping the U.S. peanut industry become competitive, thereby contributing to the CSREES goals of a highly competitive agricultural production system and enhanced economic opportunity for Americans." The principal investigator and other faculty named in the proposal are recognized for their leadership in the industry.

PM–10 STUDY, CALIFORNIA AND WASHINGTON

Question. Please provide a description of the research that has been funded under the PM–10 study, California and Washington research grant.

Answer. The PM–10 study in California and Washington addresses the effects of emissions of PM–10 and PM–2.5 sized particulates, or dust, from agricultural land on air quality and development of control strategies. These studies are being conducted by scientists at the University of California-Davis and the Washington State University, in cooperation with Federal, state, and local agricultural, environmental, and health agencies, and farmers and growers in both states. The California program has focused on developing and refining methods to accurately measure and detect the sources of PM–10 and PM–2.5 emissions from various agricultural susceptible California crops and soils. In addition, the California research has been expanded to include dust and gaseous emissions from cattle feedlots, dairies, and poultry industry. This is related to livestock operations. The Washington State University scientists are using refined instruments on field sites to measure and predict the effects of wind erosion and agricultural practices in the Columbia River Basin region on PM–10 and PM–2.5 emissions, under both natural wind erosion and with portable wind tunnel studies. Alternative cropping and tillage practices, residue management, and weed control practices are being developed and compared for control of PM–10 and PM–2.5 emission pollution under Columbia River Basin conditions.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. There has been growing national concern over the potential health and safety aspects of air pollution from dusts and suspended particulate matter resulting in passage of the 1990 Clean Air Act, as well as state air quality laws in both California and Washington. Because of particular problems from PM–10 and PM–2.5 emission in the arid regions of the Western United States, research on the role of agricultural operations in intensively cultivated soils in California and the Columbia River Basin, as sources of PM–10 and PM–2.5 emissions.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goals of this research were to measure the PM–10 emission rates from significant crop and tillage practices, to determine the source of PM–10 emissions on soils in agricultural regions of central and southern California and the Columbia River Basin in the Pacific Northwest, and to explore cost-effective alternative agricultural practices to control these emissions. More recently, studies of finer PM–2.5 particulates have been included because of their recognized potential health risks. In California, field measurements are being continued on both PM–2.5 and PM–10 emissions on production practices on almonds, figs, walnuts, cotton, wheat, and on ammonia emissions from dairy farms and feedlots. Similar studies in the Columbia River Basin are being conducted in Washington on a number of agricultural practices in the rain-fed and dryland croplands. Susceptible climatic and soil conditions and tillage and cropping practices have been identified and are being used to develop prediction tools to assist growers to adopt alternative practices to reduce potential air pollution by PM–10 and PM–2.5 particulate emissions. During 1998 an intensive study was undertaken to evaluate emission differences in almond harvesters. Data has been taken in California to assess land preparation techniques.

A Light Detection and Ranging system has been developed at the University of California at Davis that makes it possible to take a snapshot of the shape of an

emission plume from a source such as a harvester, and to make estimates on the amount of particulate material emitted into the atmosphere and its subsequent transport. Efforts continue to calibrate the Light Detection and Ranging System.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in March 1994. The appropriation for fiscal year 1994 was $940,000; fiscal year 1995, $815,000; and for fiscal years 1996 through 2000, $873,000 per year. A total of $6,120,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. In California, the program is matched by State funds in the form of salaries, benefits, and operating costs. In Washington, there were no state or non-federal funds in support of the PM–10 project in 1994 and 1995. In 1996, state support was $22,566, and in 1997, state support was $102,364. Similar funding was continued in 1998 and 1999.

Question. Where is this work being carried out?

Answer. This work is being directed by participating scientists at the University of California-Davis and at the Washington State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date of the original objectives of this project is 2000. The first four objectives of the project on soil particle characterization are anticipated to be completed in 1999. The objectives on field control will continue. In 1998, a manual for practices was developed and circulated for use by growers in Washington State to reduce wind erosion on agricultural land. Implementation and development of these management practices will be a major role of this project in the future. Quarterly and annual reports on the Washington State project to date are available.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency's Program Manager annually reviews the research progress reports and proposed new research and attends the annual meetings of the program to assess progress. The program is also evaluated each year by technical, administrative, and agency personnel. Progress is reported at research review meetings three times a year, with the November 1998 advisory committee members. A formal on-site review by a panel of experts was conducted of the Washington program in November 1997, and a similar review of the California program is planned in the near future.

PRECISION AGRICULTURE, ALABAMA AND TENNESSEE

Question. Please provide a description of the research that has been funded under the Precision Agriculture, Alabama and Tennessee grant.

Answer. CSREES has requested the university to submit a grant proposal that has not yet been received. This grant will develop needed training for farmers in the use Global Positioning Systems, Geographical Information Systems, Remote Sensing and Variable Rate Technology for precision farming application.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. This project will focus on the Southeastern area of the U.S. However results will apply to anywhere precision farming is applied.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of this project is to provide training for farmers in the use of precision farming technology.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and is funded at $425,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. This is a new project and therefore no non-federal funds have been provided.

Question. Where is this work being carried out?

Answer. The project will be conducted at the United States Space and Rocket Center Huntsville, Alabama and the Tennessee Valley Research and Extension Center at Belle Minci, Alabama.

Question. When was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives was 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. This project is under development and has not yet been evaluated.

WATER QUALITY—ILLINOIS

Question. Please provide a description of the research that has been funded under the water quality program grant.

Answer. The Illinois Groundwater Consortium grew out of a fiscal year 1990 appropriation of $500,000 to Southern Illinois University at Carbondale to focus on the short- and long-term effects of agricultural chemical contamination on the environment, the groundwater, and ultimately, human health and welfare. As a result of this appropriation, the University joined forces with the Illinois State Geological Survey, Illinois State Water Survey, the University of Illinois Cooperative Extension Service, and the University of Illinois Agricultural Experiment Station to create the Illinois Groundwater Consortium. The Consortium's primary mission, then and now, is to work effectively toward providing a scientifically-valid basis upon which meaningful agricultural chemical management and regulatory decisions can be based. The Consortium has worked to address the concerns of the agricultural and agrichemical industries as well as the valid concerns of the agencies charged with protection of environmental quality. Projects supported with Consortium funding are peer reviewed by researchers at 35 different universities and agencies from across the Nation, and results are presented and critiqued annually at the Consortium's Research Planning Conference.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. The fiscal year 1998 appropriation was targeted to research pertaining to the impacts, recovery, and remediation of the Midwestern region after flooding. The 1993 and 1995 flooding of the Mississippi, Missouri, and Illinois Rivers, and their tributaries, created devastating effects on the farm lands, communities, and natural resources of the area. These effects have major implications for agricultural practices, water quality, and public policy decisions. This natural catastrophe has resulted in a need for further studies examining the impact of the flooding on surface/groundwater, soils and their rehabilitation, biodiversity, and on economic and public policy in the region. In addition, there is the need to disseminate results to the public to enable the Consortium findings to be beneficial in the near term to those needing the information. To facilitate this work, the Consortium expanded its participant institutions to include Southern Illinois University at Edwardsville. Southern Illinois University at Edwardsville's strategic location in the heart of the flood damage area, as well as its qualified research scientists who work in the Consortium's high priority research areas, strengthen the capabilities of the Consortium. The highest priorities of the Consortium are: (1) the funding of research upon which public policymakers working on land use or groundwater protection issues in flood plain areas can base decisions and (2) the broad dissemination of this information. The projects funded by the Consortium are providing researchers opportunities to obtain data upon which larger projects can be built. Without this initial data, funding from other competitive sources would be difficult to obtain. The Consortium has tried to expand its efforts through a proposal for funds from the Fund for Rural America. This application received good feedback but was not funded. A revised proposal to similar funding sources is planned in the continuing efforts to expand the basic and applied impacts of the Consortium's research.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The Illinois Groundwater Consortium was established to coordinate and support research on agricultural chemicals in Illinois groundwater. The recent Midwest flood of the Mississippi, Missouri, and Illinois Rivers, and their tributaries, created devastating effects on farm lands that have major implications for agricultural practices and water quality in the region as well as effects in other states in the Midwest. The Consortium would like to be a leader in providing information to facilitate short-term and long-term systems studies of the effects of flooding on groundwater and surface water upon which to base policy management decisions.

Research areas characterizing short-term and long-term projects completed, underway, or proposed for each research area include:

Short-term

Effect of extended inundation on soil productivity.

Movement of chemicals—pesticides, herbicides, heavy metal, other chemicals—from flooded soils into surface and groundwater.

Impacts on soil fertility and nutrient balance caused by flooding.

Changes in nitrogen-fixing bacteria or pesticide microbic activity due to flooding.

Impacts of flooding on plant and aquatic life, including endangered and dangerous species, and microbial communities.

Effectiveness of riparian buffer strips under flooded conditions.

Groundwater quality changes resulting from flood related land-use developments in both the bottomlands where farming practices change and in the uplands where new communities are being developed.

Long-term

Effectiveness of methods of remediation for flooded soils.

Changes in surface and groundwater quality over time with changes in flooding conditions.

Changes in soil chemistry and productivity over time.

Long-term effects and recovery of microbic activity.

Effects of time on recovery and eradication of plant and aquatic life.

Recommendations for long-term, systems-based planning and management for watershed and bottomland management.

Examination of public policy decisions with implications for agriculture and water quality in light of flooding effects and recovery.

Long-term implication for public policy decisions and management of the river systems.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Research grants have been awarded from funds appropriated as follows: fiscal year 1990, $494,000; fiscal year 1991, $600,000; and fiscal years 1992–1993, $750,000 per year; fiscal year 1994, $666,000; fiscal year 1995, $460,000; fiscal year 1996, $468,000; fiscal years 1997 and 1998, $465,000 per year; and fiscal year 2000, $297,500. A total of $5,415,500 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant were as follows: $255,891 state appropriations in 1991; $447,237 state appropriations in 1992; $644,054 state appropriations in 1993; and $623,124 state appropriations in 1994. Non-federal and state funds for 1995–1997 have exceeded the federal funds.

Question. Where is this work being carried out?

Answer. The work is being carried out by the Illinois Groundwater Consortium and coordinated by the Carbondale campus of Southern Illinois University. The research is being conducted by staff at the University of Illinois, Southern Illinois University-Carbondale, the Southern Illinois University-Edwardsville, the Illinois State Geological Society and the Illinois State Water Survey at locations across the State of Illinois and in Missouri.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. This project was planned as a 5-year study of the impacts and recovery of flooding in the Midwest. In the original proposal and subsequent proposals, we identified both short-term objectives which are project goals that could be accomplished within 1–2 years and long-term objectives which are project goals that could be accomplished within 2–5 years. In calendar year 1997, we completed 3 years of studies involving 26 projects, and in calendar year 1998, we began 4 new projects and continued 12 projects. These projects were spread across areas identified as high priority, including studies of flood impacts on soil productivity and remediation, movement of chemicals in water and soils, bacteria and microbial life, plants and aquatic life, and on public policy impact. Results of projects completed in previous years and progress reports on projects underway are published each year as part of the Proceedings of the annual conference of the Illinois Groundwater Consortium and in the Illinois Groundwater Consortium's Groundwater Bulletin. Dissemination of both of these publications is broad-based, utilizing mailing lists to public and private institutions and individuals kept by the University of Illinois Cooperative Extension Service, the Illinois Groundwater Consortium, as well as dissemina-

tion through related conferences and workshops. Progress in meeting short-term and long-term objectives has been excellent. The most complex task is coordinating research projects on flood issues involving multiple issues, such as biological, social, economic and political issues, where effective solutions await the expansion of research databases. Due to waterborne contaminant problems within the Mississippi River Basin and sub-basins, it is anticipated that the projects will continue beyond the year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. From its beginning, the projects funded through the Illinois Groundwater Consortium involve reviews by at least three faculty/researchers drawn from 35 different universities, state, and federal labs and surveys, USDA's research laboratories, and other research centers. The reviewers rate proposals on criteria pertaining to scientific merit, quality of the research team, likelihood of the work resulting in publications and grant support from other sources, and relatedness of the project to the key objectives of the Illinois Groundwater Consortium. This peer review system enables the Consortium's Advisory Committee to select projects with high scientific merit from the group of proposals submitted for funding consideration. The titles, principal investigators' names and affiliations, and budgets are submitted to the USDA for review along with the Consortium's proposal for funding.

WATER QUALITY—NORTH DAKOTA

Question. Please provide a description of the research that has been funded under the water quality, North Dakota program grant.

Answer. The original goal of this research was to develop an understanding of the occurrence, transport, and fate of agricultural chemicals found in representative field settings in the Northern Great Plains region of the United States. In 1996, the scope of the program was expanded to include additional water management issues in the Red River of the North drainage basin. The Red River Water Management Consortium, a partnership between public and private sectors, was established to address critical water quality and quantity issues in an area where agriculture is the predominant industry. A major objective of the Red River Water Management Consortium is to use results from the initial phases of this research program to find economical, practical, and timely technological solutions to water problems of the region. By providing cofunding for the program, Red River Water Management Consortium members become active stakeholders in the research and ensure the practicality of the work performed.

The focus of current work is on:

—the assessment, development, and implementation of new technologies for addressing water quality and quantity concerns within the basin;

—water resource assessment and analysis, including the development of mechanisms for providing easy access to water-related information so proper water management decisions can be made;

—the determination of agricultural, industrial, municipal, and recreational impacts on water resources, both current and potential, and the identification of potential solutions to water quality and quantity problems and needs;

—water quality monitoring and coordination of monitoring activities;

—education and information dissemination on water issues facing this region of the United States; and

—the development of a watershed management strategy for the Red River of the North Basin focusing on water quality and quantity to ensure continued economic development of the area.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. The original focus of the work was on agricultural chemicals in groundwater which potentially presents both a public health and an environmental quality problem of significant short- and long-term importance. The goal of this work was to provide a scientifically valid basis upon which meaningful agricultural chemical management and regulatory decisions could be made. The establishment of the Red River Water Management Consortium provided a mechanism for transferring results of the initial research to vested stakeholders of the region and for addressing water quality and quantity issues resulting from agricultural practices and development. The overall goal of the Red River Water Management Consortium is the development of a long-term watershed management strategy focusing on water quality and quantity which can be used as a model for watershed management in other agricultural regions in the United States.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original goal of the research program was to understand the occurrence, transport, and fate of agricultural chemicals in representative field settings in the northern Great Plains region so scientifically-valid decisions could be made for their management and regulation. Work on five of the seven sites originally instrumented under this program has been completed. Research at the two remaining sites is directed toward Answer.ing questions that have arisen during the course of this research program, specifically to determine the long-term trends in nitrate concentrations in surficial aquifers under irrigated agriculture and to determine the source and trends for sulfate.

Results from this program have been reported in journals, conference proceedings, and through presentations at national, state, and local meetings. To date, more than 40 presentations or publications have resulted. In addition, two doctoral dissertations and one master's thesis have resulted from this program.

Finally, the researchers have established the Red River Water Management Consortium as a mechanism for transferring the results of the initial research to vested stakeholders in the region and to the general public in order to address water quality and quantity problems resulting from agricultural practices and agricultural development.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. In 1989, $1.0 million was appropriated under the groundwater research program. Beginning in 1990, funds have been earmarked under the Direct Federal Administration program. Work supported by this grant was initiated in fiscal year 1990 with an appropriation of $987,000. Subsequent appropriations have been $750,000 in fiscal year 1991, $500,000 per year in fiscal years 1992–1993; $470,000 in 1994; $407,000 in fiscal year 1995; $436,000 in fiscal years 1996–1998; and $340,000 in fiscal year 2000. A total of $6,602,000 has been appropriated for this water quality research program.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Red River Water Management Consortium members provide co-funding to support their participation in the program. Cofunding provided by Red River Water Management Consortium members for fiscal year 1996 totaled $59,700 and for fiscal year 1997 totaled $80,000. Interest in this program continues to grow, and it was expected that at least $100,000 in cost-share would be obtained during fiscal year 1998 through membership fees. These funds are provided directly to the program and do not include in-kind costs incurred by the participants which are estimated to be several hundred thousand dollars.

Field activities to determine the long-term trends of nitrate and sulfate and to determine the source of sulfate are being conducted in cooperation with the North Dakota State Water Commission, which is providing an estimated cash equivalent funding in the amount of $33,660 for sample analysis and approximately $12,000 for field instrumentation. Instrumentation of sites occurred in fiscal year 1997, and sampling and analysis continued through fiscal year 1999.

Consortium members' dues are also used to provide in-kind services for match in other projects being performed by the Red River Water Management Consortium. A major project sponsored by the U.S. Environmental Protection Agency and local contributors to restore riparian areas in the Red River of the North Basin has been funded and will provide $175,000 for consortium activities over the next 4 years. The amount of in-kind services provided from Consortium member fees is $9,000 per year.

The U.S. Corps of Engineers has contracted through the Red River Water Management Consortium a $100,000 6-month effort to improve the decision making capability regarding ongoing flooding within the Devils Lake Basin, a sub-basin of the Red River of the North Basin. This work is intended to produce decision support tools, forecasts, data, and forums that can be continued to be used by the Corps St. Paul district, the states of North Dakota and Minnesota, the International Joint Commission, and the people of the Devils Lake region after the project has been completed.

Question. Where is this work being carried out?

Answer. Research is being conducted at the University of North Dakota through its Energy and Environmental Research Center and at field sites and agricultural product-processing facilities in North Dakota, Minnesota, and Montana. In addition, a portion of the pesticide research was conducted at North Dakota State University. Cooperative efforts have resulted in work also being performed at cooperative institution locations such as the University of Waterloo, Victoria University, University

of Montana, the Red River Resource Conservation and Development Council offices, and the North Dakota State Water Commission.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives of the project, specifically the field-related research, was fall 1995. This research has been completed; and the sites have been decommissioned, with the exception of those relating to long-term nitrate and sulfate monitoring and analysis. Work on nitrate and sulfate trends and occurrence was scheduled for completion in 1999. The Red River Water Management Consortium was established in 1996 as a mechanism for transferring the information derived from this research program to the technical community and to the public for use in addressing water quality and quantity issues relating to agriculture and agricultural development. It is anticipated that Red River Water Management Consortium activities will continue for several years in order to meet the objectives as defined by the non-federal sponsors and the agency.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last agency evaluation of this project was conducted in September 1996. CSREES' Technical Project Officer attended a meeting of the Red River Water Management Consortium to evaluate and determine the status of this effort, which is currently the focus of research program activities. Progress was made by the Consortium during its first year, and the program is an excellent example of how federal and state agencies, research and academic institutions, private industry, and the general public can work together to solve problems in an economical manner to benefit people, communities, and the Nation. All project objectives were met for the first-year Consortium activities.

EXTENSION FEDERAL ADMINISTRATION PROJECTS

AGRICULTURE IN THE CLASSROOM

Question. Please provide a description of the research that has been funded under the Ag in the Classroom grant.

Answer. Agriculture in the Classroom is an academic program designed to promote agricultural literacy among kindergarten through 12th grade—K–12—students. Funds appropriated for this program are used to leverage agricultural literacy activities in all fifty States, the District of Columbia, and U.S. territories by providing national leadership and guidance to State Agriculture in the Classroom Coordinators. This serves the educational needs of more than five million students through a network of more than 120,000 teachers annually. Activities during the past year include implementation of cooperative agreements to identify sound instructional materials that focus on the contribution of minorities to the food and agricultural system, establishment of a web site to provide faster and more cost-effective dissemination of information and materials, and planning and conducting an annual national conference.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. This outreach program is directed toward the youth of America. In the Federal Agriculture Improvement and Reform Act of 1996 Congress noted the importance of increasing the number of young Americans pursuing baccalaureate or higher degrees in the food and agricultural sciences. Agricultural literacy is a first step in creating interest and awareness of career opportunities in the food and agricultural sciences. Education studies cite that students learn best by example. Agriculture provides an excellent vehicle for providing hands-on learning experiences in a variety of academic disciplines including biological science, social science, language arts, and mathematics.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The original purpose of this outreach program was to promote agricultural literacy through the education system. The Secretary of Agriculture established the Agriculture in the Classroom Program in 1981 to help future generations become more agriculturally literate. Agriculture in the Classroom helps students understand the complexity of the total food and fiber system, appreciate its impact on the economy and society, and become citizens who support wise agricultural policies. The program encourages educators to integrate the critical role of agriculture in our economy and society into their teaching. The program provides leadership, counsel and education materials, and maintains a nationwide network of teachers, farmers, agribusinesses, and government officials who actively support the Agriculture in the

Classroom mission. Cooperation between the Federal government and the agricultural community is strengthened through a Memorandum of Understanding between the National Agriculture in the Classroom Consortium and USDA.

Question. How long has this work been underway and how much has been appropriated by fiscal years to date.

Answer. A total of $2,461,880 has been appropriated for this program as follows: fiscal year 1986, $76,000; fiscal years 1987 and 1988, $74,000 per year; fiscal year 1989 $87,000; fiscal year 1990, $135,000; fiscal year 1991, $170,000; fiscal years 1992 and 1993, $208,000 per year; fiscal year 1994, $185,000; fiscal year 1995, $208,000; fiscal year 1996, $204,880; and fiscal years 1997 through 2000, $208,000 per year.

Question. What is the source and amount of non-Federal funds provided by fiscal year?

Answer. This is not a grants program and does not require matching funds. Agriculture in the Classroom is highly leveraged through a variety of public and private funding that supports the State programs. The cooperative agreements that are in place have matching funds.

Question. Where is the work being carried out?

Answer. National leadership for the Agriculture in the Classroom is provided by the Higher Education Programs unit within the CSREES. Each State actually manages its own program. Overall, the national program impacts an estimated 120,000 teachers and over 5 million students annually in grades K–12.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related activities?

Answer. Beginning in 1981, under the direction of the Secretary of Agriculture, an Agriculture in the Classroom program was initiated in every State, the District of Columbia, and in the U.S. territories. Each State has a viable program. The goal of promoting agricultural literacy among America's youth is a continuing effort to serve each new generation of students.

In the past year, cooperative agreements have been implemented for the development of a high quality web site to coordinate and exchange ideas among each of the Agriculture in the Classroom State Coordinators, to sponsor national teaching awards, and further disseminate superior agricultural educational materials.

Agriculture in the Classroom annually sponsors a National Agriculture in the Classroom Conference to bring the Agriculture in the Classroom community together to expand experiences, ideas, materials, information, and techniques among State programs, educators, governmental agencies, agribusinesses and agricultural organizations. A quarterly newsletter communicates agricultural educational topics. A Resource Guide and outreach to educational associations are planned to enhance the Agriculture in the Classroom efforts.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The State Agriculture in the Classroom program coordinators have formed a National Agriculture in the Classroom Consortium. This provides USDA with another source of stakeholder input for identifying and setting priorities. Evaluations have been conducted in several States. Findings are provided to the Executive Committee of the National Agriculture in the Classroom Consortium and to the National Program Leader.

During each national conference formal evaluations are conducted. These are considered in defining future goals for the program. Participants find the conferences valuable for sharing ideas on projects and for obtaining resource materials. In response to evaluations a "teacher friendly" web site has been developed and efforts are underway to find, develop and disseminate new educational materials.

BEEF IMPROVEMENT—ARKANSAS

Question. Please provide a description of the program that has been funded as the Arkansas Beef Improvement Program.

Answer. The Arkansas Beef Improvement Program uses result demonstrations to demonstrate cost effective beef management practices. These demonstrations are conducted on family owned beef cattle operations. The type of demonstrations implemented on the farms is determined by the specific problems and needs of the rancher. Education gained is then transferred to other producers through beef cattle field days and presentations, 6-hour county workshops, factsheets and popular press articles.

Question. What is the national, regional or local need for this program?

Answer. When planning, implementing and monitoring demonstrations, a business plan is used with specific goals and objectives. Therefore, the overall educational goal is to teach that decision making process rather than the specific management practices. Management problems differ from farm to farm, region to region and from year to year. Therefore, emphasizing problem identification and evaluation, exploring management options and monitoring progress are procedures that can be used throughout the ranching industry.

Question. What was the original goal of this program and what has been accomplished to date?

Answer. The overall goal of the Arkansas Beef Improvement Program was to enhance the efficiency and profitability of the Arkansas beef cattle producer. This program uses demonstration farms to implement and evaluate management practices. There are four farms enrolled in whole farm demonstrations. These demonstrations are five-year commitments. Three farms are in year three of the program and one farm is in year one. There are eight special projects that address specific management problems. Depending upon the special project, they can last two to five years. Twenty farms either have been or are currently enrolled in special projects. A six-hour workshop was developed to teach other producers the decision making process used and practices implemented on demonstration farms. Twenty-six workshops in 21 countries have been conducted. A quarterly Arkansas Beef Improvement Newsletter, two Extension publications and monthly articles in the Arkansas Cattle Business publication are methods used to transfer information to the public.

Question. How long has the program been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. $200,000 has been devoted to this project from fiscal years 1993 through 1995 and in fiscal years 1996 through 2000, $197,000 was appropriated for a total of $1,585,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Arkansas provided $118,154 for this past year.

Question. Where is the work being carried out?

Answer. The four current whole farm demonstrations and eight special projects are located on beef producing farms located throughout the state of Arkansas. These farms are family owned and operated and vary in size and stocking rates.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The Arkansas Beef Improvement Program currently has four whole farm demonstrations and twenty special projects. Three of the whole farm projects will finish in 2001, and the fourth whole farm project will finish in 2003. The special projects include cowherd performance, pasture renovation, establishing a breeding and calving season, stocker cattle, hay quality and supplemental feeding, replacement heifer management, cull cow management, and stockpiled forages. These projects range from two to five years in length. As farms complete special projects; additional farms are selected for special projects. The management problems addressed in special projects changes depending upon the need at the time.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. A CSREES review of this project is conducted annually. The 1999 review was positive, with mention made of the efforts to develop decision making skills among beef producers. A suggestion was made to expand the environmental protection aspects of the project.

BOTANIC GARDEN INITIATIVE, ILLINOIS

Question. Please provide a description of the research that has been funded under the Botanic Garden Initiative, Illinois.

Answer. CSREES has requested the university to submit a grant proposal that has not yet been received. The program is expected to increase student interest and understanding of science and other related subjects using gardening as the focus.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research?

Answer. We have contacted the Chicago Botanic Garden regarding this special grant. Their anticipated research is expected to result in educational curricula, lesson plans, garden design and construction recommendations, and garden activities that will serve as a model for other cities throughout the U.S.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The anticipated goal of this research is to develop an innovative program that increases green spaces at Chicago's public schools and teaches elementary school students the value of plant science, math, nutrition, business, and literature. Students and teachers, in collaboration with the Garden, build and maintain gardens by using the Life Lab curriculum, a nationally acclaimed and widely used science curriculum.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant begins in fiscal year 2000 and the appropriation for fiscal year 2000 is $106,263.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds sources provided for this grant have not been determined at this time, since the grant has not yet been received.

Question. Where is this work being carried out?

Answer. This work will be conducted at the Chicago Botanical Garden.

Question. What was the anticipated completion date for the original objective of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. Current progress indicates the anticipated completion date for the original objectives is five years.

Question. When was the last agency evaluation of this project? Provided summary of the last evaluation conducted.

Answer. This is a new project which will begin in 2000; therefore no evaluation has occurred.

CONSERVATION TECHNOLOGY TRANSFER, WISCONSIN

Question. Please provide a description of the extension project that has been funded under the Conservation Technology Transfer, Wisconsin grant.

Answer. This is a new project that will leverage funding at the University of Wisconsin with other federal, state and local sources to provide education and technical support to livestock producers regarding animal waste.

Question. According to the proposal, what is the national, regional or local need for this project?

Answer. The need for this project is to meet new federal regulations on animal waste to protect public waters and air quality. It can also serve as a regional model for the dairy industry.

Question. What was the original goal of this project and what has been accomplished to date?

Answer. The original goal of this project is to coordinate nutrient management assistance for livestock producers among multiple agencies and the private sector. It is a new project that has not yet received funding.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant will begin in fiscal year 2000, and the appropriation for fiscal year 2000 is $170,022.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The non-federal funds and sources provided for this grant are expected to be $600,000 from state and local funds for fiscal year 2000. As a new grant, commitments are still being secured.

Question. Where is this work being carried out?

Answer. This project will be conducted with individual producers throughout Wisconsin, in coordination with the USDA Agricultural Research Station in Madison.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date for the original objectives is one year from the date of fund transfer. As a new project, no funds have been received to date.

Question. When was the last agency evaluation of this project?

Answer. This new project will have an evaluation process included in the proposal.

DELTA TEACHERS ACADEMY

Question. Please provide a description of the program that has been funded under the Delta Teachers Academy project.

Answer. The National Academy proposes to continue its Delta Teachers Academy in the Lower Mississippi Delta Region—219 counties and parishes near the Mississippi River including portions of Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee—focusing on educational improvement in core subject areas. The program was launched in 1992 with a pilot grant of $500,000 from the U.S. Department of Education. U.S. Department of Agriculture funding began in 1994. The program provides long-term academic enrichment to approximately 525 elementary and secondary school teachers at 35 sites by teaming them with university scholars for in-service training during the school year and with summer institutes. Through its Fellows Program, the Delta Teachers Academy sustains the professional development of more than 650 Academy graduates throughout the region. This grant is not awarded competitively; however, we require annual applications reporting the previous year's accomplishments and describing planned activities and expenditures for the coming year. These applications undergo merit review before the awards are made.

Question. What is the national, regional, or local need for this project?

Answer. The 219-county Lower Mississippi Delta region has been cited by the Educational Testing Service and the National Center for Education Statistics as notably lagging in student performance in core academic areas. According to the grant recipient, 33 percent of the children in the region live below the poverty line compared to 20.5 percent nationally. In 1996, 60 percent of Louisiana's public school sample ranked "below basic" on the National Assessment of Education Progress test for eighth-graders. The USDA's Economic Research Service correlated poor educational performance, rural poverty, and limited economic development. The Delta Development Commission cited serious educational problems including poor student performance in core content areas, demoralized teachers with little opportunity for academic development, and region-wide difficulty in recruiting and retaining qualified teachers. The Commission noted that 75 percent of the region's workforce lacks the basic reading skills necessary for technical training, and specifically cited improved teacher training as one means for breaking the cycle of poverty and economic noncompetitiveness.

Question. What was the original goal of the program and what has been accomplished to date?

Answer. The original and continuing goal of the project is to address the problem of insufficient professional development opportunities for the elementary and secondary teachers of the seven-state region. The Delta Teachers Academy focuses on core subjects of English, geography, history, mathematics and science. Some sites also focus on humanities, language arts, social studies, reading, civics and interdisciplinary subjects. The Delta Teachers Academy began by offering educational development activities for 100 teachers from 50 rural districts at 10 sites. Training has expanded to 600 teachers at 35 sites across the entire seven-state region. More than 750 graduates whose professional development is sustained through the Academy's Fellows Program lead teacher in-service training at their home schools. The project has improved student performance and teacher training, morale, recruitment and retention in the region.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. A total of $24.161 million has been appropriated to the Department of Agriculture for this project, including $2 million in fiscal year 1994; $3.935 million in fiscal year 1995; $3.876 million in fiscal year 1996; $3.850 million in fiscal year 1997; and $3.500 million each year in fiscal years 1998 through 2000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. There are no non-federal funds identified for this project.

Question. Where is the work being carried out?

Answer. The Delta Teachers Academy project is coordinated out of The National Faculty's Southern Region office in New Orleans, Louisiana. The project is conducted at 33 sites in the seven-state Lower Mississippi Delta region including Arkansas, Kentucky, Illinois, Louisiana, Mississippi, Missouri, and Tennessee.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original objective was to provide three full years of training to each faculty team established by the Delta Teachers Academy. Training consists of four two-day academic sessions and one two-week summer institute for each team. This objective was met for the 24 faculty teams funded under a fiscal year 1994 Department of Agriculture grant; for 15 additional teams funded in 1995; and for one team funded in fiscal year 1996. The 20 teams funded in fiscal year 1997 have received

two years of training and the 14 teams funded in fiscal year 1998 have received one year of training.

Objectives for fiscal year 1999 included providing ongoing professional development of 33 teams consisting of 600 participants; adding two additional teams to maintain the level of service to 35 teams throughout the region; instituting new procedures to better meet clientele needs based on an independent review completed by Westat; intensifying its individual and field-based approach; and drafting individual work plans for each site. The anticipated completion date is September 30, 2002.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. An assessment of the short-term impact of the Delta Teachers Academy by Westat, Inc. of Rockville, Maryland was completed in August 1997. Westat found the majority of participants reported that the Academy met their personal and professional needs by renewing their enthusiasm for teaching, improving self-confidence, increasing their sense of professionalism, improving their knowledge of specific content areas, enhancing teaching methods and interacting with peers. Teachers are applying what they have learned from the Academy in their classrooms. For example:

—88 percent said the Academy prepared them to assume leadership roles in their schools;

—89 percent noted changes in student work habits, attitudes, aspirations and achievements;

—90 percent applied academic content from the program in their classrooms;

—78 percent used skills and strategies learned at the Academy in their classroom teaching;

—83 percent said their teaching approaches became more effective in improving student learning.

A U.S. General Accounting Office review of the Academy's programs was conducted in 1995. Report GAO/RCED–95–208 included summary statistics on more than 1,000 teacher evaluations of Academy sessions as well as the General Accounting Office's survey of participants. On average, participants reported that the Academy was more effective than any other teacher development program they had participated in, was very effective in renewing or enhancing knowledge in one or more academic subjects, and was generally effective in enhancing the teaching skills and strategies required for teaching challenging academic content.

A site visit of the Delta Teachers Academy in New Orleans, Louisiana and the National Faculty's Summer Institute at Tulane University was conducted by the CSREES's National Program Leader for Higher Education and Evaluation in 1996. The visit confirmed that Delta Teachers Academy strengthened participating teachers' abilities by improving their knowledge base, helped them become leaders of other teachers by requiring them to conduct staff development at their home schools, and had a positive impact on student learning. School superintendents reported greater student enthusiasm, more homework, and higher test scores for students whose teachers were participants in the Delta Teachers Academy program.

DIABETES DETECTION AND PREVENTION, WASHINGTON AND HAWAII

Question. Please provide a description of the extension activity that has been funded under the Diabetes Detection and Prevention, Washington and Hawaii, grant.

Answer. The grant supports research/demonstration and outreach activities designed to (1) detect undiagnosed diabetes through use of a non-invasive ocular fluorescence technique, and (2) promote collaborative efforts by CSREES and The Joslin Diabetes Center to develop and pilot test a model to provide diabetes screening, prevention education, and case management services for selected rural and urban populations in Hawaii and Washington.

Question. According to the research proposal, or the principal researcher, what is the national, regional or local need for this research/demonstration program.

Answer. This program grows out of a need to reach more of the millions of Americans who have undiagnosed diabetes. Diabetes is currently one of the leading causes of death and disability in the U.S. adult population, and is highest among certain racial and ethnic populations, especially Native Americans, African Americans, Hispanic Americans, and Asians and Pacific Islanders.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this research/demonstration and outreach project is to (1) provide screening for diabetes among selected rural minority patient populations in

Washington and Hawaii using innovative detection technology and blood glucose measures; (2) diabetes education prevention and care materials; and (3) case management support and follow-up services for patient referrals.

Among the accomplishments to date are the following:

—CSREES has met with representatives of the Joslin Diabetes Centers, and convened regular telephone conferences with representatives of State Cooperative Extension Partners in Washington and Hawaii, and all partners.

—A Memorandum of Understanding has been prepared and approved by USDA and Joslin Diabetes Center.

—A revised proposal has been submitted by the Joslin Diabetes Center, and the Hawaii and Washington Extension Programs which clarifies the Project's objectives, and establishes roles and expectations of each of the partners.

—Prevention and care materials are in draft form and are being reviewed by Cooperative Extension staff.

—Cooperative Extension staff are being trained in delivery techniques for diabetes care and risk reductions strategies.

—Cooperative Extension staff are establishing local collaborations with health agencies, and developing recruitment and maintenance strategies.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1999 with an appropriation of $550,000; the fiscal year 2000 appropriation is $550,000. The total appropriation is $1,100,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. There were no non-federal funds and sources provided for this grant.

Question. Where is this work being carried out?

Answer. The research and demonstration will be conducted at Joslin Diabetes Centers at Swedish Hospital in Seattle, Washington, and Straub Hospital in Hawaii. In addition, the Cooperative Extension offices in selected counties in Hawaii and Washington will be involved in program implementation.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completed date for the original objectives is 2002. The anticipated completion date of the revised objectives is 2004.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The project did not get underway until late in fiscal year 1999 because of the need to prepare and seek approval of the Memorandum of Understanding. Thus, an Agency evaluation has not yet occurred. A mid-year evaluation of program outputs and the delivery process to date will occur in July 2000.

EXTENSION SPECIALIST, MISSISSIPPI

Question. Please provide a description of the program that has been funded as the Basic Weather Service for Research and Extension Project.

Answer. The Basic Weather Service and Extension project is designed to fill a void in weather data due to closure of the Ag Weather Service facility in Stoneville, Mississippi. The funding will be used to gather and disseminate critical agricultural weather data for producers and researchers in Mississippi and surrounding states.

Question. What is the national, regional or local need for this program?

Answer. The grant proposal states that the Ag Weather Service facility was closed at Stoneville, Mississippi. This action has created a void in the availability of and access to critical weather data that producers and researchers use to make management decisions and to formulate work plans within the state and region. The weather data collected by this project serves a national need to provide a national database.

Question. What was the original goal of this program and what has been accomplished to date?

Answer. The goal of the project is to collect, maintain, and disseminate weather information for producers and researchers in Mississippi and surrounding states. Electronic weather stations and links with other web sites to deliver weather data have been installed and developed. The project is providing timely data to producers in the Delta.

Question. How long has the program been underway and how much has been appropriated by fiscal year through 2000?

Answer. The funding for fiscal years 1997 and 1998 was $50,000 each year and for fiscal years 1999 and 2000, $100,000 each year. A total of $300,000 has been appropriated.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The State of Mississippi through the Mississippi Cooperative Extension Service and Delta Research and Extension Center provided $41,350 in state appropriated funds to support this project in 1997, 1998, and 1999.

Question. Where is the work being carried out?

Answer. The project will be conducted at the Delta Research and Extension Center in Stoneville, Mississippi.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of the additional or related objectives?

Answer. One of the original objectives, installation of equipment to collect weather data and establishment of a website, has been completed. The agriculture community—producers, markets, suppliers of goods and services, and financial institutions—depend upon weather information as a guide for business planning and decision making. The National Weather Service has eliminated certain critical services to rural areas and to agriculture clientele. As agriculture implements new programs in pest management, crop production, and site-specific farming, near real-time weather data is needed for the success of these programs. Weather services provided by the Stoneville project will be in cooperation with and complementary to services provided by the National Weather Service. Additional objectives relating to the collection, process, and disseminate of timely weather data are needed in the Delta Region. Current funding supports the objectives to ensure these weather services are available to the region.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Evaluation of the project and Internet website is being conducted with an on-line survey instrument and through e-mail responses about the site. An advisory group has been identified and is functioning to provide feedback on the weather center's current status as well as assessing needs for future plans for the project's continued mission.

INCOME ENHANCEMENT DEMONSTRATION, OHIO

Question. Please provide a description of the program that has been funded under the Income Enhancement Demonstration Project for Northwest Ohio.

Answer. The Federal funds support the Agricultural Business Enhancement Center which plays a major role in the development of the agricultural sector of Northwest Ohio. The Center provides a variety of management training programs, helps farmers and other agribusinesses develop comprehensive business plans, and facilitates business networking. CSREES performs an annual merit review of this project.

Question. According to the research proposal, or principal researcher, what is the national, regional, or local need for this program?

Answer. The Center seeks to enhance the competitiveness of agricultural firms in Northwest Ohio and create greater economic opportunity for local residents. To be successful in business, farmers and other agribusiness firms must be able to adapt to a large number of major changes affecting the entire food system from the farmer to the consumer. These include changes in farm programs, globalization of markets, new technologies, information systems, consumers' concerns for food safety and nutrition, and society's concern for protecting the environment. Individuals, families, firms and communities in Northwest Ohio need to understand the changes, develop and implement effective strategies for dealing with change.

Question. What was the original goal of this program and what has been accomplished to date?

Answer. The original goal of the project was to help people develop new businesses and restructure and expand existing businesses in order to enhance incomes in Northwest Ohio. The Agricultural Business Enhancement Center conducts economic research on market opportunities, provides a variety of management training programs, helps individual farms and other agribusinesses develop comprehensive business plans, and facilitates networking with businesses in other regions of the United States and around the world. Recent accomplishments include the following: A group of growers formed a cooperative and contracted with the Ohio Turnpike Commission to operate farmers markets at rest stops; farmers expanded their use of the national Internet Hay Exchange; sugar beet grower associations are exploring

the feasibility of reopening a closed processing plant; Christmas tree growers worked together to expand their market and increase sales; at an annual Women in Agriculture forum, 61 percent said workshop participation would improve management of the family farm, 78 percent would improve family relations, and 28 percent would improve farm income; Master Gardener volunteers were trained and provided over 6,000 hours to advise local home gardeners.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The project began in 1991. Appropriations have been as follows: $145,000 in fiscal year 1991; $250,000 per year in fiscal years 1992 through 1995; and $246,000 per year in fiscal years 1996 through 2000. Appropriations to date total $2,375,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. The State of Ohio has appropriated the following funds: $35,100 in fiscal year 1991; $72,368 in 1992; $56,930 in 1993; $30,547 in 1994; $49,935 in 1995; $51,432 in 1996; $48,664 in 1997; $53,736 in 1998; and $56,186 in 1999.

Question. Where is the work being carried out?

Answer. The Agricultural Business Enhancement Center is located in Bowling Green, Ohio and serves eight counties in the Toledo Metropolitan Area. Project leadership is being provided by the Department of Agricultural Economics, Ohio State University, Columbus, Ohio.

Question. What was the anticipated completion date for the original objectives of the project? Have these objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1991 was for a period of 12 months, however, the ongoing needs of producers and agribusinesses to adjust to major changes in the agricultural sector continues to provide the Center with many challenges. The current phase of the program will be completed in 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. CSREES performed a merit review of the project in February 1999. In that review it was noted that: "The fiscal year 1999 proposal is especially well done—for each of its 3 objectives, there are one or more goals, and each goal has procedures and evaluation plans." Throughout the year, the project director completed evaluations which clearly demonstrated the value of the project to citizens of Ohio.

INTEGRATED COW-CALF MANAGEMENT—IOWA

Question. Please provide a description of the program that has been funded as CHIPS: Cow-Calf Integrated Resource Management Program.

Answer. CHIPS is an integrated cow-calf resource management program that originally targeted an eleven county area in southeast Iowa. The intent of the program is to impact the area's economy by maximizing the profit potential of individual livestock operations. Program technicians work one-on-one with participating beef operations, utilizing a variety of management services designed to assist these producers as enterprise decisions are made. The program has grown to extend services to over 200 beef producers in over 60 Iowa counties.

Question. What is the national, regional or local need for this program?

Answer. The agricultural economy of Iowa and surrounding states has suffered over the past several years due primarily to low commodity prices, especially corn, soybean, and hog enterprises. Selected areas of Iowa have also been challenged with extreme weather conditions that have impacted many beef operation current and long-term financial and managerial decisions.

To address this rapidly changing agricultural infrastructure, the program has adjusted its direction and focus to meet the management and technical needs of Iowa beef producers. Program technicians and staff work closely with participants to collect and analyze individual operation data. This information is necessary as management recommendations are developed to enhance the performance and economic stability of the operation. This approach supports individual economic survival as well as strengthening the local and regional economic community.

The Iowa cattle industry is exploring strengthening its position by building a new beef harvesting facility. This involves cooperation of many industry representatives. If this effort becomes a reality, the importance and need for such programs will continue to grow and expand. Producers will need continued technical assistance and expanded services as long-term decisions are made to supply a high quality, source verified, environmentally sound product to consumers.

Question. What was the original goal of this program and what has been accomplished to date?

Answer. The overall goal of the program is to have a positive effect on the area's economy by improving the long-term profit potential of the local cattle industry. Objectives include improving the understanding of producers about cow-calf production on highly erosive land, providing intensive technical assistance to develop goals and individualized farm recommendations and helping producers develop management skills to improve efficiency and lower costs of production. Over 220 cow-calf operations are to be involved in 2000.

Over the past several years, the program has expanded in geographical area, clientele and technicians. The program has grown from one technician and 11 counties in 1992 to seven technicians providing services to over 60 counties in Iowa. These technicians serve over 220 cooperators that manage over 18,000 beef cows.

During the 1998–99 fiscal years, technicians conducted over 1,330 farm and office visits. Numerous management areas were addressed during these one-on-one contacts. Over 27,000 head of calves and beef cows were weighed and over 4,000 breeding animals were permanently identified. A total of 33 performance analysis records incorporating financial and performance information were individually analyzed. More than 560 forage and soil samples were collected and approximately 300 ration projections were developed for cooperators.

Networking projects are emphasized by the program. Examples include the heifer development program, regional steer tests, educational efforts in conjunction with the Iowa Beef Center, Iowa State University Extension and the Iowa Quality Beef Program.

Question. How long has the program been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. $138,000 was approved for fiscal year 1992; $138,000 for fiscal year 1993; $276,000 for fiscal year 1994; $350,000 for fiscal year 1995; $345,000 for fiscal year 1996; $345,000 for fiscal year 1997; $300,000 per year in fiscal years 1998 and 1999; and $250,000 in fiscal year 2000. Federal funding through fiscal year 2000 totals $2,442,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Cooperators pay fees of approximately $3.00 per beef cow on a sliding scale that adjusts for herd size. In fiscal year 1999, approximately $47,000 in fees were collected.

Question. Where is the work being carried out?

Answer. The program is operated in six designated technician areas in Iowa. Services and technical support are offered to producers in approximately 60 Iowa counties.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The objectives and goals of the program have been modified to meet the needs of cooperators and adjust to the rapidly changing cattle industry. The program initially projected to address the objectives in a three-year time frame. However, due to the expansion of the program in both geographical area and cooperator numbers, services and technical assistance have been modified to accommodate the numerous changes experienced by the industry.

Over the past several years, the program has made considerable progress in achieving its goals. Cooperators are utilizing more of the data collection and record keeping programs that are offered. This data collection process has been important as producers make long-term decisions. The Iowa beef industry faces a challenging and exciting time. With the beef harvest facility initiative underway, the support and assistance offered to producers needs to be modified and adapted. A three-year time frame for the development and initiation of the Iowa Beef Network is expected.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The last annual review of this project was conducted by the agency in May, 1999. This review was positive, with special note taken of the expansion of the project to include a greater number of beef producers, promotion of a sound business approach to on-farm record keeping and management practices, and the efforts to extend this knowledge to other beef producers of the State.

NATIONAL EDUCATION CENTER FOR AGRICULTURAL SAFETY, IOWA

Question. Please provide a description of the extension project that has been funded under the National Education Center for Agricultural Safety grant.

Answer. The mission of the National Education Center for Agricultural Safety is to reduce the level of preventable illnesses, injuries and fatalities among agricultural populations. The National Education Center for Agricultural Safety serves farmers, ranchers, their families and employees by providing hands-on training and education programs at the Center. The center works in conjunction with the "Farmedic" program and teaches agricultural families how to handle farm emergencies by providing First on the Scene and First Responder courses. It also provides training for rural firefighters and paramedics who respond to rural emergencies.

The National Education Center for Agricultural Safety is located in Peosta, Iowa on the Northeast Iowa Community College Campus. Phase Two of the center's construction program has just been completed, allowing the center to provide training in "real life situations". Experience in handling grain bin entrapments, farm equipment entanglements, manure pit rescues, tractor over-turns, livestock, and utility emergencies are provided. Regularly scheduled training includes general First Aid and Cardiopulmonary Resuscitation courses.

The center has assisted local farmers and small corporations to screen workers for employment health risks and conducts health education programs on hearing conservation, skin cancer prevention and prevention of swine confinement worker and animal health problems.

The center operates an 11,000 square foot facility that was funded by the state of Iowa with matching private donations. The USDA grant provides salaries and operating funds, corporate and private donations provide needed programs and equipment. The National Safety Council and Northeast Iowa Community College underwrite additional operational costs not covered in the USDA grant or donations.

Question. According to the extension proposal, or the project director, what is the national, regional and local need?

Answer. The project director believes this training to be of national, regional, and local need. According to information compiled by the National Safety Council, 800 farmers and ranchers died in farm work incidents in 1998. Nearly 50 percent of these fatalities were related to work with farm tractors and equipment. Many of the training programs conducted at this new training center are focused on issues related to safe machinery operations. Included are safe tractor operation programs for youth and young adults and safety equipment retrofitting of farm equipment in cooperation with farm machinery manufacturers.

One common thread for most fatal injury incidents in U.S. agriculture is that they are preventable. To prevent these serious injuries and deaths, the National Education Center for Agricultural Safety develops interactive training for the many at-risk audiences, including senior farmers, children and youth, and farmers who work part-time off the farm. These programs are offered in many local, regional, and national settings and are aimed at increasing awareness and knowledge about the hazards that impact farmers, ranchers, their families, and their employees.

Question. What was the original goal of this training center and what has been accomplished to date?

Answer. The original and continuing goal of this project is to develop, implement and evaluate diverse training methods for meeting the desired training objectives of at-risk agricultural audiences. For example, the training center has developed and is currently testing the feasibility of delivering agricultural safety and health information over fiber optic systems in the Midwest. This training is designed for firefighters and emergency medical service providers who respond to farm chemical emergencies. By using a fiber optics delivery technology, the training center is able to reach over 20,000 volunteer firefighters and rescue personnel with the latest methods for mitigating farm chemical and fertilizer fire, explosion and spill and leak emergencies.

The training center's 12 acre site is also now equipped with confined spaces facility for delivering important hands-on training on manure storage hazards and silo gas risks for U.S. dairy farmers. This $60,000 private donation enables the center's staff to present real-life scenarios about the risks associated with naturally-occurring gases in production agriculture.

It should also be noted that many of the center's programs are developed for safety professionals who work with farmers and ranchers across the nation. These programs are designed for train the trainer initiatives that greatly expand the education and training opportunities for farm populations that would otherwise be at risk due to the unavailability of effective training.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. The work supported by this grant began in fiscal year 1998 with an allocation of $195,000, and has remained at this level through fiscal year 2000. The total appropriation to date has been $585,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Non-federal funds and sources of donations were as follows: In 1998, non-federal funds included $450,000 state appropriation dedicated to the construction of Phase II; and $75,000 of miscellaneous donations and in-kind contributions received from Deere & Company, Dupont Corporation, Double L Group, Ltd, Melroe Company, Dubuque Racing Association and Theisen's Farm, Home and Auto, Inc. In 1999, non-federal funds totaled $135,200 from the same sources as 1998 and additional state, non-profit organizations and private sources.

Question. Where is this work being carried out?

Answer. Training and educational initiatives under this grant are being conducted at the National Education Center for Agricultural Safety, located on the campus of Northeast Iowa Community College in Peosta, Iowa.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The anticipated completion date of the original objectives is approximately March 31, 2000. Many of these objectives have already been met. Anticipated completion date of additional objectives is March 31, 2001.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. A CSREES merit review of the project application and site review were conducted in the spring of 1999. Another site visit is scheduled for June 2000. The project will be completing its second fiscal year on March 31, 2000. The National Education Center for Agricultural Safety utilizes external farm safety and health evaluators and two advisory committees to maintain its focus on the most pressing issues affecting the safety and health of our nation's agricultural populations.

Wisconsin-Stout's Northwest Wisconsin Manufacturing Outreach Center with direct consultation and long-term in-plant assistance delivered primarily through the efforts of university Project Managers. Direct assistance may be delivered through Co-op students, staff of the University of Wisconsin System, both two-and-four year institutions, and Extension services; the Wisconsin Technical College System; secondary schools; the private sector, professional societies, and private consultants, or attendance at state or national seminars. The project also draws on many other state resources to add expertise and capacity to network facilitation and in-plant extension activities. The project has undergone a merit review.

Question. What is the national, regional, or local need for this program?

Answer. America's manufacturers continue to face tremendous global competition. There are enormous pressures to improve the quality of products; reduce the time consumed to bring new products to market; and there remains an ever increasing demand to reduce the costs of products. Currently there is a strong movement in manufacturing to use speed-to-market combined with new product introduction as a tool to obtain a competitive advantage. While high quality and cost efficiencies continue to be mandatory commitments for today's manufacturers, great value is now being placed on speed-to-market. Large companies are not the only ones influenced by these trends. Small and medium size manufacturers often supply directly to the market or are vital elements of a supply chain. Hence, they must be able to respond quickly to changing market conditions while continuously improving productivity and product quality.

Question. What is the original goal of this program and what has been accomplished to date?

Answer. The Manufacturing Technology Transfer program's principal objective is the development of a competitive, secure manufacturing base through the mechanism of industrial extension. The program principally targets small and medium size manufacturers in rural Wisconsin. This funding will: continue to provide valuable industrial extension service to the target audience; support the continued empirical development of an industrial extension model; and investigate the use of new manufacturing technologies to support global competitiveness of manufacturers. Productivity improvements were reported by the companies showing impressive economic impact to the region through client operations assessments and plant evaluations, strategy development for continuous improvement, implementation of new organizational and operational methods, implementation of new manufacturing technologies, establishment of quality assurance/total quality systems, establishment of ongoing training programs, on-site instruction in new technologies, improved methods, and processes.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This project has been underway since fiscal year 1992 and was funded for $165,000 per year in fiscal years 1992 through 1995, and for $163,000 in fiscal years 1996 through 2000 for a total of $1,475,000.

Question. What is the source of and amount of non-federal funds provided by fiscal year?

Answer. University of Wisconsin-Stout provides $24,367 as in kind match. Funds from other state, University, and partner resources are pooled with USDA funds to carry out the described efforts.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1992 was for a period of 12 months. However, the Manufacturing Technology Transfer Program was developed as a continuously evolving industrial extension strategy for serving the needs of the manufacturing community. The Manufacturing Technology Transfer program is measured by success in meeting the objectives of the past five years' proposals, including the delivery of modernization assistance and development of an industrial extension model. The current phase of the program will be completed in 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. To measure the success of the project, a client evaluation process has been developed which includes an evaluation questionnaire. Evaluations are performed both by program staff, and by an objective, third-party survey house. Evaluations indicate significant forward strides in job creation, new businesses, expanded productivity, and enhanced international competitiveness. An agency evaluation of this project was last performed by the Department of Commerce in 1999.

PILOT TECHNOLOGY TRANSFER PROJECTS, OKLAHOMA AND MISSISSIPPI

Question. Please provide a description of the program that has been funded under the Oklahoma and Mississippi Technology Transfer Projects.

Answer. The original work involved the transfer of uncommercialized technologies from Federal laboratories and universities to rural businesses and communities. The objectives have evolved to providing more one-on-one assistance to small manufacturers. This type of assistance responds to the stated needs of the small manufacturing community and fills a recognized gap in the existing service provider community. This innovative and unique program has opened an entirely new clientele base for Cooperative Extension, small rural manufacturers in Oklahoma. This project has undergone a merit review.

The original project in Mississippi focused upon the exploration, evaluation, development, and education/transfer of innovative technologies throughout the state such as agribusinesses, rural businesses and industries, communities, and local governments. In Mississippi, these original goals are still the guiding principle of the project. Specific objectives and activities of the project have been modified as the project and new technologies have been invented and introduced.

Question. What is the national, regional, or local need for this program?

Answer. Manufacturing extension programs throughout the country have identified one-on-one engineering technology assistance as a need for small manufacturers as they attempt to become more competitive and profitable. The Oklahoma Manufacturing Extension Partnership has received national acclaim for its noteworthy and highly effective partnership with the Land Grant University. This partnership was forged in 1995 by the Technology Transfer Program and continues today as the model Applications Engineering Program. As the Applications Engineering Program has begun to address more of the manufacturing engineering issues on a state-wide basis, the Technology Transfer Program has been exploring new ways of providing technology assistance to the small manufacturers. The Technology Transfer Program will begin augmenting its manufacturing engineering and technology service with Advanced Manufacturing Management Systems assistance to include: Resource Planning and Control, Manufacturing Operations Costs Analysis and Control, Manufacturing Process Simulation, and Electronic Commerce.

Question. What is the original goal of this program and what has been accomplished to date?

Answer. The primary goal of these programs is to contribute to an increase in business productivity, employment opportunities, and per capita income by utilizing technology and information from Federal laboratories, Rural Enterprises of Oklahoma, Inc. of Durant, Oklahoma; Mississippi State Food and Fiber Center; Voca-

tional-Technical Education System; Center for Local Government Technology; Cooperative Extension Service; and other university departments and non-campus agencies.

The original project in Mississippi focused upon the exploration, evaluation, development, and education/transfer of innovative technologies to various throughout the state such as agribusinesses, rural businesses and industries, communities, and local governments. In Mississippi, these original goals are still the guiding principle of the project. Specific objectives and activities of the project have been modified as the project and new technologies have been invented and introduced.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Funding appropriated to date is as follows: $350,000 per year in fiscal years 1984 and 1985; $335,000 in fiscal year 1986; $333,000 per year in fiscal years 1987 through 1990; $331,000 per year in fiscal years 1991 through 1995; and $326,000 per year in fiscal years 1996 through 2000. Total appropriations is $5,652,000.

Question. What is the source and amount of non-federal funds?

Answer. Oklahoma State University and Mississippi State University have provided considerable amounts of matching support from state funds over the life of the project. Over the past four years, support has included a significant portion of engineering faculty salaries as well as the administrative support of county and district extension staff.

Mississippi State University has provided a considerable amount of matching support from state funds each year of the project. Matching funds have been at least equal to the amount of the Federal funds provided for the project in the past 10 years. Matching funds have included faculty salaries, technology equipment, travel, commodities, and administrative support. Additional non-federal funds have been provided.

Question. Where is this work being carried out?

Answer. The work is being carried out at Mississippi State University and Oklahoma State University and, more importantly, on the shop floors of the small rural manufacturers. Work related to this project is being carried out at the University, in some of Mississippi's Community Colleges, on the Internet, and in every county in Mississippi. Demonstrations, educational workshops, Internet access, video-conferencing sessions, satellite conferences, and one-on-one sessions have been conducted in businesses, local government offices, Extension offices, schools, farms, and even homes where appropriate.

Question. What is the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1984 was for 12 months. The original objectives have been, and continue to be met. Although individual client projects have a beginning and end, the technology transfer process is continuous. Over the past years, specific and measurable annual objectives and the achievement of objectives have been documented in annual reports. The objectives of both programs have been to continue the delivery of high-quality engineering assistance and technology transfer services to small manufactures, conduct joint workshops, client referral, and joint research and application projects, and demonstrate a value of service to clients many times project operating costs.

In Mississippi the original project contained objectives designed to be completed in 12 months. However, the first year clearly demonstrated that fully reaching objectives related to the transfer of new technology not only takes longer to achieve, but becomes a never ending process as the challenge is constantly changing as new technologies are developed. The technology transfer process is an extended and a continuous process. Over the past years, specific annual objectives and activities have been set and achieved and have been documented in annual reports. The objectives and activities of the current project are designed to be completed in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. Site visits and merit reviews have been conducted annually on these projects as well as client surveys by project staff themselves. Survey results have documented job creation, productivity enhancement, and local community economic activity. The Technology Transfer Program has impacted the integration of emerging technologies that are benefitting the citizens, ranging from assisting small businesses and industries in integrating new computer hardware and software for conducting electronic commerce, to providing extensive on-line information resources. The Technology Transfer Funds have served as a catalyst for the development of

a long range telecommunications network plan for the total extension service to link all county extension offices and research centers directly to the Mississippi data/video backbone and provide access to the Internet.

Evaluation for the Technology Transfer Project in Mississippi has been both formative and summative. The effectiveness of all project activities is carefully reviewed and input is gathered from the individuals who participate in the training sessions to determine if the objectives of the project are being achieved. Evaluations of every educational workshop and activity are conducted on a regular basis and have consistently yielded outstanding marks. At the end of each year, a careful review of project demonstrations/exhibits/presentations, as well as the number of individual served, are reviewed. Perhaps the best indicator of success has been the continued increase in the demand for these technology-related activities. Also, Mississippi State University Extension Service annually reviews its implementation of new technologies to insure that these technologies are being utilized in the most effective manner possible. This project has allowed the Mississippi State University Extension Service to make significant progress in educating the clientele it serves. No State Extension Service provides more technology transfer education than Mississippi for its personnel. This training equips our county personnel to be more effective technology transfer educators and advisors to outside clientele to the point where county personnel are now conducting their own technology transfer training sessions. For example, Newton County personnel have provided at least 10 workshops in the past year for county clientele.

PILOT TECHNOLOGY PROJECT WISCONSIN

Question. Please provide a description of the program that has been funded under the Wisconsin Pilot Technology Project.

Answer. Primary industrial extension activity of the Manufacturing Technology Transfer program is the delivery of technical assistance to manufacturing companies. Executive direction in determining the assistance required will be provided by the University of Wisconsin-Stout's Northwest Wisconsin Manufacturing Outreach Center with direct consultation and long-term in-plant assistance delivered primarily through the efforts of university Project Managers. Direct assistance may be delivered through Co-op students, staff of the University of Wisconsin System, both two-and-four year institutions, and Cooperative Extension services; the Wisconsin Technical College System; secondary schools; the private sector, professional societies, and private consultants, or attendance at state or national seminars. The project also draws on many other state resources to add expertise and capacity to network facilitation and in-plant extension activities. The project has undergone a merit review.

Question. What is the national, regional, or local need for this program?

Answer. America's manufacturers continue to face tremendous global competition. There are enormous pressures to improve the quality of products; reduce the time consumed to bring new products to market; and there remains an ever increasing demand to reduce the costs of products. Currently there is a strong movement in manufacturing to use speed-to-market combined with new product introduction as a tool to obtain a competitive advantage. While high quality and cost efficiencies continue to be mandatory commitments for today's manufacturers, great value is now being placed on speed-to-market. Large companies are not the only ones influenced by these trends. Small and medium size manufacturers often supply directly to the market or are vital elements of a supply chain. Hence, they must be able to respond quickly to changing market conditions while continuously improving productivity and product quality.

Question. What is the original goal of this program and what has been accomplished to date?

Answer. The Manufacturing Technology Transfer program's principal objective is the development of a competitive, secure manufacturing base through the mechanism of industrial extension. The program principally targets small and medium size manufacturers in rural Wisconsin. This funding will: continue to provide valuable industrial extension service to the target audience; support the continued empirical development of an industrial extension model; and investigate the use of new manufacturing technologies to support global competitiveness of manufacturers. Productivity improvements were reported by the companies showing impressive economic impact to the region through client operations assessments and plant evaluations, strategy development for continuous improvement, implementation of new organizational and operational methods, implementation of new manufacturing technologies, establishment of quality assurance/total quality systems, establishment of

ongoing training programs, on-site instruction in new technologies, improved methods, and processes.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This project has been underway since fiscal year 1992 and was funded for $165,000 per year in fiscal years 1992 through 1995, and for $163,000 per year in fiscal years 1996 through 2000 for a total of $1,475,000.

Question. What is the source of and amount of non-federal funds provided by fiscal year?

Answer. University of Wisconsin-Stout provides $24,367 as in kind match. Funds from other state, University, and partner resources are pooled with USDA funds to carry out the described efforts.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1992 was for a period of 12 months. However, the Manufacturing Technology Transfer Program was developed as a continuously evolving industrial extension strategy for serving the needs of the manufacturing community. The Manufacturing Technology Transfer program is measured by success in meeting the objectives of the past five years' proposals, including the delivery of modernization assistance and development of an industrial extension model. The current phase of the program will be completed in 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. To measure the success of the project, a client evaluation process has been developed which includes an evaluation questionnaire. Evaluations are performed both by program staff, and by an objective, third-party survey house. Evaluations indicate significant forward strides in job creation, new businesses, expanded productivity, and enhanced international competitiveness. An agency evaluation of this project was last performed by the Department of Commerce in 1999.

RANGE POLICY DEVELOPMENT, NEW MEXICO

Question. Please provide a description of the research that has been funded under the Range Policy Development grant.

Answer. The Range Policy Development project has collected local economic data throughout the State. Local data have been used to develop an economic model to help explain the relationships among local economies and primary industries. The model enables policymakers to better understand how local and State economies are tied to primary industries, especially those industries that use public lands. The initial focus of the project has been on the livestock grazing industry.

Question. According to the research proposal, or the principal researcher, what is the national, regional, or local need for this research?

Answer. In New Mexico and throughout the western states, many local economies are dependent on the use and management of public range and forest lands. However, there exists a great deal of disagreement about the true level of dependence of individual communities on these public land-based industries and, consequently, disagreement about the local, statewide, and regional impacts of public policies that alter the use and management of these lands. Through better understanding of how public lands impact local and regional economies, we now can predict the outcomes of potential legislation or amended land use policies, resulting in policies that enhance, rather than detract from, local economies. The model was used to analyze the economic impacts of rangeland reform. The Bureau of Land Management—BLM—and Governor's State team chose to use the tool—Input/Output Model—and the method to analyze the Resource Advisory Council—RAC, fall back, and county alternatives for the State Environmental Impact Statement—EIS.

Question. What is the original goal of this program and what has been accomplished to date?

Answer. The model has been requested by the U.S. Forest Service to help improve Region 3 Land Use Plan amendments in response to newly listed Threatened and Endangered Species. New Mexico is in the process of developing detailed input-output models for each county, from local and state tax revenue data. Economists are following up with workshops across the state to present information from economic forecasts to local decision makers. Further, the project calls for increasing the utility of the models by expanding the scope of the database to include oil, gas, cheese processing, dairy and food livestock industries in addition to the grazing enterprises.

Question. How long has this work been under way and how much has been appropriated through fiscal year 2000?

Answer. This project was initiated in December 1994. The total appropriation for the project has been $1,162,240. The award of $197,000 for 2000 has been made to allow completion of the analysis of Draft EIS and Final EIS for BLM-U.S. Department of the Interior in conjunction with the State of New Mexico. The document is a proposed Statewide Resource Management Plan Amendment/Final EIS and is entitled "New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management."

Question. What is the source and amount of non-federal funds to support this project?

Answer. The project budget does not indicate any non-federal support. However, Agricultural Research Stations in five other States have economists currently working to expand upon the New Mexico project, ultimately to build a regional model.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. According to the project director, most of the original objectives of the first phase have been accomplished. The second phase of the project was initiated September 15, 1999. This phase will investigate the hypothesis that recreation—in particular, Federal land based dispersed recreation—generates sufficient revenue to offset the significant and now documented economic contributions of the consumptive industries, such as range, forestry and mining, and crop and livestock agriculture. Recreation expenditure patterns and economic cycles will be investigated. Production agriculture and range livestock are vital segments of rural economies. These sectors produce sustainable long-term income and wealth and are the basis of the customs and culture of rural economies. The anticipated completion date is September 30, 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The proposal for continued funding underwent merit review by an agency team of National Program Staff in May 1997, and a review of progress to date was conducted by the project liaison in September 1997. The reviews focused on criteria including the relevance of the project goals, the suitability of the proposed research methods, and the extent of progress made toward addressing the goals of the project. Both reviews found that phase one objectives had been met, and adequate progress had been made toward the objectives of the second phase of the project.

RURAL DEVELOPMENT, ALASKA

Question. Please provide a description of the program that has been funded under the Rural Development, Alaska Project.

Answer. This program is being designed to assist technical assistance delivery to distressed communities in Alaska. The grant has not been distributed to date and no programmatic actions have occurred to date.

Question. What is the national, regional, or local need for this research?

Answer. Changes occurring in the management and utilization of public lands and changes occurring in rural economies as a result of global competition and changing market conditions need to be assessed in terms of impacts on small and rural communities in distress.

Question. What was the original goal of this program and what has been accomplished?

Answer. The original goal of this program was to improve technical assistance to distressed Alaskan rural communities.

Question. How long has this work been underway and how much has been appropriated by fiscal year 2000?

Answer. The work supported by this program began in fiscal year 2000 with an appropriation of $276,285.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. No non-federal funds have been provided for this project.

Question. Where is the work being carried out?

Answer. The work is to be carried out in rural communities in Alaska.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original grant proposal has not been submitted to date.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. No program activities and no evaluation have been carried out to date.

RURAL DEVELOPMENT THROUGH TOURISM, NEW MEXICO

Question. Please provide a description of the program that has been funded under the Rural Economic Development Through Tourism—REDTT—Project in New Mexico.

Answer. The Rural Economic Development Through Tourism Project involves applied research and outreach focused on locally-based tourism development strategies to enhance economic opportunity in small and rural communities in New Mexico. Components of the agenda support training of local leadership and tourism professionals, strategic planning and market development, and technical assistance to communities. Proposals submitted are submitted for internal review and evaluation within the agency. Recommendations are presented to enhance impact on regional and national agendas.

Question. What is the national, regional or local need for this program?

Answer. This is an on-going pilot project to demonstrate the effective development and implementation of applied research, training, education, and technical assistance related to rural tourism as a development strategy. The grant has demonstrated that a long-term commitment of resources and activity can lead to effective development of tourism resources and build new market opportunities and tourism products for small communities. This project would provide an excellent proposal for the Fund for Rural America.

Question. What was the original goal of this program and what has been accomplished?

Answer. The applied research and outreach project was designed by the State Cooperative Extension Organization to increase the ability of the public sector to enhance economic opportunity for rural communities through tourism development. A regional task force composed of Extension professionals and community leaders from business, industry, education, and government—local, state, and Federal—was developed to guide and advise the development and implementation of locally-based programming and research. The results include video training materials, a public relations package, image studies and profiles, regional tourism guides, development of tourism bus packages, festival planning workshops, development of regional tours, and a mini-grants program for tourism development.

Question. How long has this work been underway and how much has been appropriated through fiscal year 2000?

Response . In fiscal years 1992 through 1995 the amount of $230,000 per year was appropriated. The appropriation for fiscal years 1996–1977 was $227,000 per year; for fiscal year 1998 was $247,000; for fiscal years 1999 and 2000, $280,000 per year. Total appropriated funds to date is $2,181,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Fiscal year 1992 included $38,764 in state matching funds. Fiscal years 1993, 1994, 1995 and 1996 included $39,360 per year of state matching funds. Fiscal years 1997 and 1998 include $39,040 per year state matching funds.

Question. Where is this work being carried out?

Answer. Applied research and outreach is being carried out through New Mexico State University.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original completion date was September 30, 1993. The original objectives of this research have been met. The additional objectives being presented for the 1999 year will be completed by September 30, 2000. Year 2000 proposal has not been submitted to date.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency evaluates the merit of research proposals as they are submitted. No formal evaluation of this project has been conducted. The principal investigators and project managers submit annual reports to the agency to document impact of the project. Each year, the project has demonstrated significant accomplishment in the reports submitted. Impacts include significant increases in attendance of local festivals, increase in number of tour bus visits to New Mexico, training to over 700 tourism employees in the region, and establishment of a number of new businesses. Agency evaluation of the project includes peer review of accomplishments and proposal objectives and targeted outcomes.

RURAL DEVELOPMENT, OKLAHOMA

Question. Please provide a description of the program that has been funded under the Rural Development, Oklahoma Project.

Answer. This program provides financial and technical assistance to small business to create and retain jobs in rural Oklahoma and to stimulate the local economies. The program is carried out through financial services, business incubators, problem-solving assistance to small and medium-sized manufacturers and technical assistance to rural small businesses. The program is expanding to include assistance to rural small businesses to enter international trade. The program continues to evaluate new products and processes that may result in new industries or be applied to improve existing manufacturing processes. The project has undergone a merit review.

Question. What is the national, regional, or local need for this research?

Answer. The increased demand for small business financing and technical assistance verifies the need for the program. Each year financing secured for small businesses has significantly increased. The demand for business incubators is also on the rise. Last year, Rural Enterprises, REI agreed to manage two more business incubators bringing the total REI-managed facilities to thirteen. Also, small businesses continue to need access to technical and business management assistance, worker training, and international trade assistance in order to stay competitive in domestic and world markets.

Question. What was the original goal of this program and what has been accomplished?

Answer. The original goal of the program was to create jobs in rural Oklahoma by providing systematic access to improved technology, training, financial and business management assistance. REI is a Certified Development Corporation for the Small Business Administration as well as a designated Certified Development Financial Institution. As a result, REI has been successful in obtaining financing for entrepreneurs and rural small businesses totaling $119,060,129. Special technical assistance efforts have included problem-solving assistance to small manufacturers; training and dissemination of information on ISO9000 to assist rural businesses compete with a global market; providing manufacturers with a "Quick View Assessment" program which enables manufacturers to compare their facilities and operations with other companies across the United States; and working one-on-one with small businesses providing on-site assistance with inventory control, cash flow management, and marketing.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Appropriations to date are as follows: $433,000 per year in fiscal years 1988–89; $430,000 in fiscal year 1990; $431,000 in fiscal year 1991, $300,000 per year in fiscal years 1992–95; $296,000 per year in fiscal years 1996–97; $150,000 per year in fiscal years 1998–2000. Appropriations total $3,969,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. No non-federal funds have been provided for this project.

Question. Where is this work being carried out?

Answer. The work is being carried out at Rural Enterprises, Inc., REI in Durant, Oklahoma.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. The original proposal in 1988 was for a period of 12 months. However, the objectives of Rural Enterprises, Inc. are on-going because of the nature of the activity. The clientele is diverse and decentralized. The engineering and management consultation model being pursued with individual clients results in a situation where hundreds of problems are being pursued simultaneously and when solved are replaced by new issues resulting from international competition, regulations, training needs, and changeover costs. The next phase of the program will be completed in fiscal year 2000.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. REI itself conducts an on-going evaluation process to measure the organization's effectiveness and efficiency in accomplishing its objectives and this is documented on a quarterly basis through our reporting system. Over 6,000 jobs have been created and retained for new and expanding businesses as a result of this program. While the program has met its key objective of job creation in rural Oklahoma, the nature of its outreach effort continues to evolve and change as business

sustainability and profitably confront new challenges within small and rural communities.

RURAL REHABILITATION, GEORGIA

Question. Please provide a description of the program that has been funded under the Rural Rehabilitation project in Georgia.

Answer. The program has tested the feasibility of providing satellite-based adult literacy education, in association with vocational rehabilitation services, to handicapped adults in rural Georgia. The program has developed curriculum, tested and adapted technology, established student recruitment and retention strategies, expanded to Statewide coverage, and provided successful adult literacy education.

Question. What is the national, regional, or local need for this program?

Answer. A state task force has estimated that 25 percent of Georgia's adult population is functionally illiterate. Functional illiteracy is regarded in Georgia as a form of disability. The extent of adult functional illiteracy is similar throughout much of rural America.

Question. What was the original goal of this program and what has been accomplished to date?

Answer. The original goal of this program was to prove that distance learning can be an effective tool for reaching and teaching functionally illiterate adults in rural areas. This program has demonstrated that satellite-based literacy training, in cooperation with vocational rehabilitation services, can successfully provide adult literacy education designed to improve critical reading, writing, and thinking skills, for handicapped rural adults. Over the past 9 years, test scores and attendance and completion rates of students in the satellite-based program have shown that distance learning is an effective delivery system for instructing low-level readers and non-readers. Test scores and attendance rates of students in this program have been comparable to those of students in traditional, urban classes. The project is currently working to perfect a process for internet based instruction and student assessment.

Question. How long has this work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. Funding for this program was initially appropriated in fiscal year 1989, and the program has been in operation since March 1989. Through fiscal year 2000, appropriations for this program have been as follows: $129,000 in fiscal year 1989; $256,000 in fiscal years 1990, 1991, and 1992; $250,000 in fiscal years 1993, 1994, and 1995; and $246,000 in fiscal years 1996, 1997, 1998, 1999 and 2000 for a total of $2,877,000.

Question. What is the source of and amount of non-federal funds provided by fiscal year?

Answer. The fiscal year 1998 source of non-federal funds provided for this program are state appropriated funds from the Georgia Department of Adult Education. Prior years sources also included private contributions from the Woodruff Foundation and other local foundations. Through fiscal year 1998, the total amount of non-federal funds provided the project has been $8,006,901. The breakdown by fiscal year is: $164,000 in fiscal year 1988; $270,500 in fiscal year 1989; $809,675 in fiscal year 1990; $656,765 in fiscal year 1991; $65,000 in fiscal year 1992; $1,019,821 in fiscal year 1993; $20,000 in fiscal year 1994; $872,500 in fiscal year 1995; $1,500,000 in fiscal year 1996; $1,319,320 in fiscal year 1997; and $1,309,320 in fiscal year 1998.

Question. Where is this work being carried out?

Answer. The Georgia Tech Satellite Literacy Project is sponsored and operated by four organizations: Georgia Institute of Technology's Center for Rehabilitation Technology, the Center for Rehabilitation Technology, Inc., Literacy Action, Inc., and the Georgia Department of Technical and Adult Education. The program grantee is CRT, Inc., a private, not-for-profit business advisory board to the Center for Rehabilitation Technology, College of Architecture, Georgia Institute of Technology, from which the literacy instruction has been provided.

Question. What was the anticipated completion date for the original objectives of the project? Have those objectives been met? What is the anticipated completion date of additional or related objectives?

Answer. It was anticipated that it would take 3 years to demonstrate that distance learning can be an effective tool for reaching and teaching functionally illiterate adults in rural areas. That original objective was met in Fiscal 1991. Additional objectives since fiscal year 1991 have been to expand the outreach of the satellite based adult literacy program to enough additional sites throughout the State of Georgia so that all potential participants have reasonable access to the program,

and to continually upgrade the quality of class programming and the technical capacities of the system. The fiscal year 1997 technological upgrades expanded the capacity of the program more than 25-fold, from 77 to over 2,000 downlink sites, and a six-fold increase in broadcast hours, and made materials available as supplemental tools to all Georgia literacy classes. As of December 1997, the Georgia Tech Satellite Literacy Program is in a period of transition from that of providing literacy instruction via direct television broadcasts to classrooms to that of development and dissemination of technology-based instructional aids. The project has been renamed the Lifelong Learning Network, or LNN. This change is being made based upon the request of the major sponsor, the Georgia Department of Technical and Adult Education, Office of Adult Literacy. The LNN will develop and produce video-based instructional supplements, technology-based curriculum and training for adult literacy practitioners, and multi-media projects for literacy students.

Question. When was the last agency evaluation of this project? Provide a summary of the last evaluation conducted.

Answer. The agency receives annual reports on the project that are used, together with agency merit review, to assess its progress. Based on these reports, the agency has found that the project has made steady progress in demonstrating the feasibility of utilizing distance learning technology and teaching methods to provide adult literacy education programs to handicapped adults throughout the State of Georgia. The project has been successful in applying the latest distance education technology to both control the program cost per participant and, most recently, to expand the availability of the program.

WOOD BIOMASS, NEW YORK

Question. Please provide a description of the research that has been funded under the Wood Biomass Grant?

Answer. The objective of this project is to expand, implement, and gain acceptance of short rotation woody crop biomass as a sustainable, renewable and environmentally friendly fuel source and as a feedstock for conversion into biobased industrial products. In addition, the project is supporting the promotion of low value fiber from the Nation's Central and Northern Hardwood forests regions.

Question. According to the research proposal, or the principal researchers, what is the national, regional, or local need for this research?

Answer. The principal researchers hypothesize that the project is of national interest. Biomass research studies through the U.S. Departments of Agriculture and Energy span 20 or more years. This work clearly demonstrates that the nation is in a position to scientifically produce environmentally affable fuels for power generation systems and other biobased industrial products. Except for co-generation plants, the current cost of conventional power supply fuels currently precludes the wholesale adoption of this technology. Complementing the planned fuel supply are many sidebar benefits including carbon offsets and sequestration, rural economic development, wildlife habitat, and reduction in soil erosion sedimentation and non-point source pollution associated with conventional agriculture. Valuing these and other products will make the economics of the system much more attractive. The applied research on the production system will be applicable across the Northeastern and Midwestern United States. Knowledge gained and lessons learned during the project will be applicable to similar projects across the country. The project is awarded noncompetitively, but it is annually subjected to a CSREES Merit Review.

Question. What was the original goal of this research and what has been accomplished to date?

Answer. The goal of this project is to promote, through applied research and technology transfer, wood biomass as a sustainable wood supply for (1) power generation and other biobased industrial products, (2) alternative farm products, (3) wise stewardship of land resources, and (4) enhanced farm profitability.

To accommodate these goals, scientists at the State University of New York College of Environmental Science and Forestry—SUNY-ESF—are planting willow trials and demonstration areas on several sites. Site preparation trials—including the use of cover crops, reduced tillage practices, and different herbicide regimes—and planting has occurred on several locations. Cornell University, a partner institution in the project, has hired a technology transfer specialist to coordinate educational activities resulting from this work. Common events include field days, news articles, presentations, tours of the demonstration farms, and exhibits.

Question. How long has the work been underway and how much has been appropriated by fiscal year through fiscal year 2000?

Answer. This aspect of the program began with an appropriation of $200,000 in fiscal year 1995. An additional $197,000 was appropriated by the Congress for fiscal years 1996 through 2000. This sums $1,185,000.

Question. What is the source and amount of non-federal funds provided by fiscal year?

Answer. Four state partners and approximately 18 private partners contribute resources at a ratio of nearly 1.5 to 1 for this project.

Question. Where is the work being carried out?

Answer. The fieldwork is being conducted on private and state land near Syracuse, New York. Electronic and print media allows Cornell's and SUNY-ESF's technology transfer activities to extend far beyond that point. Presentations have been made at international, national, and regional conferences and workshops. Numerous presentations have been made to local groups across the northeastern United States. The demonstration farms established under this project have been toured regularly by visitors from across the country and around the world.

Question. What was the anticipated completion date for the original objectives of the project. Have those objectives been met? What is the completion date of additional or related objectives?

Answer. The completion date for the original objectives of the project, willow cultivar planting was September 30, 1996. With the addition of some new dimensions to the project and the need to monitor the plots through the first growing cycle of 4 years, the completion date is now 2003. Because of the timing of one of the fiscal awards, some weather related problems and some land contract problems, all of the original objectives have not been met. Most of the unmet objectives should be completed in 2000.

Question. When was the last agency evaluation of the project? Provide a summary of the last evaluation conducted.

Answer. A field review of the project was conducted on August 20–21, 1997. Excerpts from the review report include (1) positive accolades for their quarterly progress reports, (2) positive accolades for the outreach program being conducted by Cornell University, (3) praise for the scientific outreach by the principal investigators, (4) praise for connecting the willow biomass program to the poultry waste and riparian issues in New York state, and (5) praise for gaining the acceptance of willow biomass as an agricultural crop for state property tax purposes. On the concern side CSREES' project administrator flagged the delay in establishing the demonstration farm and requested diligence in bringing this aspect of the project to fruition. Subsequent reports from the project reveal that this aspect has been satisfactorily addressed. In addition to the above, the project is annually reviewed by the Salix (willow) Consortium.

FOOD SAFETY INITIATIVE—NATIONAL RESEARCH INITIATIVE

Question. The Administration identifies a portion of the National Research Initiative (NRI) as part of the President's Food Safety Initiative. Please provide the total amount of funding made available through the NRI for Food Safety Initiative research in each of the past three fiscal years. Provide a brief description of the research work/project funded in each of these years and how it is contributing to meeting the goals of the President's food safety initiative, the amount of funding provided for the project, who is carrying out the work, and when the research work will be completed.

Answer. The NRI awarded funds for Food Safety Initiative research in fiscal years 1997, 1998, and 1999 via the Ensuring Food Safety Program. The primary objective of this program is to increase our understanding of disease-causing microorganisms, their products, and naturally occurring toxicants in meats, poultry, seafood, and fresh fruits and vegetables. In fiscal year 1999, in response to increased funding, the NRI added the Epidemiological Approaches for Food Safety Program to provide the opportunity and the large grant amounts needed for epidemiologic/population studies on the farm or anywhere along the food production continuum. The NRI awarded a total of $2.5 million in 1997, $2.9 million in 1998, and $11.1 million in 1999 for food safety research. Of the $11.1 million awarded in fiscal year 1999, $4.1 million were awarded in the Ensuring Food Safety Program, $5.3 million were awarded in the Epidemiological Approaches for Food Safety Program, and the remaining $1.7 million were awarded for food safety research under other NRI programs. A brief description of each project funded by the NRI food safety programs in the past 3 fiscal years, including amount awarded, principal investigator—PI—and institution receiving the award, duration of the award, and a short project description, follows.

1999 Awards, epidemiological approaches for food safety:

Microbial Contamination of Produce: A Field Study in the Lower Rio Grande Valley, Texas, $416,572, 3 years, University of North Carolina, Chapel Hill, C. Moe (PI). This study will look at farming and shipping practices on approximately 12 farms in the lower Rio Grande Valley of Texas with 3 vulnerable produce groups that are minimally processed and eaten raw—leaf lettuce/spinach, parsley/basil, green onions. Key agricultural practices where contamination may occur will be identified by measuring the microbial quality of produce at each step. Sources of fecal contamination will be determined.

Risk factors for Salmonella and Campylobacter infections and drug resistance in dairy cattle, $765,447, 3 years, Michigan State University, J. Kaneene (PI). This is a 3 year longitudinal study of 130 dairy herds to (1) identify the patterns of occurrence and shedding of Salmonella species and Campylobacter jejuni and associated risk factors on dairy farms in midwest and northeast. This study will also evaluate the relative sensitivity and specificity of different sampling frequencies; determine susceptibility profiles to a number of antimicrobial agents; compare conventional and organic dairy farms; and determine molecular mechanisms involved in reduced susceptibility and the development of resistance.

Ecologic Assessment of Salmonella Enteritidis va typhimurium in a dairy milk shed, $600,000, 3 years, University of California, Davis, W. Sischo (PI). This study will monitor changes in S. typhimurium isolated from two county dairy milk sheds—400,000 dairy cattle—in central California and identify the genetic variants of these isolates. It will also determine spatial pattern of variants and assess the pathogen, environment, and management factors associated with persistent dairy herd infection. Included in this study is the determination of genetic and phenotypic diversity of human and bovine sources and the spatial and temporal dynamics of human and bovine sources.

Ecology of antimicrobial resistance of enteric Salmonella and E.coli in cattle operations, $771,868, 3 years, The Ohio State University, T. Wittum (PI). This study will describe the on-farm ecology of Salmonella species and E.coli antimicrobial resistance patterns in intensively managed cattle operations. It will monitor dairy and feedlot cattle operations and identify patterns of antimicrobial use and other factors.

Effect of water chlorination on prevalence of E.coli O157:H7 and Campylobacter in feedlot cattle, $325,528, 2 years, Washington State University, T. Besser (PI). This study will chlorinate the water supplies of 32 pens of feedlot cattle in two feedlots through the feeding period and compare the infection rate in these cattle to that of 32 pens of cattle consuming non-chlorinated water. It will also evaluate the effect of chlorination on water consumption and weigh gains.

New methods for risk analysis of infectious animal diseases affecting food safety, $359,515, 2 years, Colorado State University, M. Salman (PI). This study's goal is to refine existing and developing new methodologies to allow for better risk analyses of foodborne diseases. It will compare different current approaches, develop new models and will validate these methods using two diseases as modules.

Molecular epidemiology of Salmonella transmission in swine production systems, $885,294, 3 years, University of Illinois, R. Weigel (PI). The goal of this research is to identify critical control points for interventions to reduce Salmonella infection in modern swine production facilities. Specifically, it will identify reservoirs for Salmonella in ecosystems; characterize these isolates genetically; identify the degree of genetic diversity in different reservoirs; identify changes in genetic diversity over time; and use ecological and genetic information to infer probable modes of transmission. Eight large, multi-site modern swine production systems will be studied over 15 months.

Following Resistant Salmonella through the food chain: a molecular ecology approach, $814,564. 3 years, University of Georgia, J. Maurer (PI). This study will identify the diverse integron classes and their drug resistance genes in the chicken microflora and characterize their respective bacterial hosts. This study will follow transmission of the genes and integrons throughout the food chain. Samples will be taken from poultry at the hatchery, flock house, and the processing plant.

Dynamics of Campylobacter transmission on poultry farms, $384,284 3 years, The Ohio State University, Q. Zhang (PI). This study will attempt to elucidate the sources of Campylobacter infection in broiler chickens and examine the host and environmental factors that affect the transmission of the organism on broiler farms. It will identify potential sources and routes of transmission, the affect of immune status and the environment, and assess the effect of both vertical and horizontal transmission.

1999 Awards, ensuring food safety:

Irradiation in a Combination Approach to Enhance Vegetable Safety, $128,000, 2 Years, Chapman University, A. Prakash (PI). This study will determine the optimum levels of irradiation, modified atmosphere packaging—MAP, and chlorination that will enhance safety while preserving sensory attributes such as texture, color, and flavor in selected vegetables, including shredded iceberg lettuce and shredded cabbage. The project is expected to reveal the efficacy of combination processing to address the emerging safety issues associated with minimally processed vegetables.

Recalcitrance of Clostridium perfringens to High Hydrostatic Pressure Processing, $95,000, 2 Years, University of Delaware, D.G. Hoover (PI). The goal of this study is to obtain an accurate assessment of the response of the foodborne pathogen, Clostridium perfringens, to high hydrostatic pressure in order to better understand the mechanism of inactivation and identify those controllable factors most important in protection of this pathogen from the effects of high pressure processing in foods. A novel technology, high pressure processing of foods offers U.S. agriculture a commercially-viable non-thermal means, i.e., "cold pasteurization", for the processing of foods and beverages resulting in longer shelf-life and improved safety while maintaining sensory characteristics and nutrient content nearly identical to fresh or raw products.

Are Virulent Strain-Specific DNA Sequences of Vibrio vulnificus Essential For Virulence? $150,000, 2 Years, University of Florida, P.A. Gulig (PI). Vibrio vulnificus is the leading cause of death in the U.S. associated with consumption of shellfish. This study will examine the relationship of virulent strain-specific DNA sequences to the disease process by determining if genes encoded on virulent strain-specific genomic sequences are essential for virulence, or if they are only markers for virulence by coincidence. By identifying virulence genes, we will contribute to understanding how this devastating food-borne pathogen can kill humans so rapidly after consumption of contaminated sea food. This information could be integrated into CDC, FDA, and State efforts to determine the epidemiology of infections and to develop interventions to reduce risk of V. vulnificus disease.

Inactivation of Pathogens on Alfalfa Seeds, $114,319, 2 Years, University of Georgia, L.R. Beuchat (PI). The overall goal of this research is to develop a procedure to kill E. coli O157:H7 and Salmonella on alfalfa seeds without reducing the ability of the seeds to germinate and produce sprouts. Information gained from this research will be valuable in developing strategies to eliminate E. coli O157:H7 and Salmonella from alfalfa seeds as well as other seeds intended for sprout production, thus greatly minimizing the risk of illness associated with eating of raw seed sprouts.

Improving Pathogen Decontamination Treatments for Fresh Produce, $185,000, 2 Years, University of Georgia, J.F. Frank (PI). This project will determine strategies for removing or inactivating pathogenic bacteria at protected locations on the surfaces of fresh produce. Such strategies will involve application of sanitizing agents containing food grade solvents or surfactants that may penetrate to protected sites and provide an effective decontamination treatment. Results of this research will provide basic information necessary for the commercial development of fresh produce decontamination treatments.

Genetic Markers and Pathogenesis Features of Listeria monocytogenes serotype 4b, $220,000, 3 Years, University of Hawaii, S. Kathariou (PI). Listeria monocytogenes is a troublesome food-borne bacterial pathogen because of its ubiquitous distribution, its ability to grow in refrigerated foods, and its involvement in severe and often fatal illness—listeriosis. Serotype 4b is of special interest, being involved in almost all common-source outbreaks of listeriosis and in numerous sporadic cases. This study will complete the molecular characterization of two gene clusters unique to serotype 4b strains in order to identify DNA-based diagnostic reagents for this serotype. This research may yield novel molecular reagents that will facilitate monitoring and detection of clinically important strains of Listeria monocytogenes.

Identifying Factors that Promote Clearance of E. coli O157:H7 From Cattle, $265,000, 2 Years, University of Idaho, C.H. Bohach (PI). This research will test the hypothesis that cattle diet and colonic cell proliferation may be used in pre-harvest interventions to promote the clearance of E. coli O157:H7 from the gastrointestinal tract of cattle. This research directly contributes to the USDA NRI Food Safety program goals of decreasing the incidence of food-borne illness by increasing our understanding of the ecology of E. coli O157:H7.

Molecular Mechanisms of Psychrotrophy in Listeria monocytogenes, $253,000, 3 Years, Illinois State University, B.J. Wilkinson (PI). The proposed research aims to: (1) increase our understanding of an important foodborne psychrotrophic—cold-growing—pathogen and how it resists the food preservation strategy of chilling; and

(2) provide the scientific basis for improved control strategies for Listeria monocytogenes. The investigators are studying the membrane fluidity of the organism and the genes and proteins involved in its growth of at low temperatures.

Molecular Biology of Fumonisin Biosynthesis in Gibberella fujikuroi, $100,000, 2 Years, Purdue University, C.P. Woloshuk (PI). Fumonisins are toxins produced in corn by the fungus Gibberella fujikuroi. Evidence has linked fumonisin with cancer in humans. With the likelihood of fumonisin concentrations being regulated world wide, the impact on the U.S. food industry will be substantial. The long-range goals of this research are to understand fumonisin biosynthesis and to develop novel approaches for eliminating fumonisin contamination of food sources.

Ecological Distribution of E. coli O157:H7 Strains in Agricultural Environments, $210,000, 2 Years, Kansas State University, J.M. Sargeant (PI). The goal of this project is to determine the distribution of genetically-identified E. coli O157:H7 isolates in agricultural environments, as a means to identifying the sources of infection for cattle. This information will allow for the development of land management and water-use practices and policies for the control and/or reduction in the overall prevalence of E. coli O157:H7 in agricultural food products.

Characterization of Multiple Fluoroquinolone Resistance Among Bacterial Pathogens, $157,000.00, 2 Years, U.S. Food and Drug Administration, D.G. White (PI). The objectives of this project are to: (1) Characterize the genetic resistant determinants responsible for fluoroquinolone resistance among veterinary isolates of E. coli and Salmonella spp.; (2) Determine if veterinary fluoroquinolone use selects for bacterial isolates that are cross resistant to human therapeutic fluoroquinolones; and (3) Determine if the emergence of fluoroquinolone resistance among veterinary and foodborne bacterial pathogens is genetically related. The data will determine if there are potential public health implications regarding the use of fluoroquinolones in animals in the U.S.

Detection of Viable Enterohemorrhagic Escherichia coli using Polymerase Chain Reaction and RNA-based Polymerase Chain Reaction, $111,000, 2 Years, Mississippi State University, M.A. Drake (PI). This project will develop methodologies to rapidly detect viable enterohemorrhagic Escherichia coli—EHEC. The methods will be applied to artificially-contaminated ground beef samples. The development of nucleic acid based methodologies to detect viable EHEC will be applicable to other foodborne pathogens and will provide a more rapid option for monitoring food safety.

Extrusion Processing as a Means of Reducing Fusarium Mycotoxins in Cereal Foods, $128,000, 2 Years, University of Nebraska, L.B. Bullerman (PI). Toxin producing Fusarium molds pose major food safety hazards by invading corn and wheat in the field and producing their toxins in the grain. The goal of this research is to find the optimum conditions of extrusion processing which will destroy and reduce the amounts of deoxynivalenol, zearalenone, and fumonisins in contaminated corn and wheat under simulated industrial conditions to render the processed grain-based foods free of these toxins. This project will contribute to the safety of the food supply by improving the safety of cereal-based foods.

A Membrane Fluidity Model for Sensitivity of Foodborne Pathogens to Preservatives, $230,405, 3 Years, Rutgers, the State University of New Jersey, T.J. Montville (PI). There is poor understanding of how Listeria monocytogenes, a food poisoning bacteria, survives in cold hostile environments once thought to kill bacteria or at least prevent them from growing. The cell membrane is the barrier that protects food poisoning bacteria from preservatives and the environment. This research determines how membrane properties regulate the sensitivity of the bacteria to preservatives, acidity, and cold. A better understanding of how the bacteria survive our attempts to kill them will provide new concepts that can be used to increase the effectiveness of current preservatives and processes, and thus, improve food safety.

Specific Detection and Typing of Vibrio parahaemolyticus serotype O3:K6, $110,065, 2 Years, Cornell University, K.J. Boor (P.I.). The goal of this research is to enhance the safety of seafood consumed in the U.S. by developing a rapid strategy for detecting pathogenic V. parahaemolyticus in foods, specifically focusing on serotype O3:K6 strains. The ability to distinguish between potentially dangerous isolates and the more prevalent nonvirulent vibrios will provide critically important tools that will allow public health workers to develop scientifically based guidelines for identifying water sources more likely to cause infection.

Novel Strategies for Determining Thermal Destruction of Mycobacterium paratuberculosis, $87,784, 2 Years, Cornell University, K.C. Sasahara (PI). The American dairy industry annually loses $120 million to Johne's disease, an incurable bacterial infection in cattle. Infected cattle shed Mycobacterium paratuberculosis into milk and feces, posing a possible health risk to humans. Although pasteurization of raw milk kills most spoilage and pathogenic microorganisms, isolation of M. paratuberculosis from humans suffering from Crohn's disease,

an incurable inflammatory bowel disease with clinical symptoms similar to Johne's disease, suggests a possible causal relationship. To better establish whether M. paratuberculosis cells are killed by pasteurization, the investigator will develop a strategy for screening for the presence of M. paratuberculosis in raw and processed milk. This project will establish specific heat treatment parameters for the destruction of M. paratuberculosis and develop a rapid detection method to improve dairy herd health management.

Transmission of Listeria monocytogenes in Food Systems, $192,000, 3 Years, Cornell University, M. Wiedmann (PI). This project is designed to better understand the characteristics of different Listeria monocytogenes subtypes and to gain a better understanding of which specific L. monocytogenes subtypes cause human disease and how these types differ from those that cannot cause human disease. The investigators will comprehensively characterize L. monocytogenes isolates from humans, animals, and foods using both DNA fingerprinting methods and methods for evaluating a strain's ability to cause disease. This work will ultimately contribute to the development of science-based food safety regulations that economically meet public health needs.

Modeling Bacterial Pathogen/Biocontrol Competition With Changing Temperature, $117,369, 2 Years, USDA-Agricultural Research Service; North Carolina State University, F. Breidt (PI). This project will develop models for the growth and death of two or more competing microorganisms during changing environmental conditions. The computer simulations and mathematical models being developed will be used primarily as tools to investigate the mechanisms of microbial competition. It is hoped that the principles learned in these studies can be applied to the prediction and prevention of the growth of disease causing bacteria in a variety of foods.

A Salmonella-based Vaccine to Prevent E. coli O157:H7 Infection in Cattle, $200,000, 2 Years, North Carolina State University, S.J. Libby (PI). In this study, investigators will use several live, attenuated vaccine strains of Salmonella expressing important surface proteins of E.coli O157:H7 to vaccinated calves. Vaccination of calves with Salmonella strains expressing surface proteins of E.coli O157:H7 will engender a mucosal immune response. By stimulating mucosal immunity, it is hoped that the E.coli O157:H7 will not have an opportunity to colonize the lower bowel of the calves. The reduction or elimination of E.coli O157:H7 from these vaccinated animals well be determined. Means to significantly reduce or eliminate E.coli O157:H7 from cattle will ensure a safer food supply.

Characterization of Genes Regulating Aflatoxin Biosynthesis, $220,000, 3 Years, North Carolina State University, G.A. Payne (PI). Aflatoxins are toxic and carcinogenic compounds produced in food by the fungus Aspergillus flavus. Contamination often occurs before harvest and no effective control procedures are available. The goal of this research is to understand the factors that regulate aflatoxin biosynthesis such that plant gene products or synthesized compounds can be employed to inhibit aflatoxin formation.

Development and Validation of Instruments to Evaluate Food Safety Education, $200,000, 2 Years, The Ohio State University, L. Medeiros (PI). Consumer education about the basic principles of food safety is an important component of preventing foodborne illnesses. Impact is difficult to document because of a lack of valid and reliable evaluation instruments. The goal of this project is to develop and validate an instrument that is suitable for evaluation of food safety educational programs for low-income, low-literacy audiences.

Optical Biosensor Detection of Food Pathogens Based On Direct Measurement of Antibody/Antigen Binding, $180,000, 2 Years, University of Rhode Island, A.G. Rand (PI). The demands from consumers for fresh, less processed food has increased the need to ensure microbial safety of these products. This project provides the opportunity for a multidisciplinary effort to create specific biosensors for rapid and early detection of pathogen contamination. These devices have the potential for specifically selecting food pathogens from among the total microbial load within minutes and measuring the concentration as real-time analysis on site.

Evalution of Jenseniin G as a Potential Food Preservative, $90,000, 2 Years, Clemson University, S. Baker (PI). Bacteriocins, proteins produced by some bacteria which kill other bacteria, offer a defense against some foodborne pathogens. Currently, nisin is the only approved bacteriocin for use in foods in the United States. The development of additional bacteriocins for use as food preservatives is needed in the event organisms develop resistance to nisin or for use in foods in which nisin is ineffective. Jenseniin G, a bacteriocin produced by Propionibacterium jensenii, inhibits the outgrowth of the causative agent of botulism and is heat and pH stable. The objectives of this study are to increase the number of organisms which are sensitive to jenseniin G, characterize the mode of action of jenseniin G, and produce large amounts of jenseniin G.

Mechanism of Pathogen Survival During Microwave Thermalization, $123,000, 2 Years, Virginia Polytechnic Institute & State University, J. Eifert (PI). It has been reported that microorganisms are more likely to survive in foods cooked using microwaves than foods cooked using conventional methods. This project will determine the mechanism of microorganism survival during microwave heating; determine the role of fat in the food product on inactivation of the microorganisms; study the effect of the presence or absence of steam on inactivation of the microorganisms; and develop mathematical models to describe the cooking process in the microwave oven in the presence or absence of steam. This research will result in procedures that can be used to develop microwave-heating procedures that will increase food safety.

Molecular Characterization of the Campylobacter jejuni Adhesin to Fibronectin, $195,000, 3 Years. Washington State University, M.E. Konkel (PI). The ultimate goal of this study is to develop intervention and control methods to reduce the number of cases of human campylobacteriosis caused by Campylobacter jejuni and Campylobacter coli. Most cases of campylobacteriosis are sporadic in nature, resulting from the consumption of Campylobacter-contaminated chicken, unpasteurized milk, and unchlorinated water. The proteins that mediate the binding of C. jejuni to host cells are termed adhesins. The goal of this project is to further characterize one C. jejuni adhesin termed CadF, for Campylobacter adhesin to fibronectin. CadF may be useful as a vaccine candidate.

1998 Awards, ensuring food safety:

Rapid Detection of Brevetoxin and Ciguatoxin Using Recombinant Na+ Channels, $90,000, 2 Years, University of South Alabama College of Medicine, S.D. Critz (PI). Contamination of shellfish by a marine toxin known as brevetoxin periodically threatens the health and safety of seafood consumers. This proposal will develop rapid and sensitive methods to test for brevetoxin and ensure seafood product safety.

Role of Putative Pathogenicity Island in Campylobacter jejuni Virulence, $190,000, 3 Years, University of Arizona, L.A. Joens (PI). The goal of this study is to evaluate genes contained within a putative pathogenicity island in C. jejuni for their role in virulence. Genes within this island may be influential in defining the pathogenicity of the agent that will lead to control measures for decreasing the incidence of campylobacteriosis.

Strategies to Eliminate and Prevent Microbial Contamination of Food Products, $70,000, 1 Year, University of Arkansas for Medical Science, C.M. Compadre (PI). The ultimate goal of this research is to develop effective methods to control, eliminate, and prevent microbial contamination of food products. The specific aims of this project are: to determine the effectiveness of the chemical cetylpyridinium chloride for decontamination of fresh fruits and vegetables.

Bacteria for Competitive Exclusion of Salmonella enterica Species in Chickens, $185,000, 3 Years, University of Delaware, R.D. Joerger. The community of bacteria inhabiting the intestinal tract can prevent or impede the establishment of undesirable bacteria such as Salmonella enterica subspecies. The goal of the proposed research is to identify and isolate bacteria from the intestinal tract of chickens and to eventually test their effectiveness in reducing colonization of young chicks with Salmonella.

Fluorescence-Based Chemical Sensor for Saxitoxin, $95,000, 2 Years, University of Miami, R.W. Gawley (PI). Saxitoxin is the primary constituent of the paralytic shellfish poisons. The investigators have discovered a molecular receptor that "signals" the presence of saxitoxin in solution by emitting light. The goal of this study is to begin the development of a photochemical sensor for the presence of saxitoxin which could be used to detect contamination of shellfish beds.

Defining Genomic Sequences Specific to Virulent Vibrio vulnificus Strains to Assess Risk, $90,000, 1 Year, University of Florida, P.A. Gulig (PI). Currently, there is no practical test to determine if seafood products contain hazardous strains of Vibrio vulnificus. The goal of this study is to define DNA sequences specific to virulent strains and to develop simple DNA probe test(s) that can be used by industry and public health organizations to assess risk.

Regulation of Lipopolysaccharide Micro Heterogeneity, $125,000, 2 Years, USDA Agricultural Research Service, J. Guard-Petter (PI). This study is directed towards understanding the genetic changes that result in strain variation in the Salmonella enterica serovar Enteritidis—SE. Strain variation will be measured by the ability of strains to generate particular lipopolysaccharide structures while maintaining accelerated growth. This work will lead to a better understanding of environmental conditions that favor outgrowth of new strains of SE.

Mechanism for Inactivation of Microorganisms by High Oxidation Potential Water, $120,000, 2 Years, University of Georgia, U.C. Hung (PI). High oxidation potential—HOP—water has been reported to have strong bactericidal effect on most pathogenic bacteria. The overall objective of this project is to study the fundamental principles involved in the inactivation of food microorganisms with HOP water. The application of this technology will ensure food safety at reduced cost, high food quality, and reduced danger from foodborne illness.

Screening Corn for Resistance to Aspergillus flavus and Aflatoxin Accumulation, $100,000, 2 Years, Southern Illinois University, J.S. Russin (PI). Two traits in corn genotypes will be used to identify potential sources of resistance to Aspergillus flavus. Genotypes that exhibit these traits will be evaluated for resistance in field trials. Those that show resistance will be examined for the mechanism of resistance.

Listeria monocytogenes: Ozone Inactivation, $95,000, 2 Years, University of Illinois, S.E. Martin (PI). The objectives of this study are to examine the effects of ozone on the pathogen Listeria monocytogenes. Ozone has recently been recommended for approval as Generally Recognized As Safe in food production. This study will determine important parameters of ozone-induced injury and death of L. monocytogenes in a food product—cabbage.

Persistence of Salmonella typhimurium in Swine, $240,000, 3 Years, University of Illinois, R.E. Isaacson (PI). Salmonella typhimurium is one of the major causes of salmonellosis in humans. Pigs persistently infected with S. typhimurium are one of the major reservoirs of this pathogen. One means to reduce the risk of foodborne infections caused by S. typhimurium is to prevent pigs from becoming persistently infected. This project is designed to understand the mechanisms promoting persistent infections.

Analysis of the Osmotic Regulation of Thermotolerance in Salmonella and E. coli O157:H7, $185,000, 3 Years, Purdue University, L. Csonka (PI). The investigators have found that betaine, which is found at high levels in edible plants such as spinach and cereal grains, blocks the ability of salt additives to increase the heat tolerance of bacteria. This project will carry out a comprehensive characterization of all available structural relatives of betaine for their ability to counteract the induction of increased thermotolerance by salt additives in food pathogenic bacteria. This procedure may uncover new food additives that might be used to increase the efficacy of thermal inactivation in food contaminating bacteria.

Molecular Biology of Aflatoxin Biosynthesis in Aspergillus flavus, $160,000, 2 Years, Purdue University, C.P. Woloshuk (PI). Aflatoxins, produced by the fungus Aspergillus flavus, are toxic and carcinogenic compounds contaminating a variety of food products. This research project will investigate an unusual mutation in A. flavus to determine the mechanism responsible for the suppression of aflatoxin biosynthesis. This research will impact agriculture by furthering our understanding about the regulation of aflatoxin biosynthesis and contribute information leading to development of new strategies for eliminating aflatoxin contamination.

Modeling Food Fluctuating Microbial Populations and Their Aperiodic Outbursts, $90,000, 2 Years, University of Massachusetts, M. Peleg (PI). This project will analyze the pattern of fluctuation of the number of microorganisms in food products and will use mathematical models and statistical methods to estimate the probability of occurrence of an outburst of unusually high numbers which could be considered a safety problem. These calculated probabilities can then be used as an indication of an impending microbial outbreak, and a s a tool to assess the efficacy of preventive methods in reducing the risk of foodborne illness.

Genomic Analysis of Escherichia coli O157:H7 Populations from Cattle and Humans, $150,000, 2 Years, University of Nebraska, A.K. Benson (PI). The investigators have developed a powerful technique, termed high-resolution genotyping, that permits identification of even minor genetic differences between different E. coli O157:H7 strains. In the study, they will develop a database for rigorous assessment of isolates to identify genetic differences that may be related to persistence—strains that can be repeatedly isolated from a given herd of cattle over time. Ultimately, the results may provide a basis for understanding the impact of herd management practices on the population structure of E. coli O157:H7.

Antimicrobial Use and Emerging Resistence of Salmonella typhimurium in Dairy Cattle, $120,000, 2 Years, Cornell University, L.D. Warnick (PI). This project investigates the effect of antibiotic treatment of clinical salmonellosis in dairy cattle on the occurrence of antibiotic-resistant Salmonella typhimurium, a major animal and human pathogen. This will be done by identifying dairy herds with S. typhimurium-infected cattle based on diagnostic laboratory culture results, obtaining antibiotic treatment information from farm records, and collecting fecal samples from cattle on the farm for Salmonella isolation and determination of resistance patterns. The study results will provide valuable information on the emergence of antibiotic-resist-

ant Salmonella typhimurium and specific drug-use practices which are associated with resistance.

Identification of Human Enteric Viruses in Foods and Foodborne Disease Outbreaks, $140,000. 2 Years, North Carolina State University, L. Jaykus (PI). The purpose of this research is to refine molecular methods to detect human enteric viruses from foods and to further develop approaches for the investigation of outbreaks of foodborne viral disease. The successful completion of this project will provide rapid and economical methods for the detection of viral contamination of foods and the investigation of foodborne viral disease outbreaks. These benefits will ultimately improve the safety of food products, protect public health, and minimize financial losses due to viral contamination of foods.

Stress-Induced Resistance to High Pressure in Listeria monocytogenes and Escherichia coli O157:H7, $90,000, 2 Years, The Ohio State University, A.E. Yousef (PI). High pressure processing is a novel, non-thermal technique for inactivating pathogens in food by the application of extremely high pressures. Since heat is not used in the process, negligible flavor and nutrient changes occur as a result of the high pressure treatment. Pathogenic bacteria are more likely to survive during food processing if they were exposed to conditions that make them resistant to preservation methods. This project will identify the potential causes for increased resistance of pathogens to pressure. The outcome of this project will help food manufacturers develop strategies to overcome and eliminate stress-adaptation in foodborne pathogens.

The Molecular Epidemiology of Clostridium perfringens Type A Food Poisoning, $160,000, 2 Years, University of Pittsburgh, B.A. McClane (PI). Clostridium perfringens type A food poisoning is a common foodborne disease in the U.S. The diarrhetic and cramping symptoms of this illness are caused by C. perfringens enterotoxin—CPE. This project will evaluate four possible explanations for the strong association between chromosomal CPE isolates and food poisoning. These studies will improve the safety of the American food supply by distinguishing whether only chromosomal CPE isolates are able to cause food poisoning, or if isolates carrying an extrachromosomal CPE can be converted, by food-related stress, into chromosomal CPE isolates.

Inactivation of Foodborne Pathogens Exposed to a Uniform Flow Discharge Plasma, $71,442, 1 Year, University of Tennessee, D.A. Golden (PI). The overall objective of this research is to evaluate the efficacy of a One Atmosphere Uniform Glow Discharge Plasma—OAUGDP—for its ability to destroy foodborne pathogens. The OAUGDP is a newly-invented form of electron discharge which generates a uniform glow discharge plasma in atmospheres of various gases such as helium, carbon dioxide, and most importantly, air. The OAUGDP unit has the potential to be adapted as an in-line process suitable for application as a mechanism of pasteurizing foods and controlling foodborne pathogens.

Sporulation Control of Enterotoxin Synthesis in Clostridium perfringens, $130,000, 2 Years, University of Tennessee. S.B. Melville (PI). Clostridium perfringens is a common source of food poisoning in humans. The ability of C. perfringens to produce a heat resistant spore not only leads directly to the production of enterotoxin, but also leads to increased outbreaks of the disease. Often, foods are prepared at high enough temperatures to kill vegetative cells, but not spores. The purpose of this study is to determine how the sporulation process regulated enterotoxin protein gene expression. Information about how heat-resistant spores and enterotoxin are produced by the cell can be used to develop better food handling procedures to reduce the incidence of this very common disease.

Novel Antimicrobial Systems for Control of Foodborne Pathogens, $90,000, 2 Years. University of Wisconsin, E.A. Johnson (PI). In the presence of low concentrations of the food-approved flavorants nerolidol and farnesol, microorganisms are inhibited by markedly lower doses of certain antimicrobial agents and antibiotics. These compounds are derived from natural plant sources. In this study sensitization by flavorants and inactivation of foodborne pathogens will be investigated. The successful completion of this project will provide novel elimination and sanitation technologies to reduce the risk of foodborne disease from foods and food contact surfaces.

DNA-Binding Proteins CspE and Dps Protect DNA at Low pH in Escherichia coli O157:H7, $115,000, 2 Years, University of Wisconsin, C.W. Kaspar (PI). It is hypothesized that acid tolerance of Escherichia coli O157:H7 is a contributing factor to the low-infectious dose noted for this human pathogen. Because DNA is sensitive to acidic—low pH—environments and survival is dependent upon its protection, the goal of this project is to define the contributions of specific regulated proteins, known as CspE and Dps, to DNA proection in low pH environments such as foods and gastric fluid. Results from this study will provide industry and public health

agencies with the much needed data to further refine strategies for control, identify areas of risk, and add to the scientific knowledge on the survival of E. coli O157:H7.

1997 Awards, ensuring food safety:

The Role of Acid Resistance in Escherichia coli O157:H7 Colonization and Disease, $227,000, 3 Years, University of South Alabama, J.W. Foster (PI). A crucial feature of Escherichia coli O157:H7 pathogenesis is its ability to withstand stomach acidity. The long term goal of this study is to develop new strategies that will diminish the infectious character of this pathogen through an understanding of the molecular basis of acid resistance in E. coli with emphasis on the superior acid resistance of O157:H7.

Quantitative Viability Assays for Cryptosporidium parvum and Giardia lamblia, $44,000, 1 Year, University of California, Davis D.O. Cliver (PI). Cryptosporidium parvum and Giardia lamblia are common waterborne agents whose potential for transmission via foods is increasingly being recognized. The objectives of this study are to develop quantitative viability assays for C. parvum and G. lamblia and to evaluate the methods in trials of killing the protozoan oöcysts or cysts by various means pertinent to food safety. The tests will be applied in inactivation trials with viable oocysts or cysts in foods of interest—e.g., apple juice, shellfish—or in water that might be used in food processing.

Molecular Stress Physiology of Listeria monocytogenes, $113,000, 2 Years, Illinois State University, B.J. Wilkinson (PI). This study will look at the underlying mechanisms involved that permit Listeria monocytogenes to grow at low temperatures. The investigators will attempt to identify novel genes and proteins involved in growth at low temperatures. It is hoped that these studies will provide the scientific basis that will lead to novel methods of control of Listeria and improved methods of detection of the organism.

Detoxification of Fumonisin by a Simple Fructose Reaction in Corn for Food, $110,000, 2 Years, Iowa State University, S. Hendrich (PI). A suspected cancer-causing agent in humans, fumonisin B1—FB1—requires its amine group, a simple nitrogen-containing portion of the molecule, for its toxic action. Reacting this amine with simple sugars, such as fructose, is likely to block fB1 toxicity. The objectives of this study are to determine the toxicity of fructose-fB1 products in feeding studies in pigs and rats and to determine the processing conditions for the reactions of fructose and glucose with fumonisin to occur in corn-based foods. These studies may provide a practical approach to the problem of natural toxins, increasing the safety of the food supply by detoxifying a natural toxin that occurs in corn everywhere.

Salmonella enteritidis Heterophil Resistance, $164,000. 3 Years, Iowa State University, T.T. Kramer (PI). The investigators have isolated two less virulent Salmonella enteritidis—SE—mutants which are only briefly shed by infected chickens, are effective in protecting birds against virulent challenge, and prevent egg transmission of virulent SE. In this study, they will use these mutants to study the molecular basis of SE virulence and to identify genes involved in immune cell resistance so that safer vaccines can be developed.

Extracellular Sporulation Signals of Clostridium perfringens, $148,000, 3 Years, University of Massachusetts, R. Labbe (PI). Clostridium perfringens is a leading cause of human foodborne illness in the U.S. This organism produces heat resistant spores. An enterotoxin is produced by some strains during sporulation and therefore the sequence of events leading to spore formation are especially important. The investigators have identified a sporulation factor produced by both enterotoxin-positive and negative strains which stimulate the onset of sporulation and enterotoxin formation by this organism. In this study they will develop conditions to optimize the levels of this factor and then attempt to isolate and characterize it.

Enhanced Green Fluorescent Protein Expression in Escherichia coli to Study Adherence to Meat, $92,000, 2 Years, University of Massachusetts, L.S. McLandsborough (PI). This study will develop a microscopic experimental system that will investigate bacterial adhesion to meat surfaces at the cellular level. Knowledge of the interaction between bacterial and meat surfaces will lead to improved methods of detection and meat decontamination.

Detection and Analysis of Staphylococcus aureus Enterotoxin A in Food, $133,000, 2 Years, Johns Hopkins University, L. Rasooly (PI). The goal of this project is to increase food safety by developing the next generation of detection and analysis methodology for bacterial toxins in food, using Staphylococcus aureus enterotoxin A—SEA—as a model. The project aims to develop two technologies: a cell culture based assay of SEA activity and biosensor methodology for immediate automated detection of SEA in food. Biosensor technology represents a new approach to food safety analyis: real-time analysis.

Intimin: Candidate for an Escherichia coli O157:H7 Anti-Transmission Vaccine, $232,456, 3 Years, Uniformed Services University of the Health Sciences, A.D. O'Brien (PI). Most cases of enterohemorrhagic Escherichia coli O157:H7—EHEC—disease have occurred after ingestion of undercooked, contaminated ground beef. Cattle are reported to be asymptomatically infected with the organims. EHEC have been shown to adhere to the intestinal epithelium of neonatal calves via a bacterial surface protein called intimin. The long-term goal of this project is to develop an inexpensive vaccine to prevent cattle from becoming infected with EHEC, and thus prevent transmission from cattle to humans.

Survival and Virulence of Enterohemorrhagic Escherichia coli as Affected by pH and Water Activity, $87,000, 2 Years, University of Maryland, J. Meng (PI). A variety of foods have been implicated in Escherichia coli O157:H7 outbreaks, particularly foods of bovine origin. Certain foods such as apple cider and dry-cured salami that were considered safe and are generally not heated before consumption have been identified as transmitting vehicles in E. coli O157:H7 outbreaks. Unlike O157:H7, most of the non-O157 EHEC serotypes have been isolated from sporadic cases, hence, the significance of food as a vehicle for transmitting non-O157 EHEC is not clear. This project will study survival of EHEC strains—mainly non-O157:H7—as affected by pH and water activity and virulence of EHEC strains as affected by pH and water activity.

Symposia on Microbial Foodborne Hazards—Basic Research/Industry/Regulatory Concerns, $6,000, 1 Year, U.S. Food and Drug Administration, V.K. Bunning (PI). The Food Microbiology Research Conference—FMRC—focuses on the presentation of basic/applied research by scientists within academia, government, and industry. The FMRC meets every two years to advance knowledge and understanding in the area of food microbiology.

Recombinant Antibodies to Natural Toxicants, $116,000, 2 Years, Michigan State University, J.J. Pestka (PI). This project seeks to genetically engineer novel antibodies to an important group of natural toxins known as the Fusarium mycotoxins which commonly contaminate wheat, corn, rice, and barley. From the perspective of food safety, the general approaches developed in this research will be amenable to improved detection of natural toxicants, chemical contaminants as well as bacterial pathogens and their toxins.

Adhesins for Colonization of Chickens & Their Use in Preventive of Salmonellosis, $156,000, 3 Years, Washington University, R. Curtiss III (PI). The long-term objective of this study is to reduce or eliminate Salmonella colonization of poultry, which would in turn result in a reduction in the shedding of Salmonella in feces, its transmission to eggs, and the cross-contamination which occurs during processing. An understanding of the mechanism of Salmonella adherence to chicken cells could be particularly valuable when developing strategies to eliminate Salmonella contamination of poultry.

Incidence and Fate of Moniliformin in Corn and Heat Processed Corn Products, $97,000, 2 Years, University of Nebraska, L.B. Bullerman (PI). Moniliformin is a highly toxic substance produced by Fusarium proliferatum and Fusarium sublutinans, molds commonly found on corn. The overall objective of this study is to determine the incidence and levels of moniliformin in U.S. corn and corn-based foods and the effects of heat, as applied in basic thermal processing of corn, on the stability of moniliformin.

Modeling the Interactions of Pathogenic and Biocontrol Bacteria for Applications in Foods, $86,000, 2 Years, USDA-Agricultural Research Service, F. Breidt (PI). The objective of this research is to develop a safe method for preventing the growth of pathogenic bacteria in minimally processed, refrigerated foods. A biocontrol strategy will be sued which involves bacterial competition to accomplish this task. Lactic acid bacteria which are commonly used in various food fermentations—dairy, meat, vegetables—will be added as biocontrol agents to prevent the growth of pathogenic bacteria in minimally processed foods.

Salmonella in Modern Swine Production Systems. Risk Factors for Fecal Shedding by Finished Pigs, $241,000, 3 Years, North Carolina State University, P.R. Davies (PI). Specific objectives of this project are to determine risk factors for Salmonella prevalence in finishing pigs raised on slotted concrete floors in barns managed all-in/all-out, withing multiple-site production systems and the relative importance of Salmonella infection in nurseries or the finishing environment as determinants of Salmonella infection in finishing hogs. The information obtained will be relevant to a large and increasing segment of the national swine industry and will aid in defining the most efficient options for reducing Salmonella in the pork supply.

Experimental Campylobacter Vaccine, $138,000, 2 Years, University of Pennsylvania, I. Nachamkin (PI). Campylobacter jejuni is a major cause of gastrointestinal infection in humans. The goal of this study is to assess the ability of previously de-

veloped Campylobacter vaccines to confect cross protection with different flagella types of C. jejuni, determine the minimal amount of time needed post-immunization to confer protective immunity, determine the minimal C. jejuni challenge dose in which complete protection occurs, determine whether the bivalent vaccine confers protection against Salmonella infection, and determine the smallest flagellin fragment that can elicit protective immunity.

Food Pathogen Biosensors for Rapid Safety Measurements of Meat, $96,205, 2 Years, University of Rhode Island, A.G. Rand (PI). Classical procedures for the detection of microbial pathogens in meats are slow and labor intensive. Rapid methods currently available are either complex, require potentially hazardous and expensive materials, or utilize a pre-enrichment step of 18–24 hours to grow enough cells for detection. This project will establish that biosensors employing immobilized antibodies specific for meat pathogens can be successfully utilized for biomonitoring of contamination in food products.

Salmonella typhimurium Genes Required for Systemic Infection of Cattle, $90,000, 2 Years, Texas A & M University, R.M. Tsolis (PI). Little is known about genes allowing Salmonella typhimurium to cause systemic infection in cattle, an important meat source in the U.S. Since systemic infection can lead to a chronic carrier state, information about the mechanisms used by S. typhimurium to establish systemic infection is relevant to development of strategies to eliminate this pathogen from cattle. The goals of this project are the identification and characterization of bacterial genes which enable S. typhimurium to cause systemic infection in cattle.

Fumonisins: Immunology, Genetics and Enzymology, $129,897, 2 Years, University of Wisconsin, F.S. Chu (PI). Using mutant cultures and a combination of immunochemical and chemical methods, the investigators will identify the major steps, intermediates, and enzymes involved in the biosynthesis of fumonisins. The methodology developed in the proposed work could be used for further studies of the conditions conducive to the formation of fumonisins in the field and during storage.

REGIONAL CROP INFORMATION AND POLICY CENTERS

Question. The President proposes first-time funding of $1,500,000 for Regional Crop Information and Policy Centers program. Please explain why this new program is needed and why the goals of this program can't be fulfilled by other existing programs, and identify where each of the proposed Centers will be located.

Answer. USDA has placed a high priority on the establishment of regionally-based Pest Management Center(s) as a means of strengthening its connection with production agriculture, research and extension programs, and agricultural stakeholders throughout the United States. Since passage of the Food Quality Protection Act—FQPA—in 1996, USDA and the Environmental Protection Agency—EPA—have recognized the need for a pest management information network that can quickly respond to information needs of the public and private sectors. When fully functional, Pest Management Centers will help agricultural producers, USDA, and its partner institutions identify, prioritize, and coordinate a national pest management research, extension, and education program implemented on a regional basis. The intent of the Center concept is to bring to the region a new level of coordination and stakeholder input to Federal and state pest management programs and activities. This effort will be directed toward coordinating expertise and resources located at colleges and universities throughout a multi-state region. The exact location of each of the centers will be determined by a competitive grants process. Criteria for selection includes: (1) the expertise present at site; (2) documentation of the ability to accomplish the Center objectives; (3) the ability to provide leadership to form a broad-based regional information network; (4) the ability to foster research, extension and education collaborations, interdisciplinary teams, and inter-institutional partnerships; (5) the adequacy, professional training and experience of Center staff; (6) evidence that stakeholders were consulted during proposal preparation and will participate in the operation of the Center; (7) the ability to establish partnerships with stakeholders to accomplish Center objectives; and (8) institutional support for the Center and a budget reflective of the Center objectives.

1994 INSTITUTIONS

Question. Why does this budget propose to support infrastructure enhancement at the 1994 Institutions through an increase in the annual contribution into the endowment rather than through a separate line-item in the budget?

Answer. The critical need for infrastructure support at the 1994 Institutions is well documented. While the purpose of the endowment fund is to support educationally related activities, often the classrooms and laboratories at the 1994 Institutions are in poor and unsafe condition. By providing the 1994 Institutions with a stable

funding source for improving their educational facilities, college administrators will be more effective in planning institutional needs. This will create a better educational environment for both students and faculty and allow the 1994 Institutions to be more effective partners in the Land Grant community. Each 1994 Institution will be able to determine if its priority needs are educational activities or in infrastructure to support those educational activities, and be able to plan accordingly.

NATIONAL RESEARCH INITIATIVE

Question. Is there a need in your view to establish better accountability measures of agricultural research outcomes for the National Research Initiative projects and other federally-funded agricultural research? I understand that NRI, for example, has no systematic documentation of accomplishments from past funded research. It has been suggested that competitively awarded "evaluation grants" might be one way to address this. Do you agree?

Answer. While accountability for programs such as the National Research Initiative—NRI always could be improved, the NRI does systematically document accomplishments from funded research. Each awardee is required to produce annual and final technical reports. In addition, one of the most rigorous accountability measures for NRI supported projects is the renewal of the project. For a project to renew, it must go through a peer review and be analyzed by a panel of experts as to its accomplishments, its progress towards meeting its original stated goals, and its proposed work for the next funding increment. To renew, the project must also compete against other renewals and new projects. This systematic analysis of the supported research provides one of the most rigorous accountability measures possible.

The NRI could better its accountability, not on a project by project basis, but on a program basis. This year as a pilot project, the NRI is using experts to assess the value of previously supported projects, what has resulted from these projects, and the state of the science in the Markets and Trade program area. While this is a pilot program, CSREES expects that valuable information will be produced and such an analysis could serve as a foundation for further programmatic evaluations. However, such an evaluation is costly and with the many programs within the NRI and elsewhere, it would be cost-prohibited to plan such an exercise for each and every program. Evaluation grants might offer an opportunity for this, however, additional funds should be provided for such purposes since the existing funding level for the NRI only allows support of about 20 percent of all submitted projects.

SMITH-LEVER 3(D) FARM SAFETY AND AGRABILITY

Question. The Administration again proposes to eliminate Smith-Lever 3(d) farm safety funds and funding for the AgrAbility program after the Administration rescinded nearly $600,000 in fiscal year 2000 appropriations provided for these programs. Why does the Administration propose to eliminate funding for these programs?

Answer. This action is consistent with the Administration's belief that the most effective use of taxpayer dollars is through competitively-awarded, peer reviewed grants. Alternate funding from formula programs, State and local governments, and private sources could be used to support aspects of this program deemed to be of high priority at State and/or local levels. However, a new Youth Farm Safety Education and Certification program is proposed for $5.0 million in fiscal year 2001.

YOUTH FARM SAFETY EDUCATION AND CERTIFICATION

Question. A new program named Youth Farm Safety Education and Certification is proposed to be established with a funding level of $5 million. Please describe this new program in detail (who would be eligible for the program, how funds will be awarded, and what activities will be funded, etc.). Also, how is this proposed new program different from the Smith-Lever 3(d) farm safety and AgrAbility programs the Administration proposes to eliminate?

Answer. The Fair Labor Standards Act and selected state laws allow child agriculture workers to work at younger ages, for longer hours, and in more hazardous occupations than in other industries. Minors 16 and 17 years of age are exempt from prohibitions on work in hazardous occupations identified by the Secretary of Labor, and 14 and 15 year old children are exempt from the hazardous occupation restriction if they possess a valid certificate documenting completion of safety training for tractor operation or other machine operation. This new Youth Farm Safety Education and Certification Initiative would establish a USDA-administered competitive grants program to states to provide formal safety training and certification targeted to youth age 16–17 years. These grants would also be used for related purposes such as curriculum improvement for current safety programs and development of new

safety education curricula for other agricultural occupations as needed. The initiative would provide funds to land-grant institutions in order to contract with qualified private businesses and community and youth organizations to deliver education and training, such as 4–H, Future Farmers of America, and other similar organizations that would provide safety education that prepares youth for safety certification.

This initiative is intended to augment state and local vocational agriculture school funds for safety training by agricultural employers and other private businesses, and is intended to enhance the safety of young farm workers, while maintaining their employability in agriculture and minimizing disruptions to farm employers' access to youth workers.

The Youth Farm Safety Education and Certification program supports specific formal training that is required by the Fair Labor Standards Act while the current Farm Safety program provides limited support for an Extension program developed by State or Territory Extension specialists that addresses a wide range of farm safety program needs identified by these specialists. The AgrAbility program is designed to assist farmers with disabilities to stay in farming.

No Federal funds have been appropriated to support the current certification training required by the Fair Labor Standards Act for 14–15 year olds. Thus, State Extension programs have struggled to find the resources to provide the training, keep training materials current, and conduct evaluations of the training.

1890 INSTITUTIONS

Question. Provide a list, by 1890 institution, of the renovation and construction projects funded in fiscal year 1998 and fiscal year 1999, the funds provided for each, and the amount required in future years to complete the project.

Answer. Awards are made for the acquisition and improvement of agricultural and food sciences facilities and equipment, including libraries, so that the 1890 Land-Grant Insitutions and Tuskegee University may participate fully in the production of human capital in the food and agricultural sciences. These activities are ongoing and are proposed in a five-year plan of work. The first table indicates the past, current, and proposed appropriations to complete activities under the current five-year plan of work starting in fiscal year 1998. The second table is a chart which provides the progress to date on each of these projects, as well as the plans for each facility in fiscal year 2000.

1890 FACILITIES

	Fiscal Year					Total
	1998	1999	2000	2001	2002	
Alabama	$403,755	$449,013	$666,710	$666,710	$666,710	$2,852,898
Tuskegee	403,755	449,013	666,710	666,710	666,710	2,852,898
Arkansas	387,818	430,036	658,969	658,969	658,969	2,794,761
Delaware	310,482	337,479	621,209	621,209	621,209	2,511,588
Florida	408,640	454,830	669,083	669,083	669,083	2,870,719
Fort Valley	448,874	502,734	688,627	688,627	688,627	3,017,489
Kentucky	497,465	560,587	712,229	712,229	712,229	3,194,739
Southern	379,624	420,281	654,989	654,989	654,989	2,764,872
Maryland	356,775	393,076	643,890	643,890	643,890	2,681,521
Alcorn	392,395	435,487	661,192	661,192	661,192	2,811,458
Lincoln	495,381	558,109	711,217	711,217	711,217	3,187,141
North Carolina	511,065	576,736	718,817	718,817	718,817	3,244,252
Langston	399,604	444,071	664,694	664,694	664,694	2,837,757
South Carolina	394,830	438,385	662,374	662,374	662,374	2,820,337
Tennessee State	455,003	510,031	691,604	691,604	691,604	3,039,846
Prairie View	570,689	647,775	747,798	747,798	747,798	3,461,858
Virginia State	430,885	481,317	679,888	679,888	679,888	2,951,866
Subtotal	7,247,040	8,088,960	11,520,000	11,520,000	11,520,000	49,896,000
Federal Admin	301,960	337,040	480,000	480,000	480,000	2,079,000
Total	7,549,000	8,426,000	12,000,000	12,000,000	12,000,000	51,975,000

1890 FACILITIES PROGRAM SUMMARY OF PROGRESS

[Fiscal years 1999 and 2000]

Institution	1999	2000
Alabama A&M University Normal, Alabama.	Develop specifications and bid requests for connectivity of Interactive Video Center and Mobile Video Conference Laboratory. Select architect for renovation of teaching and research laboratories. Select architect for replacement of heating and cooling system for Hobson Bonner Halls. Purchase research equipment. Enhance Extension facilities/equipment.	Enhance teaching facilities for academic units in family, consumer and food sciences. Establish a multi-media laboratory to enhance instruction and research lecture, workshops and seminars. Initiate the bid process to replace the laboratory and field research equipment. Convert extension laboratories in accommodations for new program efforts.
Tuskegee University Tuskegee, Alabama.	Renovate and upgrade Milbank Hall. Renovate and upgrade the Vocational Building as an Extension Activity Center. Upgrade gutters and repair Morrison-Mayberry Hall. Planning for improving and constructing teaching facilities. Renovate the Vocational Education Building. Construct Safety and Food Processing Center. Purchase equipment for the Extension Building. Complete the renovation of Milbank Hall. Renovate and convert the Vocation Building as an Extension Activity Center. Plan for teaching facilities. Install and seal flooring in Milbank Hall. Install draining system in Milbank Hall. Replace roof of the new wing of the Carver Research Foundation Laboratory. Acquire land and plan for rural tourism and business development laboratory. Construct Safety and Food Processing Center.	
University of Arkansas Pine Bluff, Arkansas.	Site improvements at the University of Arkansas at Pine Bluff (UAPB) farm. Support renovation of Woodard Hall. Renovation of Child Development Laboratory. Renovate Agronomy storage building. Acquire replacement farm vehicles. Purchase GIS survey system equipment. Purchase instructional and audio-visual equipment. Design of the Sheep Facility. Construction of Fish Processing and Marketing Facility.	Design for renovation of Woodard Hall. Upgrade playground at the Child Development Center. Design of the Child Development Center. Renovation of Agronomy Storage Building. Construct an outdoor pavilion at the Lonoke farm site. Purchase instructional, farm and research equipment.
Delaware State University Dover, Delaware.	Plan and construct a facility for office, laboratory and classroom space. Construction of the herbarium.	Construct an office, laboratory and classroom building to support the research, extension and academic programs and centralize the location of two academic departments of the School of Agriculture, Natural Resources, Family and Consumer Sciences. Complete construction of the herbarium.

1890 FACILITIES PROGRAM SUMMARY OF PROGRESS—Continued

[Fiscal years 1999 and 2000]

Institution	1999	2000
Florida A&M University Tallahassee Florida.	Acquire land to construct a facility for research, teaching and extension aquaculture. Develop plans and specifications for Aquaculture facility.	Determine equipment and supplies needed for the Aquaculture facility and laboratories. Develop plans and specifications for multi-purpose research, teaching and extension facility. Purchase computer and office equipment for extension offices. Acquire materials and supplies to develop outreach Environment Science programs. Acquire equipment and furniture for distance learning classrooms. Develop plans and specifications for enclosure at teleconference center.
Fort Valley State University Fort Valley, Georgia.	Plan for the construction of the Family Development Center. Acquire and improve laboratory and demonstration equipment.	Construction of the Family Development Center. Acquisition and installation of laboratory and demonstration equipment.
Kentucky State University Frankfort, Kentucky.	Development of a Research, Extension and Teaching Aquaculture Field Station. Establishment of Resource Technology Center.	Establishment of a Resource Technology Center.
Southern University and A&M College Baton Rouge, Louisiana.	Purchase and install equipment including animal pens, electronic timers, portable bleachers, portable panels, poultry coops. Purchase a small vehicle. Purchase fire and sound evacuation, security and monitoring systems for the Multi-purpose Livestock Show Arena. Renovate the facility (Pinkie Thrift Hall) for the Division of Family and Consumer Sciences. Bring the Meat Processing Laboratory to meet health department standards. Plan to construct a facility to store agricultural chemicals. Construct the Cooperative Extension Administrative Complex and Center for Small Farms Research and the Arena Complex.	Renovate meat laboratory. Install video equipment for conference center. Renovate the facility (Pinkie Thrift Hall) for the Division of Family and Consumer Sciences. Renovate the Meat Processing Laboratory to meet health department standards. Complete purchases and installation of signage, equipment and furnishings for the Cooperative Extension Administrative Complex and Center for Small Farms Research and the Arena Complex. Complete landscape design, and design and construction of parking lot for the Cooperative Extension Complex.
University of Maryland Eastern Shore Princess Anne, Maryland.	Design of the Plant Science and Teaching Research Facility. Design of the Food Science and Technology Center.	Construction of the Plant Science and Teaching Research Facility. Construction of the Food Science and Technology Center. Purchase equipment for the Cooperative Extension facility.
Alcorn State University Lorman, MS.	Planning of Center for Biotechnology. Planning of Center for Environmental Ecology and Natural Resources.	Construction of Center for Biotechnology. Planning of Center for Environmental Ecology and Natural Resources. Computer Networking.
Lincoln University Jefferson City, MO.	Renovation of Bennett Hall.	Continue renovation of Bennett Hall.

1890 FACILITIES PROGRAM SUMMARY OF PROGRESS—Continued

[Fiscal years 1999 and 2000]

Institution	1999	2000
North Carolina A&T State University Greensboro, NC.	Wire and connect offices and classrooms in Carver Hall to University Fiber Optic Network. Install new lighting, ceiling, heating/air conditioning and window treatments to offices, classrooms, and auditorium in Carver Hall. Renovate labs offices, and lounge area in Ward Hall and construct new labs and research areas to support program activities in food safety, nutrition and health. Purchase scientific equipment. Wire and connect offices and labs in Ward Hall. Establish teleconferencing and distance education capabilities in Coltrane Hall.	Construct new greenhouse and small horse barn/corral in support of teaching programs in horticulture and animal sciences. Enhance research capabilities of Ward Hall in support of multi-disciplinary research and graduate education in food safety, nutrition and health. Enhance telecommunications infrastructure and capabilities of research facilities; Ward Hall and C. H. Moore Ag Research Facility and School of Ag–TV studio. Enhance infrastructure of research facilities, both physical and equipment needs, used in support of research and graduate education. Renovate and expand extension equipment/storage building to create bathrooms and new offices, conference room and meeting rooms.
Langston University Langston, OK	Construct/renovate Extension/Research Complex.	Construct/renovate Research/Extension Building. Construct/renovate greenhouse. Construct new facility to house teaching, research and extension programs.
South Carolina State University Orangeburg, SC.	Construct/renovate Commercial Foodservice Management Laboratory.	Construct commercial dining/hospitality facility. Continue renovation at Staley Hall auditorium. Continue renovation at R.L. Hurst Building.
Tennessee State University Nashville, TN.	Renovation and installation of equipment for a distance learning center. Purchase equipment.	Continue development of demonstration areas of distance learning center. Renovate and upgrade the child development laboratory.
Prairie View A&M University Prairie View, TX.	Purchase office and audio-visual equipment for the Cooperative Agricultural Research Center (CARC). Construct/renovate H.S. Estelle 4–H and Youth Camp. Renovate dairy goat center, creamery laboratory, meat laboratory, greenhouse, swine center, feed mill, poultry center, and human nutrition/food science laboratories..	Continue to purchase office and audio-visual equipment for the CARC. Purchase vehicles for the CARC. Continue to construct H.S. Estelle 4–H and Youth Camp. Purchase equipment for communications network. Upgrade communications network with new equipment and connectivity for satellite video production. Continue renovation of dairy goat center, creamery laboratory, meat laboratory, greenhouse, swine center, feed mill, poultry center, and human nutrition/food science laboratories.
Virginia State University Petersburg, VA.	Further develop the greenhouse facility. Construct the greenhouse. Purchase bus. Procure equipment for the Plant Science and Animal Science Labs.	Demolish current storage facility and construct a new facility. Construct a New Farm Service Center. Develop an electronic Classroom.

EXTENSION INDIAN RESERVATION PROGRAM

Question. The administration asks for an increase of over $3 million for Extension Indian Reservation Agents for fiscal year 2001. Are all reservations eligible for this program? How many extension agents are currently funded for fiscal year 2000 and

at which reservations are they located? How many requests for extension agents are outstanding? How many agents can be added with this increase?

Answer. The Extension Indian Reservation Program—EIRP—provides Extension agents and links the Land Grant University. The EIRP is designed for large reservations—100,000 acres or larger—that preclude adequate programming from existing county staffs. Reservations are isolated, seldom have industrial development or job opportunities, and often have high rates of unemployment, alcoholism, school-dropouts, and nutrition-related health problems. Gainful employment opportunities are tied to the limited natural resource base—mostly land and water. Agriculture is often the only feasible route to gainful employment. This program helps reservation residents to make the most of their cultural and natural resources in the production of crops and livestock; in the development of youth skills, self esteem, and educational achievement; in the maintenance of family health and well-being; and in the achievement of an improved quality of life.

The Reservation Extension agents help Native Americans to produce and market crops, livestock, and timber; to develop quality products to overcome isolated sales locations and quality or shipping discounts; to develop and exploit niche markets; to develop healthier life styles; to develop more nutritious diets; to forestall diabetes—a ubiquitous malady in Indians; to develop marketable life-skills; to stay in school until graduation; to pursue higher education; and to help themselves. There is widespread need for more of these programs that assist new and experienced farmers and ranchers; that provide linkages for "Remote Area"—veterinary—Medicine programs on the reservations; and that encourage youth to achieve, develop leadership skills, stay in school, develop healthy life styles, and to pursue college educations that will be helpful to their families and others.

Developing these skills will enable reservation residents to make direct use of their natural and cultural resources, rather than leasing them to outsiders and depending upon the Bureau of India Affairs—BIA—to collect, mishandle, and distribute the receipts; or to depend upon welfare programs for sustenance.

There is a need for about 85 such projects, based on reservation numbers and size. To date, only 25 are in operation because there has been no funding increase for this program since 1990. There is a backlog of 17 applications for this program. Other reservations have expressed interest, but have been discouraged from submitting applications until additional funding is available. The proposed increase to $5 million would allow the program to increase the level of support for many of the existing projects, and to add an additional 23 Reservation agents.

The present level of funding—$1.71 million, supports EIRP agents—employees of the State Land-Grant University—on 25 reservations, distributed as follows:

Alaska—1—(Tanana Chiefs Conf)

Arizona—4—(Navajo [Window Rock], Hopi, San Carlos Apache, Colorado River Tribes.)

Florida—1—(Seminole)

Idaho—1—(Fort Hall)

Mississippi—1—(Choctaw)

Montana—4—(Flathead, Northern Cheyenne, Blackfeet, Ft. Belknap)

N. Carolina—1—(Cherokee)

N. Dakota—1—(Fort Berthold)

New Mexico—3—(Jicarilla Apache, Zuni, Navajo [Shiprock] [1])

Nevada—1—(Nevada tribes)

Oklahoma—1—(Muscogee)

Oregon—1—(Warm Springs)

S. Dakota—2—(Pine Ridge, Rosebud)

Washington—2—(Chehalis, Colville)

Wyoming—1—(Wind River)

Under the fiscal year 2001 proposal, the program would actively solicit applications for new projects from those reservations that have previously applied, and from all other qualified reservations. The Inter Tribal Agriculture Council estimates that a total of 86 agents are needed to adequately serve such reservations. The proposed increase would allow the EIRP to expand to a total of 48 reservation agents.

AGRICULTURE IN THE CLASSROOM

Question. There is an increase in the President's budget that would double the funding for Ag in the Classroom. Please provide a brief explanation of this program

[1] Administered by the University of Arizona, in cooperation with New Mexico State University and the Utah State University.

(who qualifies for the funds; what activities are funded, etc.) How will the increased funding requested for the program be utilized?

Answer. The Agriculture in the Classroom program is an effective vehicle to provide students and educators with accurate information about food and agriculture. The program integrates scientifically-valid agricultural information into a variety of academic disciplines including science, the social sciences, language arts, and mathematics. The program reaches over 120,000 teachers annually, impacting over 5 million students.

We reach teachers through a variety of activities such as a national web site linking State programs and other related agricultural projects, national teacher awards honoring outstanding teachers incorporating agricultural concepts into their curriculum, annual conferences attended by over 300 teachers and educators, and a network of State programs coordinated by the National Agriculture in the Classroom Consortium. In addition, we seek to make agricultural concepts a part of national initiatives such as the Millennium Green.

In 1999, eight graduate-credit courses were offered throughout Missouri to better acquaint 200 teachers with agriculture and demonstrate how to integrate some facet of agriculture into the regular classroom curriculum. On average, each participating teacher will teach 10 years, reaching over 50,000 children. Efforts of this nature are being replicated across the Nation. For the 1999–2000 school year, the Missouri Farm Bureau Foundation for Agriculture is providing $7,500 in mini-grants to K–12 teachers who demonstrate ability to enhance student knowledge of agriculture. Thirty-nine classrooms will directly benefit from this endeavor. Mini-grant programs in each State and territory are supporting projects that promote agricultural literacy efforts.

Ohio's Agriculture in the Classroom program has been successful in developing a comprehensive educational kit in conjunction with Ohio State University. This kit meets the Ohio's Kindergarten through third grade competencies and helps prepare students for their State proficiency tests.

Maryland's Agriculture in the Classroom program has been successful in educating teachers, students, and the public about agriculture with three Mobile Agriculture in the Classroom Laboratories. The themes for the mobile units are "Aquatic Science," "Agricultural Products," and the "Biotechnology and Food Safety."

Additional funding would allow the Department and the Agriculture in the Classroom community to expand education outreach activities to under-represented groups, support regional demonstration projects, continue the integration of information technology to lower program delivery costs, and increase outstanding teacher recognition initiatives.

Other planned initiatives include the development of materials which portray scientifically-accurate and technologically-advanced agriculture, dissemination of materials about career opportunities in the food and agriculture arena, research and evaluation of program components, an expanded network of educators involved in promoting agricultural literacy, and strengthened relationships between the Agriculture in the Classroom community and our partnering college and university systems.

LOUISIANA AND MISSISSIPPI RURAL HEALTH PROJECTS

Question. Please give the Committee an update on the Louisiana and Mississippi rural health projects funded for the last several years.

Answer. The Nurse Managed Family Health Care Center project conducted by Southern University and A&M College is a health promotion and disease prevention program for at-risk populations residing in rural and inner city neighborhoods in south Louisiana. Quality, cost-effective, community-based health care services are offered through a collaborative practice model where graduate-prepared nurse faculty, nursing students, and physicians located in the community health outreach centers assist women, children and the elderly in promoting self-care health behaviors.

Since the inception of the program in 1995, 400 nursing students have participated in this program. During 1999, in a partnership with Head Start, 500 children enrolled in Head Start were able to receive all their health screenings through the mobile health unit made available in this program. The mobile clinic also visited a rural clinic and homeless shelters in inner-city neighborhoods.

This program continues to expand outreach to underserved populations and has been recognized in a number of publications.

The Mississippi Rural Health Corps is a joint endeavor of the state's 15 community and junior colleges and the Mississippi State University Cooperative Extension Service. The purpose of the project is to improve rural health through the education

of Mississippi residents and the training of health care professionals in rural practice. Loans have been made to 608 students enrolled in nursing and allied health professional courses. Of the 608 loans, 246 were awarded to students in an associate degree nursing program, 140 went to those in licensed practical nursing programs, with the remainder awarded to students in allied health professional programs. Four loans assisted nursing faculty to pursue advanced degrees.

During 1999, 362 Corps students graduated. Since the inception of the program, 1,827 loan recipients have graduated. Each makes a commitment to practice for up to a maximum of three years in a rural setting.

Other examples of the breadth of the outreach include the following: two nursing courses, one nutrition course, and three health seminars which were delivered to 17 locations throughout the state in 1999. Extension agents reached over 60,000 clients with health related training and events. Mississippi Extension staff trained 2,461 lay health volunteers in early breast cancer detection who reached 16,400 women with prevention information. Self-care education reached 1,732 rural families with information on the safe use of medications.

This program continues to expand outreach and graduate new health professionals.

INTEGRATED RESEARCH, EDUCATION, AND EXTENSION ACTIVITIES

Question. In the fiscal year 2000 budget the Administration requested that Smith-Lever 3(d) programs Water Quality, Food Safety, and Pesticide Impact Assessment be funded through the integrated research, education, and extension competitive grants program. How do you foresee the ability of the integrated authorities account to manage these programs?

Answer. CSREES was created by merging the Cooperative State Research Service and the Extension Service in 1995. Since that time, CSREES has integrated the staff, functions, and goals of the two former agencies into a new agency to serve the American public with the highest quality agriculture and food system research, education, and extension programs. However, this integration could never be complete while no funding mechanism existed to link the functions of research, education, and extension together under a single program. The Agricultural Research, Education, and Extension Reform Act of 1998 includes Section 406, Integrated Activities, giving CSREES the authority to develop programs which integrate these three functional areas. In fiscal year 2000, Congress appropriated $39.541 million under this funding authority.

Funding research, education, and extension under the Integrated Activities authority holds several advantages. The integrated program is open to a broader array of colleges and universities. All colleges and universities, including the 1890 Institutions, Hispanic Serving Institutions, and non-land grant colleges of agriculture are eligible to compete for funds under these programs, thereby broadening the range of topics proposed and building research, extension, and education capacity of the non-1862 Land Grant community. Grants from the integrated authority programs are competitively awarded, as required by law; therefore, all proposals will be judged on technical merit, with only the best programs funded. Most importantly, the integrated program more closely links research programs with extension and education activities and transfers the results of the research to producers more quickly. For instance, in the pest management area, several programs are funded under integrated authorities: Pesticide Impact Assessment, Crops at Risk from FQPA Implementation, FQPA Risk Mitigation and Methyl Bromide Transitions. These programs address critical issues faced by producers who stand to lose important pest control tools to the implementation of FQPA. The research to develop new pest management systems must be immediately transferred to producers. The most effective way to promote this linkage is through a single integrated competitive program which evaluates each project on the basis of scientific merit and the linkage of research, extension, and education components.

INTEGRATED ACTIVITIES

Question. There is a concern that there will be a funding gap when the funding runs out for water quality programs in June 2000 and when the funds will be awarded through the competitive basis that will result in the termination of staff members and a disruption of coordination activities between federal agencies and private sector groups. What is the Administration doing to avoid this situation?

Answer. The integrated research, education, and extension Water Quality Program is designed to protect water from contamination by agricultural chemicals—including agricultural plant nutrients and pesticides—and has also included efforts to reduce the overall impact of agricultural practices in degrading the physical

structure and biological support capacities of water bodies. The program is structured to allow the stakeholder community to be the group responsible for the identification of most critical problems, and for the development of approaches to resolve those problems. This approach has historically resulted in the CSREES' support of a broad array of projects and state programs designed to reduce nutrient loading to targeted water bodies.

In fiscal year 2000, CSREES restructured its Water Quality Program, placing all of the available funding under the Integrated Authority outlined in Sec. 406 of the Agricultural Research, Extension, and Education Reform Act of 1998. This authority will be used to further integrate the activities of research, education, and extension on a common basis. Grants will be awarded on a competitive basis. Recipients who have received grants in previous years have the ability to request no cost extensions without additional funds, if appropriate, to existing grants which may ease the funding gap. Watersheds will serve as the common activity and reporting unit to be used within a regional coordination structure that will facilitate inter-state collaboration as well as collaboration with other Federal water quality programs. The objectives of these watershed-based activities would be to identify the causes of water quality degradation; conduct research filling the gaps that are critical to the development of water improvement practices and programs; implement watershed-scale improvement programs; monitor the efficacy of the improvement programs implemented; assess the costs and benefits of water quality management; and conduct evaluations closing the loop and improving our understanding of the drivers of water quality degradation.

For fiscal year 2001, CSREES has requested an additional $3.204 million to enhance current efforts by conducting integrated farm- and watershed-scale research, education, and extension on ways to reduce nutrient and pesticide delivery to streams and rivers draining into coastal ecosystems—including the Great Lakes. If funded, the CSREES Integrated Water Quality Program will promote a stronger linkage between research, education, and extension to ensure that education and outreach programs reflect the most current scientific knowledge resulting from the Research, Education, and Economics water quality research and development efforts.

These additional funds will also be used to support interagency programs designed to assess and reduce nutrient delivery to impacted coastal areas.

SMALL FARMS INITIATIVE

Question. The Administration proposes again the Small Farms Initiative in the fiscal year 2001 budget at a funding level of $4 million. In what ways does this program propose to stop the decrease of the small farm? Can this program be carried out in conjunction with other programs that already exist?

Answer. CSREES' Small Farms Program proposes to address the economic, social, and environmental problems that contribute to the decrease in small farms nationally. The Initiative will support Land Grant institutions and other partners who work with small farmers to develop effective research, education, and extension programs on:

—Small farm specific research, rather than size neutral research;
—Marketing strategies such as direct marketing, cooperative marketing, and community-supported agriculture;
—Helping beginning farmers establish viable farm operations;
—Entrepreneurial and business skills that will help small farms deal with their social and environmental issues; and
—Facilitating the development of networks between farmers and experts, in both the public and private sectors, that can help small farmers gain better access to information and technology.

The Small Farm Program will collaborate with other research, education, and extension programs. In fiscal year 1999, CSREES' Small Farm Program awarded four small grants to land-grant universities in four regions to conduct feasibility studies assessing the resources available for research and extension activities favoring small farmers and ranchers. The information in the reports from the land-grant universities will be useful to managers of the Small Farm Initiative because the report will identify integral institutions such as community-based organizations, non-profits, other government programs, and individuals that have interest in the small farm effort and will complement the work for effective research and extension to stop the decrease of small farms and ranches.

BIOBASED PRODUCTS

Question. A new program named the Biobased Products Program has been proposed in the President's budget that proposes to increase economic opportunities for farmers by developing and expanding markets through research, development, and commercialization of products from bio-based resources. Does this program need to be authorized? Can you explain in detail the effort in this program to promote commercialization for ongoing projects within CSREES?

Answer. Section 406 of the Agricultural Research, Education, and Extension Reform Act enables an integrated approach to research, education, and extension activities. The Biobased Products Program has been proposed under this authority.

This proposed program targets the expansion of the domestic industrial base through research and development of agricultural raw materials as feedstocks for industrial products. Thus far, advances in agriculture have stressed crop production technologies without a comparable interest in new crops or conversion technologies to produce industrial products. Currently, projects within CSREES that address biobased product research and development are, for the most part, single issue projects and do not take into account barriers to commercialization that can occur at various points along the research and development continuum. The proposed program is based on a systems approach that will build upon currently funded projects and will encompass all phases of product development, from growing industrial crops, adding value to conventional crops, to demonstration of the end-items. Integration of research, education, and extension activities is considered an efficient mechanism to accomplish the goals of this program.

METHYL BROMIDE TRANSITION PROGRAM

Question. Can you give an initial status report on the Methyl Bromide Transition Program that has recently been funded? Do you feel that the program thus far has been successful enough in its initial stages to warrant such a large increase in funds? How many more competitive grants can you award with this increase?

Answer. The Methyl Bromide Transition Program is being administered in fiscal year 2000 as a competitive grants program, and it is expected that 10 to 12 projects will be funded during the review process to be conducted in early July with the awards announced at that time. The proposed increase in funding for fiscal year 2001 would allow for about 20 more grants to be funded during the next year. The use of methyl bromide is scheduled to be reduced from a 1991 baseline by 50 percent in 2001, by 70 percent in 2003, and by 100 percent in 2005. This will impact the U.S. tomato and strawberry industry, fruit and nut tree production, nursery stock production, the cut-flower industry, forest nursery production, ornamental crops, post-harvest treatments, and other uses. Due to the large number of U.S. production systems that use methyl bromide, the increase in funding is necessary to assure that alternatives can be developed rapidly for all needs.

METHYL BROMIDE TRANSITION PROGRAM

Question. The Department stated that research, education, and extension would proportionately receive the funds for the Methyl Bromide Transition Program. Have you seen a need for one category to receive more of the funds than another category?

Answer. The Methyl Bromide Transition Program was funded under Section 406, Integrated Research, Education, and Extension Competitive Grants Program—Pest Management. These funds support integrated, multi-functional agricultural research, extension, and education activities. Depending upon the commodity, the degree to which an alternative to methyl bromide use on that commodity has been developed varies greatly, with some commodities having no proposed alternatives at this time. Therefore, it is expected that proposals will equally consider the research approach and the delivery of that research to the grower through extension and education programs. Due to the competitive nature of the program, we are not able to predetermine the ultimate combination of research, education, or extension that will be supported by these projects.

ANTI-HUNGER AND FOOD SECURITY GRANTS PROGRAM

Question. How does the proposed Anti-Hunger and Food Security Grants Program in the fiscal year 2001 budget differ from the program that the Administration proposed in last year's fiscal year 2000 budget and why is there a significant decrease in funds from last years proposal? Does this program need to be authorized?

Answer. The Food Recovery and Gleaning grants proposed in fiscal year 1999 and fiscal year 2000 would have funded only food recovery, gleaning, rescue, and donation programs, but the Anti-Hunger and Food Security Grants proposed for fiscal

year 2001 would fund, in addition to food recovery and gleaning projects, a far broader array of projects to reduce hunger, improve nutrition, strengthen local food systems, and help low-income families move towards self-sufficiency. USDA broadened the proposal in direct response to input from community-based groups throughout the country who communicated their belief that food recovery, gleaning, and donations programs would be most effective as part of more comprehensive efforts to deal with local food insecurity.

The grants would be made available to any nonprofit group in the United States, including faith-based organizations. Such groups could include:

—food banks;
—church, synagogue, mosque, or temple-based soup kitchens or food pantries;
—community food security groups;
—nonprofit small farmer or sustainable agriculture groups;
—food recovery, food rescue, or gleaning organizations;
—community gardening groups;
—job training, assets development, and micro enterprise organizations;
—community action agencies;
—youth service organizations;
—nutrition education groups;
—nonprofit farmers' markets and direct marketing organizations.

The intent of the program will be to give out as many small and medium-sized grants as possible to provide seed money so that the grant recipients will be able to leverage other resources. Priority would be given to innovative public/private partnerships that comprehensively tackle local problems, as well as for the replication of successful model programs. Nonprofit groups have consistently commented that government and foundation funding that often focuses only on new—and unproven projects—is not always wise public policy, particularly when the funding streams will not fund the replication of programs that have proven their effectiveness. Thus, these grants will place a significant focus on helping nonprofit groups replicate projects that have already proven their effectiveness.

The following are some examples of the types of projects that could be funded by the grants:

—Enabling local emergency feeding organizations, which currently focuses on the short-term goal of providing food to clients, to increase their focus on longer-term and broader community food security activities that both help their client move to self-sufficiency and strengthen local food systems.
—Assisting small- and medium-sized farmers to sell their agricultural products directly to school districts, government hospitals, public universities, and other public institutions. These projects have the potential to boost the income of struggling family farmers and at the same time provide students and others with improved nutrition by being able to eat fresher products.
—Starting or expanding community or school gardens that enable low-income residents to produce their own food; such projects can help increase community self-reliance, increase the availability of fresh produce in low-income areas, preserve open space, teach young people about science, and even create "safe spaces" that reduce crime.
—Strengthening the infrastructure of food banks, food recovery organizations, food rescue groups, and field gleaning organizations necessary to increase the quantity and/or quality of the excess food that is recovered and gleaned; funds could be used for: (1) vehicles and fuel for transportation of recovered food; (2) Volunteer coordinators as well as training programs for volunteers; (3) preparing, printing, and distributing handbooks, and instructional materials; (4) heating and refrigeration equipment to ensure the safety of the recovered food; (5) equipment to collect, sort, process, dehydrate, transport, and distribute food.
—Supporting peer-to-peer efforts in which senior citizens provide nutrition, food, and other assistance to fellow senior citizens.
—Helping youth service or other community organizations increase the involvement of community volunteers in anti-hunger and community food security activities. This would advance the volunteerism goals set jointly by President Clinton, former President Bush, and former General Colin Powell. Funds could be used for hiring staff to recruit and supervise volunteers, as well as for training programs for volunteers.
—Increasing connections between farmers' markets and other local food security and anti-hunger activities.
—Supporting the creation of new or expansion of existing community kitchens, such as DC Central Kitchen, that combine rescuing excess food with training low-income individuals for jobs in the food service industry. Such programs have

been extremely successful in helping individuals move from poverty and homelessness to self-sufficiency and independent living.

—Enabling community groups to team up with local universities to comprehensively map all food security-resources in their community and then conduct outreach to ensure that more community residents utilize those resources.

—Expanding programs that engage chefs as volunteer nutrition education instructors and tying nutrition education and financial management training classes into broader community food security efforts that comprehensively help low-income families.

—Supporting the development of small, food-related businesses and micro enterprises in low-income communities, such as youth farm-stand programs or efforts in which products grown in local gardens are turned into salad dressing or baked goods.

—Providing increased food and assets development assistance to help working poor families to stay off welfare, increase their ability to feed and support their families, and eventually move into the middle class.

In fiscal year 1999 and fiscal year 2000, USDA proposed in the Food and Nutrition Service's budget $20 million and $15 million in CSREES' budget for grants for food recovery and gleaning. The need for food banks, food pantries, soup kitchens, religious-based anti-hunger groups, community food security organizations, etc. to receive Federal assistance has increased in the past years with many organizations reporting a rise in the number of families needing assistance, particularly working families.

The proposed grants do not require separate authorization.

DEPARTMENTAL ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

CONTRACTS TO PRIVATE SOURCES FOR SERVICES

Question. Please provide a description of estimates on the degree to which the Department contracts to private sources outside USDA for various services. Include in this description, estimated expenditures, mission areas, and FTE equivalents for the current fiscal year. Additionally, for the purposes of comparison, please include the same estimates for fiscal year 1995. Finally, please describe what process whereby decisions to contract out are analyzed and evaluated to insure that the service level is not compromised and cost-savings are accrued.

Answer. USDA contracts out with private sources for a wide array of services. The information provided below generally represents contracts awarded for such services, with the exception of construction services. We do not collect data on FTE equivalents of contracting activity. Decisions to contract for services are made on a case-by-case basis by the requiring office. The decision process is governed by the instructions of the Office of Management and Budget in Circular A–76 in those situations where it applies. The procurement process is governed by A–76 and the instructions applicable in the Federal Acquisition Regulation. USDA has installed an internal oversight process for approval of advisory and assistance services in excess of $25,000. Services in this category are elevated to the Under and Assistant Secretaries for approval prior to contract award.

[The information follows:]

CONTRACTS TO PRIVATE SOURCE FOR SERVICES

[In millions of dollars]

Mission Area and Agency	Fiscal year		
	1995	1999	2000
Farm and Foreign Agricultural Services:			
Farm Service Agency	44.1	70.9	16.9
Foreign Agricultural Service	0.3	.....	.....
Food, Nutrition, and Consumer Services: Food and Nutrition Service	24.2	23.8	0.4
Food Safety: Food Safety and Inspection Service	3.4	15.6	10.6
Marketing and Regulatory Programs:			
Agricultural Marketing Service	.....	0.7	.....
Animal and Plant Health Inspection Service	17.1	11.6	1.5

CONTRACTS TO PRIVATE SOURCE FOR SERVICES—Continued

[In millions of dollars]

Mission Area and Agency	Fiscal year		
	1995	1999	2000
Natural Resources and Environment:			
Forest Service	254.5	361.7	77.5
Natural Resources Conservation Service	48.9	33.7	8.0
Rural Development Mission Area	55.3	34.7	15.9
Research, Education, and Economics: Agricultural Research Service	85.7	93.0	32.4
Departmental Administration	35.2	50.5	24.8

ECONOMIC RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

STRUCTURAL CHANGES AND CONCENTRATION

Question. Can you give more information on an increase of over $1 million dollars in the President's budget for an initiative on Structural Changes and Concentration in Food and Agriculture to improve the efficiency of the Agricultural Sector?

Answer. ERS aims to significantly enhance its ability to address the growing issues of concentration and structural change in the food system. Broad areas of interest include: structural change in food and agricultural industries; expanded reliance on formal contracting as a means of organizing the production and exchange of agricultural commodities; and the role of new developments in biotechnology as they affect structural change and agricultural markets. The increased budget resources would be used to improve the agency's stock of relevant data; to perform policy relevant economic research on structure and concentration issues through internal agency research and through cooperative research projects with universities and other agencies; and to encourage interaction among researchers and dissemination of new knowledge through a series of conferences and workshops on specific topics. Actions would emphasize: (1) determining where and why concentration is occurring in the agricultural marketing chain; (2) examining opportunities and risks for farmers within this kind of market environment; and (3) providing analysis for the USDA and other parts of government regarding structural changes in agriculture.

ERS efforts regarding market concentration are distinct from those of other USDA agencies because the focus of research and analysis is addressed broadly to all agricultural markets from producers to consumers. Concentration is occurring throughout the marketing chain, among input suppliers, production agriculture, commodity marketing, food processing, and wholesale and retail markets. At the same time, marketing arrangements like contracting, vertical integration, and various types of strategic alliances have emerged throughout the supply chain from producers to processors to retailers. In some instances, developments in biotechnology and intellectual property rights influence trends in industry concentration and the choice of marketing arrangements. Because concentration and changing marketing arrangements and scientific developments are interrelated, analyses of concentration and marketing arrangements must be largely integrated.

This initiative will aid expansion and targeting of data collection related to changes in market structure and the identification of small and mid-size farms that are affected by these developments. Current data collection and research will indicate what portion of total agricultural production is grown under contract, the distribution of the mix of business strategies used by farmers, and will begin to determine the extent to which economic returns from contract growers differs from participants in cash market. This research will enhance ERS's ability to measure and analyze changes in concentration and provide assistance to USDA and the Department of Justice regarding potential impacts of concentration and merger activity. Finally, ERS will develop a forward-looking capacity to anticipate significant changes in markets and their potential economic impacts on farmers and consumers.

CARBON SEQUESTRATION

Question. What are the details on the initiative on the Economic Incentives for Carbon Sequestration and Trace Gas Emissions Control in Agriculture to mitigate the dangerous effects of greenhouse gases that is proposed in the President's budget?

Answer. This initiative will focus on the economic potential for domestic carbon sequestration and control of greenhouse gases (GHG) in agriculture, the use of economic incentives to encourage carbon sequestration on agricultural lands, and the potential to target USDA conservation programs to promote GHG mitigation activities in the farm sector.

ERS would initiate three kinds of activities:

Economic potential for domestic carbon sequestration and trace gas control in agriculture.—This component of the work would seek to establish the "supply curve" of trace gas control in agriculture. ERS has begun a three-year cooperative research agreement with the Natural Resource Ecology Laboratory in Colorado to investigate this topic. Funding for the first two years has been provided by the Fund for Rural America. Funding under this initiative would allow completion of the third year.

Economic Incentives for Carbon Sequestration.—There are many ways to create economic incentives for sequestering carbon in agriculture. For farmers, however, the economic implications of even relatively specific proposals, such as a system of tradable carbon permits, can be very different depending on how such a program is implemented. Additionally, the nonpoint nature of soil carbon sequestration means that monitoring and enforcement could be a costly component of a tradable permit system. For this reason, other policy mechanisms that have been successfully used in agricultural conservation programs may have merit or there may be ways to target programs such as Conservation Reserve Program or Environmental Quality Improvement Program to meet trace gas control goals. Research to use economic valuation techniques to weight multiple objectives to better target these programs is underway at ERS. Initiative funds would allow this work to incorporate carbon sequestration and other trace gas control programs in such targeting schemes.

The Global Potential for Agricultural Trace Gas Mitigation and Sequestration.—This component of the initiative would allow ERS to collaborate with researchers around the world to incorporate estimates of carbon sequestration in agricultural soils into global economic models such as ERS's FARM model as well as to consider the potential for other GHG mitigation efforts on agriculture. This would build on modeling work to estimate the impacts of climate change on agriculture and link this to the broader issue of threats to global agricultural sustainability such as water quantity and quality and land constraints and soil degradation.

RESEARCH PRIORITIES

Question. What are the research priorities for fiscal year 2000?

Answer. ERS research priorities for 2000 are as follows for each of the three program divisions:

Priorities for the food and rural economics division

Restructuring of the Food System.—Processing, wholesaling, and retailing industries have been consolidating rapidly, following many mergers, acquisitions, and plant closures. These transformations are leading to larger and more specialized firms and plants with fewer buyers and sellers. A series of ERS studies is designed to examine the impact of these changes on businesses and consumers.

Food Stamp Caseloads.—ERS research will identify the forces that explain the declining Food Stamp Caseloads including the impacts of the economy, welfare reform, and State administrative practices. The study will address the economic status of households and individuals leaving the program.

Benefits of Safer Food.—In collaboration with the Centers for Disease Control and the Food Safety and Inspection Service, ERS will use data from the FoodNet active surveillance system to develop new estimates of the costs associated with foodborne pathogens. These finding will be used to rank pathogen-related diseases on the basis of their economic impact. This will help establish priorities for investments in food safety improvements, and to evaluate efforts to strengthen the food regulatory system.

Low-Wage Low-Skill Workers in Rural Labor Markets.—ERS will study the characteristics of low-skill, low-wage workers in rural America. Focus will also be given to the availability of jobs, the geographic distribution of rural workers, and the long-run market prospects for low-income, low-skill workers.

Economic Change in Rural Areas.—ERS will study the determinants and consequences of rural economic change in the 21st century. Analyses will focus on de-

mographic diversity and the changing face of rural America; the socioeconomic well-being of rural residents; growth, decline and stability of the rural economy; implications of industrial restructuring on rural areas and challenges and policy implications for the future.

Behavioral Nutrition.—ERS research will study children's food consumption and compare it to the Food Guide Pyramid. Food intakes will also be studied by source, at home and away, and eating occasion. The factors causing the displacement of milk by soft drinks will be addressed.

Priorities for the market and trade economics division

Risk and Uncertainty in U.S. Agriculture.—ERS research is focused on factors influencing the degree of price and market risk, and economic implications of various risk management strategies. In early 2001, a synthesis report will assess the current state of knowledge regarding price variability in U.S. and global markets.

Unfinished Business and New Issues for Agriculture in the WTO.—ERS research is now focused on finalizing conceptual and empirical economic frameworks to analyze the unfinished business and new issues arising out of implementation of the Uruguay Round Agreement on Agriculture. Planned for early 2001, Options for Agricultural Trade Liberalization will provide a synthesis of quantitative analyses of the costs to the global and U.S. economies stemming from protectionist agricultural policies.

Biotechnology and Agricultural Markets.—In 2000, ERS studies will examine the adjustment of marketing systems to the introduction of biotech crops, the pricing of biotech crops, and the implications of new genetically enhanced seeds on comparative advantage both in the U.S. and globally.

Improved Capacity for Analysis and Forecasts of Demand and Supply Conditions in Commodity Markets and Major Regions.—ERS'commodity and regional market analyses provide timely economic outlook information on U.S. and global agricultural markets. In 2000, ERS will study the dynamics and changing structure of global food demand and its implications for U.S. agricultural producers and exporters. ERS will continue to develop new and innovative ways for users to access commodity market information.

Structural Change in U.S. and Global Agriculture.—ERS will undertake a series of studies on how structural changes in U.S. and global commodity markets, such as the use of contracting, will affect U.S. producers and consumers. A forthcoming report, Understanding the U.S. Wheat Industry's Transition into the 21st Century, looks at challenges and opportunities confronting wheat producers due to U.S. farm policy changes, the pace of yield-enhancing research and new product development, and a more liberalized and competitive global marketplace.

Priorities for the resource economics division

Analysis of Farm Sector Performance.—As part of USDA's interdepartmental responsibility to support estimation of the National Income and Product Accounts, ERS will measure, forecast, and explain indicators of economic performance for the U.S. farm sector and major crop and livestock groups. Particular attention is directed to the impact on farm income of adoption and use of technology, managerial decisions and practices, and government programs.

Domestic Conservation Policy.—ERS will review the accomplishments under the conservation titles of the past 3 Farm Bills and evaluate options for a new generation of agri-environmental policies, to provide insights regarding program size, design, and implementation.

Greenhouse Gas Emission Reduction, Carbon Sinks, and U.S. Agriculture.—ERS will examine the economic potential for domestic carbon sequestration and control of greenhouse gases (GHG) in agriculture, the use of economic incentives to encourage carbon sequestration on agricultural lands, and the potential to target USDA conservation programs to promote GHG mitigation activities in the farm sector.

Adoption of Bio-engineered Crops.—ERS will assess the farm-level effects of the adoption of bio-engineered crops and identify the factors that have affected adoption. Manure Management for Water Quality Improvement. ERS will assess some of the issues in designing nutrient-based nonpoint source pollution control policies and to evaluate the economic and environmental characteristics of animal waste regulations on confined livestock and poultry farms.

Small Farm Success.—ERS will examine the determinants of small farm success, with particular attention to farm type (stated occupation of the operator, financial resources, sales level), resource endowment, and choice of integrated management systems. Agricultural Trade and the Environment. ERS will analyze how trade liberalization agreements affect the environment, how domestic environmental policies

affect trade flows, and how international environmental agreements can improve global environmental quality.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Question. What is the geographic breakdown of obligations for fiscal year 1999?

Answer. Below is a table that shows the geographic breakdown of obligations for fiscal year 1999.

Alabama	$27,000
Arizona	176,800
Arkansas	26,000
California	764,428
District of Columbia	53,077,897
Florida	90,000
Georgia	99,828
Illinois	309,090
Indiana	169,500
Iowa	180,000
Kentucky	44,500
Louisiana	7,100
Maryland	406,429
Massachusetts	3,601,543
Michigan	220,354
Minnesota	197,500
Mississippi	182,900
Nebraska	755,556
New Jersey	18,500
New York	813,212
North Carolina	212,812
Ohio	360,000
Oklahoma	20,000
Oregon	59,100
Pennsylvania	15,000
Tennessee	15,000
Texas	38,700
Virginia	271,550
Washington	155,000
Wisconsin	173,150
Total	62,488,449

FOOD AND NUTRITION SERVICE

INCENTIVE PAYMENTS

Question. How much in incentive payments will be made to States lowering their error rates in fiscal year 2000?

Answer. It is estimated that in fiscal year 2000 States will earn $39 million for incentive payments by lowering their food stamp issuance error rates in fiscal year 1999.

CHILD NUTRITION STATE ADMINISTRATIVE EXPENSES

Question. What is the breakdown in increases requested by the fiscal year 2001 budget proposal for State Administrative Expenses for the Child Nutrition Programs? Why is an increase of $9,482,000 needed for fiscal year 2001?

Answer. The level of funding required for Child Nutrition, State Administrative Expenses is dictated by section 7 of The Child Nutrition Act, as amended. This law requires that 1.5 percent of the amount of funds a State used in the second prior year for School Lunch and Breakfast, Special Milk and the Child and Adult Food Care Programs be made available to States for their administrative expenses for those same programs. Thus, the funding requested for fiscal year 2001 is determined by the actual expenditures in fiscal year 1999. All of the funds requested would be granted to States, usually the State education agency for school programs with some funding going to the State Agriculture agency to pay for their expenses incurred in handling commodities for schools and some to the State welfare agency if they administer the Child and Adult Care Food Program. I will provide additional data on how much funding is generated from each of the programs listed above.

STATE ADMINISTRATIVE EXPENSES—EARNINGS: FISCAL YEAR 2001

[In thousands of dollars]

	Fiscal year 1999 cash payments to States	Percentage	Fiscal year 2001 State Administrative expenses
School Lunch Program	$5,516,552	1.5	$82,748
School Breakfast Program	1,354,843	1.5	20,323
Child and Adult Care Food Program	1,598,580	1.5	23,979
Special Milk Program	18,075	1.5	271
Total	8,488,050	1.5	127,321

SCHOOL BREAKFAST DEMOS

Question. Please give the subcommittee an update on the School Breakfast demos.

Answer. USDA is continuing preparations to commence the demonstration of universal free school breakfast in school year 2000–2001. A rigorous study design has been developed with the assistance of a contractor and a panel of National experts. The design document, along with a literature review that summarizes the current knowledge about the relationship between breakfast and learning, was completed in December 1999; these documents are now available on the Food and Nutrition Service website.

A Federal Register notice announcing the application process for school food authorities (SFAs) who wish to participate was published in early December 1999. School districts throughout the country have expressed interest in participating in the pilot project demonstration. A total of 386 school districts from 43 States submitted applications. Selection of the six school districts to participate in the pilot projects will occur in early Spring 2000. These districts will be selected to be geographically dispersed, with a blend of urban and rural areas, and consideration given to socioeconomic conditions.

In addition, the process of selecting an evaluation contractor to collect and analyze data and produce a final report is underway. The request for proposals (RFP) for the evaluation of the pilot projects was mailed to over 60 potential offerors in February 2000. Proposals were submitted to FNS at the end of March; we expect to make a final selection of the evaluation contractor by early July 2000.

NUTRITION EDUCATION AND TRAINING

Question. The fiscal year 2001 proposed budget has an increase of $2 million for Nutrition Education and Training. Was the study that was directed by the Committee used in forming this request?

Answer. The request in the President's fiscal year 2001 budget of $2 million in funding for the Nutrition Education and Training (NET) Program is designed to help States maintain the nutrition education infrastructures they have built up through NET over the past 20 years. While the Administration is exploring budget options for the future that would implement the broader nutrition education coordination strategies outlined in the report directed by Congress, it has requested NET funding for a number of years as a critical tool to support nutrition education efforts at the State level.

"The Promoting Healthy Eating: An Investment in the Future" report on nutrition education in Federal nutrition assistance programs, prepared by FNS pursuant to the Agriculture Appropriations Act for fiscal year 2000, identifies a number of important actions that would strengthen nutrition education within and across FNS programs. One of the actions identified was to restore the appropriation for NET. The report notes that "Over the last 10 years, the inconsistency of NET funding levels has complicated the coordination and long-term planning of nutrition education services. While Team Nutrition has made available many creative nutrition education resources and strategies for State and local government, implementation is limited. Without the infrastructure supported by NET, States face diminished capacities to conduct programs and to perform the vital leadership functions of assessment, policy development and quality assurance needed to promote implementation." (p. 17)

Nutrition education in the Child Nutrition Programs is designed to be supported through two complementary, integrated mechanisms—NET and Team Nutrition.

NET has provided the infrastructure required by State and local agencies to deliver the Team Nutrition materials at schools and child care settings participating in the Child Nutrition Programs. Without NET, delivery mechanism for either National Child Nutrition Initiatives like Team Nutrition or more localized approaches and projects.

ALTERNATIVE PROTEIN PRODUCTS

Question. On March 9, 2000, the Food and Nutrition Service issued a final rule that allows full replacement of meat, poultry, and seafood with Alternative Protein Products (APPs) such as soy and whey protein in the child nutrition programs.

Why did the agency change the name of Vegetable Protein Products (VPPs) to Alternate Protein Products? Does not this name change infer a substitution rather than an alternate choice of one protein for another? Is it the agency's intent that Alternate Protein Products replace rather than substitute meat, poultry, and seafood available in the child nutrition programs?

Answer. We changed the name of Vegetable Protein Products (VPPs) to Alternate Protein Products (APPs) to permit the use of protein products that are vegetable-based as well as products derived from animal sources such as whey-based protein products. In addition, we did not want to restrict the use of any alternate protein products that might be developed in the future that were not vegetable-based. We believe the term APPs, as opposed to the term VPP, most accurately reflects the fact that protein is available from a variety of sources, including vegetable-based sources. This name change was not intended to imply a replacement or a substitution, rather it was intended to provide schools with the flexibility of expanding their menus to offer children a meat alternative in addition to those currently available such as cheese, peanut butter and dry beans. It was our intention that Alternate Protein Products would expand the number of protein food items to satisfy the cultural, ethnic and special dietary needs of a diverse student body.

Question. Why does the agency not require blended meat products with more than 30 percent (VPPs) be clearly identified and labeled in a non-misleading way?

Answer. Food product labeling is regulated by both the Food Safety Inspection Service (FSIS) in USDA and by the Food and Drug Administration (FDA) in the Department of Health and Human Services. FSIS labeling regulations cover meat, poultry and egg products. FDA labeling requirements cover all other non-meat foods such as shellfish, fruit, milk and grain products. Current FSIS and FDA rules require food manufacturers to list, by common name, the ingredients used in the formulation of processed food products on the label for that product. Information about the source or type of protein will be clearly indicated in the ingredient listing, such as whey protein concentrate or hydrolyzed soy protein. However, according to FSIS and FDA regulations, percent labeling is voluntary.

With regard to the point of service menu labeling, we encourage program administrators to provide menus that accurately describe menu items served to students and their parents to assist them in making choices that meet their dietary demands. Clear point of service menu labeling can assist students and their parents in making menu selections consistent with their dietary needs.

We plan to work with representatives of the food industry, school food service directors, FSIS, FDA and other interested parties to develop voluntary labeling for both products and menus.

Question. On days when products composed entirely of VPPs are served to fit the needs of religious and ethnically diverse populations, is a meat entree required to be served also? If not, why?

Answer. On days when products composed entirely of APPs are served to meet the needs of religious and ethnically diverse populations, a meat entree is not required. However, we do believe that menu planners are likely to use APPs as a choice, not as the only entree available. This is consistent with the use of other meat alternates such as cheese, peanut butter and dry beans. Many factors go into menu planning for our programs—preferences of those consuming the meals, economics, availability of foods, and the need to meet program meal patterns as well as the nutrition standards, including the Dietary Guidelines for Americans' recommendation that people consume a variety of foods. We stress the importance of schools and institutions offering choices and believe this practice to be the general rule.

Given these factors, we believe that menu planners will provide choices and variety to the greatest extent possible and that they will use APPs appropriately and will take into account the varied dietary demands of all program participants.

Question. How is the agency ensuring that schools who use VPP/meat blended products are in a readily fortified form so that all products meet the same quality and consistency?

Answer. Manufacturers are required to document that the amount and quality of protein meets the levels specified in the final rule. Further, schools may specify that products are fortified. Finally, manufacturers may participate in the Child Nutrition (CN) labeling program. The CN labeling program has reviewed labels of products containing VPP since 1984 and will continue to do so for APP labels. The CN labeling program, which is widely used by the food manufacturers who market their products to the Child Nutrition Programs, provides information on how products are to be credited under the meal patterns established for each program.

Question. Why did the agency choose to not require fortification of these APPs when research shows that increased consumption of soy has been found to cause deficiency systems of calcium, magnesium, manganese, iron and zinc?

Answer. The Food and Nutrition Service is not aware of any scientific research showing that increased consumption of soy has led to the deficiencies enumerated. However, we are aware of current research indicating that eating a variety of foods will generally ensure adequate mineral intake. This research further suggests that unrestricted use of highly fortified APPs could actually result in excessive intakes of iron and zinc.

When the VPP regulations were first developed in 1983, we required that VPPs used in the school meals programs be fortified according to our specifications. When we recently revised the requirements on VPPs, we eliminated our special fortification requirement. The requirement had previously been eliminated for schools using the Nutrient Standard Menu Planning System. The new rule extends to all schools the option to purchase the same products available to commercial markets, as well as allowing the food industry to directly market their products to schools.

USDA's nutrition standards for school meals require that meals, averaged over a week, meet one-third of the Recommended Daily Allowance (RDA) for key nutrients, including iron. Schools may continue to purchase fortified products if they are needed to ensure menus meet the nutrition standards. We believe the decision to purchase fortified products should rest with the local school, based on the nutrient content of other menu items. We believe that the food industry is in the best position to determine if and to what extent APPs should be fortified based on available research and the needs and preferences of consumers.

STUDIES AND REPORTS

Question. FNS was directed to provide information to the committee relating to the effectiveness of adolescents and older children participating in the after-school program and provide views on the advisability of expanding the availability of free or reduced price meals under this authority to children under the age of 12. What is the status of this request?

Answer. The enactment of the William F. Goodling Child Nutrition Reauthorization Act of 1998 (Public Law 105–336), on October 31, 1998, expanded the availability of afterschool snack programs in a significant manner. In essence, it made them available to every child through age 18 in every public and nonprofit private primary and secondary school in the Nation. It also made them available to children through age 18 that attend afterschool programs operated by public and nonprofit private organizations in areas in which at least half of the children are eligible for free and reduced price meals. The Department initially proposed expansion of the afterschool snack program in its 1998 reauthorization proposals and fully supported the version of the provision enacted into law.

FNS shares the belief reflected in the Committee's directive that afterschool programs are an effective way of providing supervision to a vulnerable population and that the availability of nutrition benefits can be helpful in drawing children to these programs. As we gain more experience under the existing provisions of the law, we may be in a better position to consider whether further expansion of benefits and/or eligibility is warranted. We would certainly support an evaluation of the effectiveness of these programs after they have become more widely utilized.

FOOD SAFETY AND INSPECTION SERVICE

Question. What is the status of the agency's efforts to streamline regulations and eliminate carcass by carcass requirements in the HACCP Inspection environment?

Answer. FSIS has undertaken a comprehensive review of its regulations, policy notices, and policy memoranda for consistency with the HACCP-based inspection system. The review was announced in the December 29, 1995, Federal Register as an advance notice of proposed rulemaking (ANPR) entitled "FSIS Agenda for Change: Regulatory Review." In it, the Agency said that it would determine which regulatory procedures and requirements were still needed and which needed to be

modified, streamlined, or eliminated. The ANPR identified several categories of meat and poultry products inspection regulations that would be reviewed.

Published on the same day as the ANPR—December 29, 1995—were some of the rulemakings needed to streamline existing requirements and carry out the FSIS food safety strategy. These included a proposed rule to eliminate the FSIS prior-approval system for substances added to meat and poultry products (FDA issued a companion rule) and a final rule eliminating unnecessary duplication in the approval system for meat and poultry labels. Since the "Regulatory Review" ANPR was published, several "HACCP-consistent" rulemakings occurring over the past three years have streamlined requirements or replaced prescriptive requirements with performance standards. These include: issuing a final rule eliminating prior approval requirements for facilities and equipment, eliminating prior approval requirements for proprietary substances and non-food compounds used in meat and poultry establishments, issuing a final rule on performance standards for the production of certain meat and poultry products, issuing a final rule on revised sanitation requirements for meat and poultry establishments, and issuing a final rule revising regulations governing the refusal, suspension, or withdrawal of inspection services (including determinations of HACCP system inadequacies).

A number of dockets remain under development within the Agency with final publication expected during fiscal year 2000. These include regulations governing water retention in meat and poultry (proposed rule published September 11, 1998), chilling requirements for slaughtered poultry, processing and handling temperature requirements for meat and poultry, and the elimination of requirements for partial quality control programs (proposed rule published May 18, 1999).

FSIS has also completed action on a list of priority regulatory changes provided to the Agency by the industry following a May 20, 1998 hearing before the House Agriculture Subcommittee on Livestock, Dairy, and Poultry. The top five rulemakings requested by industry were those dealing with:

—Procedures for industry appeals of FSIS decisions and rules of practice for proceedings under the Federal Meat Inspection Act (FMIA) and the Poultry Products Inspection Act (PPIA). A final rule was published on November 29, 1999.

—Sanitation at official establishments. A final rule was published on October 20, 1999.

—Substances approved for use in the preparation of livestock and poultry products. FSIS simultaneously published the substances final rule and the final rule on red meat irradiation on December 23, 1999 so that future activity by FDA on irradiation—as well as other additive approvals—can be handled by FDA rulemaking without separate rulemaking by FSIS.

—The elimination of prior approval of proprietary substances and non-food compounds was accomplished in the Agency's final rule on revised sanitation requirements, which was published on October 20, 1999.

—Performance standards for certain cooked meat and poultry products were published in a final rule on January 6, 1999.

Lower-priority actions specified by industry include rulemakings on: (1) performance standards for perishable and shelf-stable ready-to-eat products (a proposed rule to be completed during fiscal year 2001); performance standards for perishable, non-ready-to-eat products (a proposed rule to be completed during fiscal year 2001); and, (3) the elimination of requirements for partial quality control programs (a final rule to be completed during fiscal year 2000).

The Federal Meat Inspection Act and the Poultry Products Inspection Act require post-mortem inspection of all carcasses by Federal inspectors. Absent any amendment of these Acts, carcass-by-carcass inspection remains a requirement of the Federal meat and poultry inspection program. However, in a case recently brought before a District Court, it was ruled that the Secretary of Agriculture has the discretion to decide that the inspection of each carcass need not be "organoleptic." The implications of this decision may lead to further regulatory streamlining.

Question. The budget request includes new language which authorizes the Secretary to transfer funds to FSIS to cover unbudgeted expenses in the event of a food safety emergency. Why is the Department's existing reprogramming authority not adequate in this case? Please provide a history of all occurrences of food safety emergencies in which the funds available to FSIS were insufficient to meet needs arising from the emergency.

Answer. New appropriations language authorizing funding transfers is included in the budget request since the Secretary's previous authority to transfer funds between Agencies has expired. Two types of significant events would warrant use of the transfer authority: (1) a costly nationwide recall involving large amounts of product that would constrain the Agency's ability to fund its other food safety efforts; and (2) massive outbreaks of foodborne illness, such as that which might be

the result of a bioterrorist action, which overwhelm the Agency's ability, given existing resources, to protect public health. Funds transferred in these situations would cover the cost of emergency personnel deployments, laboratory analysis, and inspector recruitment and hiring.

During a bioterrorist event, FSIS would assume the lead in coordinating the local, State, and federal authorities that comprise the Foodborne Outbreak Response Coordination Group (FORCG). Proper execution of this role would require dedicated manpower and a state-of-the-art communications capability. Additional personnel, travel, and equipment would also be needed to conduct on-site investigations in the "zone of contamination," as well as trace backs of many more implicated lots of product than in a usual investigation when only 1 or 2 products are implicated. Emergency deployment of personnel and supporting resources would require emergency funding so as not to divert resources from core food safety activities.

FSIS has in the past responded to food safety emergencies as they arise, however, the pace of the Agency's response is hampered by the need to first assess where within the Agency funds might be available to cover emergency personnel redeployments or increased laboratory costs as these emergencies arise. A large scale, nationwide, recall of product can result in direct costs to FSIS of over $300,000 in a brief period of time. It is estimated that FSIS could expend close to $200,000 for travel by public health and investigative staff and laboratory costs in the event of an act of bioterrorism in a major metropolitan area. Food safety emergencies late in a fiscal year are especially difficult since flexibility is limited when most funds are already obligated. In 1997, the costs related to a massive recall of ground beef produced in Nebraska caused the Agency to impose restrictions on travel by both support staff and processing inspectors, many of whom have patrol assignments visiting several establishments on a daily basis. The cost of this recall of ground beef was among a number of factors contributing to the Agency's fiscal year 1997 Anti-Deficiency Act violations. Other high-priority activities of the Agency must be postponed or cancelled as funds originally budgeted to support them are redirected to deal with emergency situations. For example, as a result of the 1999 outbreak of listeriosis in ready-to-eat hot dogs and lunchmeat products, FSIS was unable to provide training for new Epidemiology Officers to coordinate emergency response activities at the State and local level. Other examples of postponed, high priority activities include inspector recruitment efforts and HACCP implementation programs, such as the HIMP Models project.

The following is a listing of all product recalls and examples of food safety emergencies handled by FSIS over the previous five years:

EXAMPLES OF FOOD SAFETY EMERGENCIES

YEAR	PRODUCT	PROBLEM TYPE	LOCATION
2000	BONELESS BEEF	POSSIBLE PRODUCT TAMPERING (SYRINGE)	GENESSEO, IL
1999	BEEF CARCASSES	ALLEGED PRODUCT TAMPERING (INVOLVING CONTAMINATION WITH HIV TAINTED BLOOD).	MILWAUKEE, WI
1999	PORK DUMPLINGS	ILLEGALLY IMPORTED PORK DUMPLINGS FROM KOREA	COLUMBIA, MD
1999	BEEF CARCASSES	PRODUCT ADULTERATED WITH E. COLI 0157:H57	COLUMBUS, NE
1999	BEEF CARCASSES	INVESTGATION OF ALLEGED UNSANITARY PRACTICES AND ADULTERATED PRODUCT.	WALLULA, WA
1999	BEEF CARCASSES	CUSTOM VIOLATION, PRODUCT ADULTERATED WITH E–COLI 0157:H7.	HARRSON, AR
1999	BEEF CARCASSES	ALLEGED DES FINDINGS IN SWITZERLAND	CHICAGO, IL
1999	CHICKEN BREASTS	METAL CONTAMINATION IN CHICKEN BREASTS	ROME, GA
1999	HOT DOGS	HOT DOGS ADULTERATED WITH LISTERIA	MADISON, FL
1999	BEEF CARCASSES	E–COLI 0157:H57 OUTBREAK ON BEEF CARCASSES	VARIOUS STATES
1998	HOT DOGS	LISTERIA INVESTIGATION	ZEELAND, MI
1998	HOT DOGS	HOT DOGS ADULTERATED WITH LISTERIA	FOREST CITY, AR
1998	BEEF	SPOILAGE IN BEEF PRODUCTS	OCALA, FL
1997	POULTRY	SPOILAGE IN POULTRY PRODUCTS	ROGERS, AR
1997	MEAT AND POULTRY	DIOXIN CONTAMINATION	NATIONWIDE
1997	GROUND BEEF	E–COLI 0157:H57 OUTBREAK IN GROUND BEEF PATTIES/BURGERS.	NATIONWIDE
1996	MEAT AND POULTRY	RODENT DEFILED PRODUCTS RECEIVED FROM OTHER COUNTRIES.	TAMUNING, GUAM
1996	MEAT AND POULTRY	SPOILAGE IN MEAT AND POULTRY PRODUCTS	TROY, FL

Question. Please describe the arrangement under which the Agricultural Marketing Service performs egg safety activities through contract or cooperative agreement for FSIS, including the dollar amount of such agreements.

Answer. FSIS has a cooperative agreement with the Agricultural Marketing Service (AMS) to cross-utilize AMS graders to perform routine egg product inspection and other related services. Included in the agreement is a provision that FSIS will provide egg products inspectors to perform routine egg grading and other service to AMS. The estimated amount of reimbursements provided to each agency is $130,000 for fiscal year 2000. These agreements will be proposed for modification under the new Egg Safety Action Plan.

Question. Please provide an update on the FAIM program, including funds obligated to date and projected needs in future years.

Answer. Nationwide FAIM implementation for Federal inspectors is scheduled to be completed over a five-year period. Implementation started in fiscal year 1996 and is on schedule to be completed at the end of fiscal year 2000. Although FAIM implementation will be completed on schedule by the end of fiscal year 2000, in fiscal year 2001 and future years, funding will be required to (a) replenish obsolete and depreciated equipment/software; (b) support a user population of 5,500 inspectors with telecommunications, maintenance, technical support, and supplies; and (c) develop and deploy new software applications as the system evolves to meet new inspection requirements. A table of actual and estimated obligations is provided.

[The information follows:]

Field Automation and Information Management

[In thousands of dollars]

Fiscal year	*Expenditures*
1996	7,230
1997	9,485
1998	8,023
1999	7,524
2000	8,893
2001	8,023

FSIS began an initiative to extend the FAIM project to the State inspection programs in fiscal year 1999 as a multi-year capital investment to assist States in meeting mandatory HACCP requirements. Under this initiative State inspectors receive identical equipment, software, training and technical support as FSIS inspectors. Completion of State FAIM implementation is dependent upon individual States obtaining the necessary matching funds. Fifteen States will have secured sufficient funding to complete FAIM implementation by the end of fiscal year 2000, and FSIS plans to work with the remaining 10 States in fiscal year 2001 and future years. The State FAIM project's costs are segregated from Federal FAIM as a separate budget activity with laboratory upgrades and HACCP training under Special Assistance for State Programs. In fiscal year 1999 $2.2 million was spent for State FAIM and it is estimated that $3.9 million and funds carried over will be spent in fiscal year 2000 and fiscal year 2001.

Question. The Senate report accompanying the fiscal year 2000 appropriations act urges the Secretary to provide at least $3,200,000 for Codex alimentarius activities for fiscal year 2000. Please provide the estimated level of Codex support provided for fiscal year 2000. Is the fiscal year 2001 request adequate to support the United States' participation in this organization?

Answer. The direct funding of the activities of the U.S. Codex Office is provided for in the budget of the Food Safety and Inspection Service under the Codex budget activity. Estimated direct Codex funding is $707,000 in fiscal year 2000 and funding of $2,039,000 is proposed in fiscal year 2001. FSIS also funds travel for the chairman of the Codex Alimentarius in the amount of $30,000 for fiscal years 2000 and 2001. Two former Foreign Agricultural Service (FAS) employees have been added to the Codex staff to work with the chairman. These amounts exclude spending by either other USDA agencies or other Departments in support of Codex activities such as the travel and personnel costs of the Agricultural Marketing Service (AMS), Foreign Agriculture Service (FAS), and U.S. Trade Representative, Commerce and State Department staff that are sent as delegates to meetings of Codex Committees. FAS also expends funds for programs of support to developing countries which indirectly advance U.S. Codex interests. Codex interests are served by Agricultural Attaches around the world in the handling of demarches to foreign capitals on specific Codex issues. Affixing firm dollar levels to these activities with respect to Codex is not practicable.

FSIS' fiscal year 2001 budget request is adequate to fund the Agency's activities supporting the United States' participation in the Codex Alimentarius Commission.

Question. Does the budget request assume enactment of legislation allowing interstate shipment of state inspected meat? If so, please provide a budget cross-walk that reflects fiscal year 2001 needs if this legislation is not enacted.

Answer. The fiscal year 2001 budget includes an initiative for comprehensive reviews of all State Inspection Programs, which is justified in part to prepare for enactment of legislation to permit interstate shipment of State inspected meat and poultry. Whether or not this legislation is enacted, FSIS will increase the frequency and intensity of its State reviews to ensure HACCP compliance. Currently, State reviews are staggered over a three-year period. State programs inspect many of the very small plants, which recently implemented HACCP in January 2000. FSIS worked closely with the very small plants to provide needed technical assistance, and comprehensive reviews in fiscal year 2001 will provide follow-up assistance to address and resolve any compliance issues that may arise in the first year of HACCP-based State inspection. Reviewing all State programs in the same year will enable FSIS to assist the States in preventing problems that may develop if reviews are delayed for two or three years.

Question. The budget request reflects $943,094 in fiscal year 1999 funds which lapse. Please explain why it was therefore necessary for this subcommittee to provide $8,000,000 above the fiscal year 2000 budget request for filling of inspector vacancies and recruitment of new inspectors.

Answer. The $943,094 in unobligated fiscal year 1999 funds which lapsed was intentionally held in reserve to cover unforeseen upward adjustments in obligations. This reserve is intended to guard against unintentional violation of the Anti-Deficiency Act, which occurred in fiscal year 1997 and fiscal year 1998, and to ensure sound fiscal management of the food safety program. This amount is far less than the standard recommended reserve of two percent of the Agency's budget.

Fiscal year 1999 unobligated funds which lapsed are only 11.8 percent of the amount provided in fiscal year 2000 for filling inspector vacancies and for the recruitment of new inspectors to meet estimated increases in industry demand for new services. Had FSIS obligated all $943,094 for hiring additional inspectors in fiscal year 1999, a significant increase in fiscal year 2000 inspection resources would still be needed.

NATURAL RESOURCES CONSERVATION SERVICE

FARM SAFETY NET INITIATIVE

Question. Assuming that the President's Farm Safety Initiative is not enacted into law, what increases in conservation technical assistance would be needed for fiscal year 2001?

Answer. Assuming that the President's Farm Safety Net Initiative is not enacted into law, an increase in Conservation Technical Assistance of $86 million over the fiscal year 2000 appropriated level is needed.

Question. What would the adjusted ceiling for staff be should the Farm Safety Initiative not be enacted into law in fiscal year 2001?

Answer. Should the Farm Safety Net Initiative not be enacted into law in fiscal year 2001, the adjusted staff year ceiling would be 11,344 based on the assumption of a technical assistance reimbursement level of $75 million for the Wetlands Reserve and the Conservation Reserve Programs.

WATERSHED LOAN PROGRAM SUBSIDY

Question. For fiscal year 2001 the President's budget request proposes $4.17 million in subsidy budget authority for a new $60 million loan program. How many projects would be funded by this amount of loan authority?

Answer. It is estimated that $60 million would address between 10 and 20 rehabilitation projects. This is difficult to answer definitively, since the scope and complexity of needed work varies significantly with each project.

Question. How will projects be chosen to receive loans for this work?

Answer. NRCS will develop a risk-based ranking system to score loan applicants which would take in to account the greatest human health and safety, as well as environmental concerns. The applicants' qualifications for a loan would also need to be factored into the priority process.

The rehabilitation program will be modeled after the Rural Utilities Service (RUS) Municipal Electric Loan Program, in terms of borrowers, defaults, interest, pre-payments, and loan characteristics.

FUNDS AVAILABLE FOR CRP AND WRP

Question. How much funding is available for technical assistance for CRP and WRP due to the limitation on the use of CCC funds? Does the President's proposed budget request require the passage of legislation to provide technical assistance for CRP and WRP at $75 million from CCC?

Answer. Fund transfers through the Commodity Credit Corporation (CCC) are limited by statute through the Section 11 cap. In fiscal year 2000, NRCS's portion of these funds was $10.74 million.

The President's budget proposes to increase the Conservation Reserve Program (CRP) acreage cap to 40 million acres and that the annual enrollment in the Wetlands Reserve Program (WRP) be set at 250,000 acres.

The Farm Service Agency (FSA) has estimated that the technical assistance needs in fiscal year 2001 would be $81,866,909 for NRCS and $4,593,883 for the Forest Service to implement the 40 million-acre CRP program. It would take $22.5 million to implement the WRP program as contained in the President's budget. Technical assistance funding for the two programs combined would equal $109.01 million.

If NRCS receives the same level of funding from CCC that it did in fiscal year 2000 ($10.74 million) we would experience a $93.62 million shortfall. Without removal of the CCC Section 11 cap, or some designated additional discretionary appropriations, NRCS would not be able to implement these programs in fiscal year 2001.

ADDITIONAL ASSISTANCE TO AMERICAN INDIANS AND ALASKA NATIVES

Question. How does the department plan to focus additional resources to assist American Indians and Alaska Natives regarding their conservation needs other than through the designation of $16 million of EQIP funds in fiscal year 2001?

Answer. If additional resources are allocated USDA will use them to do the following types of activities: Accelerated technical assistance through additional staff to support conservation planning and applications. Accelerated outreach with tribes regarding USDA programs and activities including field trials, field days, etc. Accelerated soil survey's of Native American lands.

Question. If there is no increase in EQIP funds will the Department still earmark these funds for assistance to American Indians and Alaska Natives?

Answer. The Department has earmarked $5 million (2.5 percent) in fiscal year 1997, $8.1 million (4.0 percent) in fiscal year 1998, and $8.7 million (5 percent) in fiscal year 1999 and fiscal year 2000 for EQIP activities on Native American and Alaskan Native lands. If there is no increase in the fiscal year 2001 EQIP budget, the Department will continue to earmark 5 percent of the EQIP allocation for Native American and Alaskan Native concerns.

OPERATION OF PLANT MATERIALS CENTERS

Question. The fiscal year 2001 proposed budget would continue the operation of the plant materials centers at the fiscal year 2000 level of $9.1 million. The explanatory notes state that the ongoing plant materials development would continue at a somewhat reduced rate. What materials development is ongoing and what would be at a "somewhat" reduced rate?

Answer. Level funding over the past several years has reduced our ability to perform studies on plant materials by approximately 12 percent. In fiscal year 1999, over 14,000 plant collections were being evaluated on 73,000 plots by the Centers and 22 new plants were released for commercial production. If funding continues at a level rate as it has for the last 4 years, outputs from the Centers will be reduced. There are 26 plant materials centers around the country that maintain an ongoing program to develop plant technology for such critical issues as buffer strips, invasive species problems, and habitat restoration with native species. Products from this work have made significant contributions to conservation programs like, WRP, WHIP, CRP and others. Plant centers will become more limited in their ability to undertake new studies and to develop new technology and/or plant releases.

RESCISSION OF FINANCIAL ASSISTANCE

Question. Why did a rescission of $7.8 million in financial assistance for Public Law 534 and Public Law 566 occur?

Answer. The Department opted to utilize its authority to rescind 15 percent of the financial assistance for Watershed and Flood Protection Operations as a means of complying with the omnibus budget bill while minimizing impact on technical assistance.

IMPACT OF GENERAL PROVISION SECTION 717

Question. How has the General Provision Section 717 of Public Law 106–78 affected this agency?

Answer. General Provision Section 717, Public Law 106–78 has had a positive impact on the agency by allowing NRCS to non-competitively enter into cooperative agreements with conservation partners under the Wetlands Reserve Program (WRP) to restore and protect America's wetlands.

EQIP NATIONAL PRIORITY AREAS

Question. In the fiscal year 1999 Senate Report 105–212 and in fiscal year 2000 Senate Report 106–80, the Committee directed the agency to provide adequate funding for two designated National priority area pilot projects. It is the Committee's understanding that no funds have been obligated for the Mississippi Delta National Priority Area Pilot Project. However, in fiscal year 2000 the Colorado Salinity Basin National Priority Area Pilot Project received "special emphasis" dollars amounting to $1.3 million. How has this discrepancy occurred?

Answer. In accordance with fiscal year 1999 Senate Report 105–212, the Department established two EQIP National Priority Areas; the Colorado River Basin Salinity Control Area and the Mississippi Delta Area. The Mississippi Delta National Priority Area received $1.3 million in both fiscal years 1999 and 2000.

STUDIES AND REPORTS

Question. The Committee directed the NRCS to provide the committee with a detailed analysis of the aging water systems for flood control structures and the hardship placed on the local conservation and flood control districts and to provide a comprehensive strategy for rehabilitation of these structures. The Committee has not received this analysis. What is the status of this analysis and strategy plan?

Answer. The report is in draft form. The final report will be available on or before May 1, 2000.

OFFICE OF THE CHIEF INFORMATION OFFICER

Question. What is USDA's fiscal year 2001 Information Technology (IT) budget?

Answer. According to the OMB Exhibit A–11 submitted in January 2000, the Department plans to spend approximately $1,316,100,000 on its fiscal year 2001 IT budget.

Question. What part of USDA's fiscal year 2001 budget is for new IT investments, such as acquisition of new technology?

Answer. Consistent with revised reporting guidance of the Office of Management and Budget, USDA includes funding for new IT investments in the category of Development/Modernization/Enhancement. The latest report submitted to OMB estimates that approximately 50 percent of USDA's information technology budget is dedicated to this category.

Question. How much of USDA's fiscal year 2001 IT budget represents costs for personnel, and what is the total number of FTE's that the fiscal year 2001 budget supports?

Answer. Approximately 23 percent of the budget is for salaries and benefits for government personnel who perform information technology related functions 51 percent or more of their time. This supported an estimated 4,964 FTE's as of August, 1999.

Question. How much of USDA's fiscal year 2001 IT budget is for contractor support services, and what did USDA spend for such services in fiscal year 1999/2000?

Answer. According to our August 1999 OMB report, USDA contractor support services will be approximately 19 percent of the budget for fiscal year 2001. This includes maintenance used in support of equipment, software or other services. Contract support services for fiscal year 1999 and fiscal year 2000 are as follows:

—Fiscal year 1999—$277,434,826

—Fiscal year 2000—$293,831,647

CAPITAL PLANNING AND INVESTMENT CONTROL (CPIC) PROCESS

Question. USDA's OCIO budget says that the CPIC program has established a process for the Department to select, manage, and evaluate the results for all major investments in information technology.

What were the major investments reviewed and approved for fiscal year 2001 by USDA's Executive Information Technology Investment Review Board as part of the CPIC process?

Answer. The major investments reviewed, and decisions, for those investments in the "Select" and "Control" phases are included in the following charts. [The information follows:]

RECOMMENDATIONS TO THE EITIRB REGARDING USDA MAJOR INFORMATION TECHNOLOGY INVESTMENTS FOR BUDGET YEAR 2001

	Rank (H,M,L)	Investment Decision
Select Phase:		
Employment Complaints Tracking System	High	Approve
Integrated Acquisition System (IAS)		Defer
Programs Funding Control System (PFCS)	High	Defer
REE Information System (REEIS)	Medium/High	Approve
Integrated Personnel System for the 21st Century (IPS 21)	High	Approve
Guaranteed Loan System (GLS)	High	Approve
Multi-Family Integrated System (MFIS)	High	Approve
Community and Utility Business System (CUBS)	High	Approve
USDA Telecommunications Enterprise Network	High	Defer
International Trade Data System (ITDS)	High	Approve
Entry, Processing, and Inquiry System (EPIC)/Personnel Office Desktop Solution/PODS.	Low	Disapprove
Combined Administrative Management System (CAMS)	High	Approve
Control Phase CORE Accounting System (CORE)	High	Continue
Project 615	High	Continue
Foundation Financial Information System (FFIS)	High	Continue
Shared Information Systems	High	Continue
Evaluate Phase:		
Processed Commodities Inventory Management System (PCIMS)	High	Continue
Integrated System Acquisition Project (ISAP)	High	Continue
Agency Financial Management System (AFMS)	High	Continue
Food Stamp Program Integrated Information System (FSPIIS)	High	Maintain
Integrated Personnel System (IPS)	Medium	Maintain
Field Automation and Information Management (FAIM)	High	Continue
Management Services Information System (MSIS)	Low	Terminate
Dedicated Loan Origination System (DLOS)	High	Continue

Question. Has the USDA established performance measures for each and every one of these IT investments? If so, what are they for each project. If not, why?

Answer. In accordance with the Department's CPIC process, each agency is required to establish performance measures for their respective information technology investments during the "select" phase of capital planning and investment control for fiscal year 2002. Agencies with projects in the "evaluate" phase will conduct post-implementation reviews to ensure that program missions are being met, and the performance measure accurately reflects contribution of the IT investment to the mission. As the CPIC process is now in its early stages within the Department, much of this is already being done. While USDA does not yet have performance measures for all of the IT systems listed above, the OCIO is working with each agency to develop mission and program related performance measures so that the CPIC process can be in full effect for the fiscal year 2002 budget process. Following are the performance measures for some of our major IT systems.

Research education and economics information system

Performance measures are to be developed through modeling user behavior, through an ongoing Quality Assurance program to assess system performance, and through establishing user feedback mechanisms as part of system usage. Performance Indicators include:

—Number of accesses per user profile
—Number of reports requested per user access
—Number of returns to access system

—Number of changed user profiles
—Quantifiable responses on Quality Assurance questionnaire
—Character of responses on non-system surveys

Food safety and inspection service—field automation and information management (FAIM) project

Performance Goals for system implementation include:
—Number of FSIS inspectors trained in FAIM each year through fiscal year 2005
—Number of FSIS computers deployed to the field each year though fiscal year 2005

Forest service project 615—IT infrastructure

The Forest Service (FS) is using the "Hardware Management System—HMS—to track Project 615 IBM acquisitions, including financial and inventory information and to develop replacement plans. The HMS tool provides guidance on replacement planning using market analysis and utilizing the output from Information Technology Investment Portfolio System—I–TIPs. The Agency's Project 615 implementation team is responsible for monitoring the achievement of Project 615 goals and outcomes. These goals and outcomes are defined in the FS GPRA Performance Plan. Performance Measures include:
—Cost per seat. Anticipated computer system capital investment level for hardware and software as currently planned is $1,600 per seat per year.
—To ensure that the IT infrastructure meets minimum performance characteristics, yet stays within investment guidelines, additional measures include disk space per seat, seat/server capacity utilization, expected versus actual seats, useful life remaining per unit equipment, and others.

Some example target measures would be:
—One gigabyte server-disk capacity per seat
—75–85 percent seat/server capacity utilization
—Actual versus expected seats of under 110 percent

Field units report on their measures on a regular basis, documenting reasons for any deviations from performance targets. Quarterly summaries are prepared with aggregated results that are used in future planning.

Implementation of the IBM System is critical to the successful accomplishment of the Forest Service mission. Listed below are key milestones and measures of success for this project.

Date	Milestone	Measure of Success	Status
October 1998	Office automation on 615	95 percent of Data General office automation closed and transferred to 615.	Completed
February 1999	Full 615 implementation	All offices equipped and operating with initial 615 systems for all employees.	Completed
March 1999	All offices functional on 615	All mission work accomplished on 615 with initial system.	Completed
May 1999	Data General phased out	Existing systems transferred from Data General computers and made Y2K compliant on 615.	Completed
October 1999	New accounting system	FFIS implemented service wide	Completed
September 1999	New Office Automation (O/A) System	Microsoft Office 2000 installed on desktops.	Completed
January 2000	GIS project work standardized	Existing GIS project work converted to core data standards.	Completed
June 2000	Mainstream E-mail messaging system (Lotus Notes) implemented.	All employees using the new messaging system integrated with the Office Automation system.	On Schedule
March 2001	GIS project work standardized	90 percent of major information systems operating with corporate standards and support.	Plans in Progress
June 2001	Enterprise Management standardized	All server and desktops installed with and managed by enterprise systems management software.	Plans in Progress

Rural development—guaranteed loan system (GLS)

Description of performance-based system:

Rural Development and FSA are shifting from primarily making direct loans to making a significant number of guaranteed loans as part of their overall role in providing agricultural credit and rural development assistance. To achieve this objec-

tive, the automated system needs to support the full range of guaranteed loan business activities in order to:

—Improve availability, accuracy, and timeliness of management information;
—Provide servicing offices with capability to maintain and manage their guaranteed loan portfolio;
—Improve the guaranteed program to be more attractive to lenders;
—Provide the capability to effectively monitor lender performance;
—Provide information required by congress, OMB, General Accounting Office, Office of Inspector General, and United States Department of Agriculture.
—Fully comply with the Government-wide guidelines documented in the Joint Financial Management Improvement Program (JFMIP) Guaranteed Loan System Requirements.

Performance Goals:

—Achieve annual savings of $250,000 through reduced postage and mailing costs, and a significant reduction in paper costs facilitated by the use of electronic commerce.
—Achieve reduction in non-performing loans through more timely and accurate status information. The new system will allow the Agency to monitor the status of guaranteed loans more closely. This will allow the Agency to determine which loans are experiencing problems and implement corrective action sooner. This will result in a 5 percent reduction in non-performing loans.

Rural development—dedicated loan origination and servicing system (DLOS)

DLOS is considered an earned value system in that it identifies baseline costs, schedules, and performance goals. The DLOS system was installed in the Production environment and the Centralized Servicing Center was established in fiscal year 1997 to provide the loan origination and servicing functions for RHS Single Family Housing borrowers. Performance indicators used to gauge the success of DLOS are monitored on an ongoing basis through management reviews and tracking of key factors including:

—Borrower Delinquency Rates
—Delinquent Loan Accelerations
—Average Response Time in Call Center
—Average Response Time in Field Support
—Customer Service Call Abandon Rates in Call Center
—Collections Call Abandon Rate
—Accuracy of New Loan Set-ups
—Collections Through Treasury Offset Program
—Escrowing of Portfolio

Rural development—multi-family integrated system (MFIS)

MFIS is considered an earned value system in that it identifies baseline costs, schedules, and performance goals. The MFIS system will be installed in the Production environment in fiscal year 2000. Performance indicators that will be used to gauge the success of MFIS and will be monitored on an ongoing basis through management reviews and tracking of key factors include:

—Increase the Number of Supervisory Activities Performed
—Reduce Classification "D" Projects (Not in Compliance) to Below Current Levels
—Reduce Delinquency Rates to Below Current Levels
—Reduce the Average Time to Correct Project Findings
—Decrease the Average Time Required to Review and Approve Project Budgets
—Decrease the Average Time Required to Perform Quarterly and Year-end Analysis.

Question. How is USDA tracking the performance of all of its IT investments—in terms of improvements to the business it is supporting?

Answer. The Department has taken great strides to fully institute its Capital Planning and Investment Control (CPIC) Process. Per the Office of Management and Budget passback language, the Department has forwarded the CPIC guide to OMB in March 2000. Integral to the CPIC is the evaluation of the contribution of an IT investment to the agency's mission as part of the selection process, monitoring of achievement of the investment's performance goals as part of the control process; and performance evaluation of each information technology system. OCIO is working with Departmental executives to increase the attention to the "control" aspect of capital planning during the fiscal year 2002 budget development process. OCIO, in conjunction with agency executives, will review performance of major investments against established goals, and is working on an individual basis with each agency to ensure that CPIC is applied effectively. Eight information technology systems are currently undergoing a post-implementation review based on the USDA CPIC guid-

ance, to determine how well those systems met performance goals and contributed to agency mission.

The Department has a senior level advisory group that reviews the major information technology—IT—investments in an effort to make recommendations aligned with the Department's missions and to maximize efficient and effective utilization of USDA's IT resources.

For fiscal year 2001, the senior level advisory group's review encompassed IT investments designated major because of their size, scope, or strategic impact to the Department. The review criteria included impact on mission, risk, return on investment for new investments, along with performance criteria—cost, schedule, and performance goals—for systems that are underway. Additionally, IT investments in the Evaluate phase were evaluated against Post-Implementation-Review criteria to determine how the systems were performing against the original design criteria. The senior level advisors reviewed and scored the investments based on supporting documentation prepared by the agencies and met early in December to develop a consensus on investment scores and priorities. The review process took approximately two weeks. Their report was reviewed and voted upon by the Executive Technology Investment Review Board—EITIRB—prior to being forwarded to the Office of Management and Budget.

Question. How does the CPIC process address managing and evaluating the investment for IT personnel, which are IT-related investments, to ensure that investments in personnel are still cost-effective as opposed to other options (i.e., outsourcing)?

Answer. All costs for IT investments are evaluated through USDA's CPIC process. Prior to proposing investments to the Department, agencies evaluate alternatives for accomplishing IT investments, which may include using government personnel versus outsourcing. Investment proposals specifically identify the FTE's associated with initiatives and as directed by OMB Circular A–11 include the personnel costs for project management and direct support. In addition, the CPIC investment proposal process allows the EITIRB to evaluate the business case presented to justify new investments and their reliance on Federal support verses outsourcing as a delivery method.

Question. How are investments for contractor support addressed in the CPIC process to ensure that the investment in contractor support is cost-effective?

Answer. As stated above, all costs for IT investments are evaluated through USDA's CPIC process. Prior to proposing investments to the Department, agencies evaluate alternatives for accomplishing IT investments, which may include using government personnel versus outsourcing. Investment proposals specifically identify the FTE's associated with initiatives and as directed by OMB Circular A–11 include the personnel costs for project management and direct support. In addition, the CPIC investment proposal process allows the EITIRB to evaluate the business case presented to justify new investments and their reliance on Federal support verses outsourcing as a delivery method. Reliance on contractor support to implement IT initiatives is often a result of a need for specific skills that cannot be obtained through the permanent workforce or is the result of a need for temporary support that is most efficiently provided through contractors.

IT MORATORIUM

Question. The budget mentions that a supplemental activity to the CPIC is the IT acquisition moratorium. It says that under the moratorium, significant investments (over $25,000) are reviewed. It also says that during 1999, 249 IT acquisition moratorium waivers were approved. What was the total number of waivers requested in 1999?

Answer. During fiscal year 1999 the OCIO processed 249 waiver requests for approximately $414.5 million.

Question. What was the total value of the 249 waivers approved?

Answer. During fiscal year 1999, 241 waivers were fully approved and two were partially approved to expend $386.6 million in fiscal year 1999, 2000, and 2001 funds. Also,two waivers were fully denied and the requesting agency or OCIO canceled four.

Question. If the OCIO approves such a large number of waivers, then does the Department really have an IT acquisition moratorium in place? In that regard, what was the total number and value of waivers denied in 1999?

Answer. USDA's goal in instituting the IT acquisition moratorium was not to stop agencies from purchasing IT, but to ensure that they followed Departmental guidance on the Year 2000 problem and as much as possible, an IT architectural blueprint. Many approved waivers contained conditions or stipulations that the agencies

must share IT or coordinate the purchases with other agencies. USDA's use of frequent, good communications with the Under and Assistant Secretaries, Agency Heads, and Agency Chief Information Officers has resulted in agencies understanding and complying with the changing direction of the moratorium. This was especially evident when Secretary Glickman's mandate that USDA direct more attention and funds to the Year 2000 conversion effort was so successful. We have also used the moratorium to move USDA towards a comprehensive capital planning process that is recognized by OMB as being among the leaders of the Federal Government. During fiscal year 1999, two waivers were fully denied and the requesting agency or OCIO canceled four. Denied amounts totaled $27.9 million in fiscal year 1999 and 2000 funds.

INFORMATION SYSTEMS ARCHITECTURE

Question. USDA's OCIO budget states that the Department's February 1997 version of its information systems technical architecture is being expanded and updated. If USDA does not continuously update its architecture, how can the Department then be positioned to use it as an effective tool to ensure it is cost-effectively meeting business needs as opposed to just putting a document on a shelf.

Question. What processes are USDA's OCIO establishing to ensure that the architecture is continuously updated?

Answer. The updated and expanded version of the architecture outlines USDA's architecture program, its future architecture direction, and its current baseline. The major components of the architecture program are principles and standards, current architecture, the architecture repository/database, future architecture, and the associated governance and transformation processes required to achieve the future architecture direction. We view the architecture on a continuum. The architecture is never completed but instead is managed using processes that respond to continuously changing programmatic requirements and technology advancements. USDA's approach to architecture aligns with the Federal Architecture Framework model as endorsed by the Federal CIO Council.

Question. What steps will USDA take to incorporate the new business models and associated processes and technologies evolving from the e-commerce revolution?

Answer. USDA agencies are beginning to develop electronic-based services and program delivery mechanisms and USDA has already recognized the need to incorporate E-models into its architecture efforts. USDA's future architecture direction has an "E" focus. For both this year's and last year's IT planning cycles, USDA IT investments were evaluated based on whether or not electronic program delivery had been considered. Several agencies have already implemented systems or are in the process of designing them. While agencies recognize the need to change their business models to an electronic government model, much work remains to be done.

E-COMMERCE

Question. USDA's OCIO budget includes about $1.3 million for contractor support and operating expenses to support E-government/commerce at the Department. What are the overall planned expenditures in fiscal year 2001 across all USDA's agencies and offices on E-government/commerce initiatives (broken out by agency)?

Answer. The Department does not currently track expenditures for E-government/commerce initiatives apart from overall IT or other related spending, such as training. Our fiscal year 2002 budget requests funding to develop a corporate strategy and approach to E-government/commerce. Among other things, this would provide the Department the capability to develop common definitions and metrics to assess and measure E-government/commerce activities; and would include an inventory of existing and planned initiatives, including expenditures, across USDA.

Question. What steps has the Department taken to ensure that there is a common, consistent USDA approach to E-government/commerce initiatives across the Department so that there is not duplication of effort?

Answer. We fully recognize and appreciate the need to ensure that there is a common, consistent approach to E-government/commerce at the Department. The host of web sites run by USDA agencies are supported by scores of servers, and other technology, which is decentralized and often redundant across agencies and even at the state and regional level.

The Department must act quickly and decisively to develop a corporate strategy for E-government to ensure that we maximize the resources that are being devoted to this effort with an emphasis on sharing lessons and leveraging solutions across USDA. To that end, the Department is in the process of establishing an E-government working group, under the direction of the Deputy CIO, with representation from all agencies and mission areas with E-government initiatives. The working

group represents an important step towards establishing the common look to E-government that we desire.

Most importantly, the funding we have requested in our fiscal year 2001 budget will enable the Department to develop a coordinated strategy and ensure that cross-cutting issues which affect all USDA customers and employees are identified, prioritized and addressed as agencies pursue E-government initiatives. Our goals include developing a Department-wide strategy improving coordination, and developing standardized approaches to cross-cutting issues. These include data warehousing, data mining, electronic mail and other electronic directories, online forms, and privacy protection. Training our IT staff to integrate web-based applications into the Department's technical infrastructure is another integral component.

Question. What specific programs and benefits (1) are already being delivered via the Internet, or (2) are expected to be delivered via the Internet in fiscal year 2001. (List programs/benefits for each agency/office).

Answer. USDA agencies have a number of E-government related initiatives in progress, with more applications being developed regularly. The Department has not yet ascertained which specific applications are being planned for fiscal year 2001. However, with a few exceptions, most USDA agencies are at the initial stage of E-government where agencies are using the Internet to provide the public electronic access to information about the Department's programs and services, market information, as well as breaking news. For example:

Today, via the Internet, farmers and agricultural producers can electronically view public information on USDA programs such as crop and production reports. They can download and fill-in application forms for temporary programs such as the Small Hog Operation Program, the Dairy Market Loss Assistance Program, Crop Disaster Program, the Livestock Assistance Program, and several forms for the Farm Service Agency's farm loan programs.

The Natural Resources Conservation Service's—NRCS—PLANTS website provides a single source of standardized information about plants in the US and its territories. The database includes all sorts of information about plants, and is accessed by over 57,000 users per month.

The Economics Research Service publishes online research reports, periodicals, new releases, issue papers, and other information on all aspects of the domestic and international farm and agricultural economy. Agricultural Outlook reports, state fact sheets, and Agricultural Trade data bases are all available to anyone with access to the Internet.

The Rural Development agencies provide data over their web sites about all of their housing, infrastructure and job creating programs, as well as links to other sites of interest to the rural development community. Almost a million citizens viewed these web sites in 1999.

Visitors to the web site of the Risk Management Agency—RMA, which manages Federal crop insurance, can access and search county actuarial tables online, by State or crop. There is also an education site to assist producers and agribusiness in understanding their risk exposure and responsibility.

Another example is USDA's Forest Service—FS, which is participating in a one-stop recreation site with seven other Federal agencies. The site—www.recreation.gov—is part of the Vice-President's Access America initiative that was established to provide a single source of information about recreation on federal lands. Citizens can now reserve campground sites via the Internet. FS is also piloting a clearinghouse on the Internet for distributing information related to Forest Plan updates. The clearinghouse application allows the public to view information generated from the FS' Geographical Information System (GIS) and relate their comments on the plan to specific locations on a GIS map.

The Agricultural Research Service—ARS—web sites provide Internet access to extensive resources for scientists, regulators, farmers and many other customers. ARS laboratories use the Internet to provide information about their missions, research programs, results, and analyses. Technical and semi-technical publications produced in-house are published electronically; and customers may now subscribe to the Agricultural Research magazine online. Some 1,500 stakeholders, including media outlets, commodity groups, educators, and others, have also signed up for a daily E-mail feed. An interactive web site for middle school students, "Science for Kids," showcases ARS research results in ways that demonstrate the importance of agriculture in people's everyday lives and help students understand and appreciate the benefits of agricultural research.

The National Agricultural Library—NAL—is also providing increased electronic access to its unparalleled storehouse of agriculture related information and to improve the services it provides. NAL maintains the Agriculture Online Access bibliographic database of more than 3 million citations to the literature of agriculture and

related physical and social science subjects. NAL is also working in partnership with land-grant universities and other institutions through the establishment of the Agriculture Network Information Center—AGNIC—that serves as a major focal point on the Internet for access to quality information, subject area experts, and other resources. Funding is needed for new technology to improve search systems that operate across multiple institutions and to expand the scope of these initiatives.

The Department's main "home page—www.usda.gov—has also recently been redesigned to provide visitors with information about critical Departmental issues and Secretarial initiatives, regardless of which agency or mission area they relate to. The homepage provides links to pages developed and maintained by USDA's agencies. Our E-government vision includes eventually providing customers a "portal" or main web site, similar to major private sector sites such as Yahoo.com, that will be organized by subjects, so that visitors can find the information they want regardless of which agencies might possess it.

The Internet now makes it possible for the Department to provide real time information to the public about issues critical to their health and welfare. USDA's broadcast facilities, managed by the Office of Communications, provide a wealth of information to farmers daily through radio and satellite transmissions. Daily and weekly radio and news reports supply information about sign ups for farm programs; announce results of agricultural research; broadcast major policy changes; provide consumer news on food prices, nutrition, conservation, and the environment; and report vital economic news about crop prices and supplies, as well as crop weather conditions. However, the broadcast industry is moving quickly to digital standards that our existing equipment cannot meet. Our goal is to use the Internet to allow farmers, constituency groups, and the public to take full advantage of the programs, services, and data at USDA. This means that we must invest in the kinds of high-speed computers and telecommunications equipment necessary to handle the voluminous files required to electronically disseminate video, photographs, radio, and television messages in digital formats.

Increasingly, USDA agencies are working with State and local partners, and other agencies, to develop applications that utilize the Internet to actually conduct E-business. Agencies are trying to meet the demands of their customers by moving beyond simply providing the public access to information via the Internet to implementing more advanced applications to conduct secure transactions online. Processes, from applying for grants to procuring products and services, are being web-enabled. For example:

The Food and Nutrition Service—FNS—which is in the forefront of E-government through its highly successful Electronic Benefits Transfer—EBT—initiative, has plans to use the Internet to share information with its state partners; provide authorized users online access to information to help reduce fraud; and collect information directly from retailers who support the WIC program. FNS has also begun planning for an extranet environment that will allow entry to only users who have direct business with FNS. FNS currently uses an Electronic Data Interchange—EDI—system in its food distribution division that enables customers to process some 80 percent of the orders for the school lunch program. Of course, all of these applications are being developed with security and privacy as key components. FNS has also recently developed and deployed an online Healthy Eating Index (HEI), which allows citizens to input their diets and receive instant analysis of their nutritional strengths and weaknesses.

Cooperative States Research and Extension Service—CSREES is a participant in the Inter-Agency Electronic Grants Committee in the development of standard processes, standard Federal data sets, and the design of a "portal" to Federal grants activities known as the Federal Commons. The portal will allow citizens and institutions to track the status of federal grant proposals online throughout the entire grants life cycle. When it is completed, constituents will be able to apply for grants electronically as well as receive award notices online. This kind of interagency initiative is key to government's ability to provide citizens with the kind of common interfaces to government they are demanding; however these projects are expensive and they depend upon means being found to support interagency funding that have yet to be developed. CSREES has actually been using electronic mail to send acknowledgement of proposal receipts for the past year, reducing turn around time by weeks from the normal paper intensive process. However, much more work must be done before citizens can actually submit their proposals online.

The Farm Services Agency has already implemented an award winning E-business application—the Electronic Bid Entry System—that automates the bid entry portion of USDA's procurement of commodities that are exported under foreign food aid programs. With this system, bids for some $1.2 billion in food for farm aid can be opened and contracts awarded in two hours. Plus, up to the minute market prices

improve competition, so that more people can be fed for each dollar in aid. More recently, FSA has developed a system which allows steamship lines to use the Internet to input bid data. Yet another E-business application allows FSA to issue payment statements to vendors via E-mail, with estimated savings to vendors of almost $200,000 per year as a result.

In 1997, USDA's Agricultural Marketing Service—AMS—became the first Federal agency to actually use the Internet in the rule-making process by posting proposed rules for the National Organic Program, which sets standards for organic produce, for comment on its web site. As a result, the agency reported receiving over five times the usual number of comments on the proposed rule. AMS is now focused on educating employees and managers about potential E-business opportunities; establishing a viable Internet infrastructure which is 80 percent complete; providing adequate security for that infrastructure; training staff; and providing training to secure expert web building support to all AMS users.

Rural Development—RD—agencies are developing web-based applications to allow more efficient operation of multi-family housing programs. Over 10,000 changes to tenant certifications, such as changes in income, etc, are received each month from borrowers. RD plans to enable those borrowers to transmit this information electronically or to enter data directly via a web page. Borrower and lender changes for RD and FSA guaranteed programs are now accepted via Intranet, and all RD community program reporting is now available through the web.

The Animal and Plant Health Inspection Service—APHIS—just recently launched a new website that will allow customers to submit online applications to import fruits, vegetables, and animal products into the United States. APHIS' new website is designed to make the permit application process easier for our customers, and if it is as popular as can be expected, it will be expanded to include additional permit applications. Importers can access the site by going to APHIS' Home Page at www.aphis.usda.gov and clicking on Import Authorization System under hot issues.

Question. USDA's OCIO budget also states that web-enabling service deliver will demand a high-performance and reliable enterprise telecommunications network. It says that to meet these expectations in fiscal year 2001, the Department will expand its network to all major state offices and that significant contract support will be required to securely expand the enterprise telecommunications network. What will the cost be in fiscal year 2001 to expand the network and how many states are being considered when you say all major state offices?

Answer. Fiscal year 2001 reflects the Phase I implementation of our Universal Telecommunications Network that will be delivered to sixteen states where our major offices are located. Phase II will extend the Network to all fifty states. Phase I cost is projected at $4.5 million.

Question. What will be the recurring annual operational and support annual costs for the network to the states, and what are estimated annual benefits?

Answer. Our annual operational and suppport costs are projected to grow from a current $1.6 million to $6.1 million based on program delivery requirements and Electronic Government initiatives. The recurring annual costs are expected to increase as the program areas increase their dependence on information technology to support their missions. However the unit cost will decrease. For example, in the last two years USDA has increased its Internet capacity by seven-fold and increased network reliability while the costs to support these activities increased 3 fold. Each dollar bought more than 2.3 times than it previously bought.

Question. What alternatives' analysis has USDA completed to show that it will be more cost-effective to expand its network to states to deliver web-enabling service delivery from such a large number of sites as opposed to delivery of web-based service from just one or two sites?

Answer. USDA's initial architectural design is based on analysis done as part of the Service Center Initiative's LAN/WAN/Voice project. The understanding of program direction and future requirements is essential to effective network design. Network requirements are being collected from the program community so that the initial architecture can be independently verified and validated.

COMMON COMPUTING ENVIRONMENT/SERVICE CENTER MODERNIZATION

Question. Describe in detail how USDA will provide one-stop service to its customers in all 3,000 of its service center sites, especially since only about 700 sites will house all three service center agencies. Also describe the mission critical processes for implementing such a concept and the estimated milestones, time frames and resources required.

Answer. About 700 of our 2,600 Service Centers will have all three agencies present. About 1,700 of the remaining 1,900 will have at least two agencies present,

primarily the Natural Resources Conservation Service (NRCS) and the Farm Service Agency (FSA). Around 200 will be occupied by only one agency on a full-time basis.

Our one-stop vision essentially means that service will be available anywhere, anytime and in a seamless manner. For customers with Internet access, this may mean that they may rarely or even never go to a physical office location at all. They will be able to electronically "shop" at the Service Center via the Internet to obtain information, set up appointments at their farm site, file program applications, and change or update information in the files.

Customers who do not have access to the Internet or need "hands on" assistance, will be able to go to any one of the 2,600 Service Centers and obtain some level of service for all of the programs offered by the county-based agencies. That level of service will be different depending on which agencies have staff at that particular center and the progress in deploying a fully functional CCE. The following describes one-stop service for each of these office scenarios assuming that the CCE technology infrastructure is in place.

All three agencies present

This would represent the optimum level of service. Each agency representative would be able to describe, in general, the program services available from the other two agencies, provide written material and introduce the customer to other agency counterparts if the customer was interested in other services. They would also be able to check the status of a pending item, such as a loan application, and provide that information to the customers. If needed, they could set up appointments with the counterparts or take information, such as a new telephone number, and put that information into a shared database.

One or two agencies present

Same type of service described above except that for services for an agency not on site, the Service Center employees will depend upon technology to bridge from providing general information, such as application forms, to personal service on a particular program. For example, if the customer is interested in a service offered by Rural Development—RD, but there is no RD employee on site, an NRCS employee can provide general information and assistance. But, since their expertise is conservation and not lending, they would not be able to pre-qualify or process a loan application. With the CCE technology in place, however, they would be able to assist the customer in connecting to the nearest RD office through a user friendly KIOSK or computer terminal. Through an automated question/answer process, the customer could pre-qualify for a loan, submit a loan application, and schedule an appointment with the RD loan officer either at his or her base Service Center or at the NRCS only office. Another option would be to go on line directly using the KIOSK or computer terminal and a two-way video connection to discuss the loan application and needs with a remote RD loan officer.

In the above instance, the full one-stop service would be provided via the technological connection with some assistance from the NRCS employee to help the customer get started and be comfortable with the process.

In addition to the above examples, the one-stop concept also encompasses situations where a farmer may have parts of his or her farming operation in several counties or even crossing state lines. Currently, that individual has to visit each Service Center that services his or her dispersed operation. With CCE technology in place and the Geographic Information Systems that are a key part of that technology, the producer will be able to stop in only one of the Service Centers and sign up for programs or conduct other business covering the entire operation.

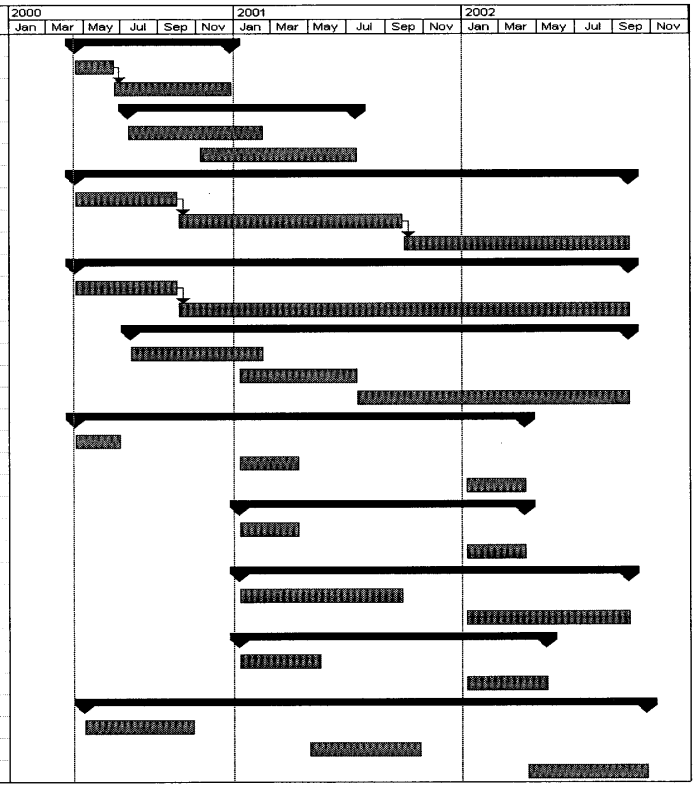
The CCE is the essential linchpin for achieving the one-stop vision outlined above. This common information system will allow information to be shared both within a Service Center and between Service Centers. The current stove pipe and out-of-date technology supporting the Service Center operations today do not allow for this mobility of data and customer service. This infrastructure barrier must be removed in order to provide the "anytime, anywhere" one-stop shopping service that is needed. Without the open state-of the art enabling technology provided by the CCE, one-stop service cannot be achieved.

With respect to major milestones, the CCE will be fully implemented at the end of fiscal year 2002, provided that adequate funding is provided for the capital investments necessary to acquire the key components at the specified times to meet that schedule. The implementation strategy identifies the key components of the CCE infrastructure and lays out their execution in a staged approach, providing immediate benefits and building capability to support reengineered business processes as they are implemented. These critical milestones for the implementation of the CCE are

described in the following project plan Implementation Schedule for CCE components:

[The information follows:]

ID	Task Name
1	**Implement Legacy System Connectivity Solution**
2	Technical Evaluation and Decision by USDA CIO
3	Implement Connectivity Solution
4	**Deploy Network Servers**
5	Acquire and Install Initial 500-600 Network Servers
6	Acquire and Install Remaining Network Servers
7	**Establish Application Servers**
8	Acquire and Deploy Remaining CAMS Servers
9	Acquire and Deploy Initial Application Servers
10	Acquire and Deploy Remaining Application Servers
11	**Establish Electronc Access for USDA Customers and Employees**
12	Acquire and Implement Electronic Access Hardware & Software
13	Maintain and Support Electronic Access Hardware & Software
14	**Deploy Workstation/Server Software**
15	Support Initial Network Servers w/ Software
16	Deploy Software w/ Remaining Servers
17	Maintain Software on Workstations & Servers
18	**Acquire and Deploy Enterprise GIS Software**
19	Negotiate and Make Initial Purchase
20	Purchase Next Increment of GIS Licenses & Maintenance
21	Purchase Remaining GIS Licenses & Maintenance
22	**Establish Data Management Capability**
23	Purchase Initial Relational Database Software
24	Purchase Remaining Relational Database Software & Maintenance
25	**Provide Peripheral Equipment for Offices and Mobile Workers**
26	Acquire and Deploy Initial Peripheral Equipment
27	Acquire Remaining Peripheral Equipment
28	**Acquire & Deploy Additional Printers**
29	Purchase and Deliver Additional Printers
30	Purchase and Deliver Remaining Printers
31	**Acquire & Deploy Remaining Workstations**
32	Purchase & Install Additonal Workstations
33	Purchase & Install Additonal Workstations
34	Purchase & Install Remaining Workstations



Question. Because most business planning for the common computing environment was completed prior to advent of Internet growth, (1) to what extent and specifically how does the Department intend to use the Internet to compliment current service delivery, and (2) what changes if any will integrating the Internet into service delivery have on CCE IT acquisition and maintenance costs in fiscal years 2000, 2001, and 2002.

Answer. Today, via the Internet, farmers and agricultural producers can electronically view public information on USDA programs, such as crop and production reports. They can download and fill-in application forms for temporary programs such as the Small Hog Operation Program, the Dairy Market Loss Assistance Program, Crop Loss Disaster Assistance Program, the Livestock Assistance Program, and several forms for FSA's farm loan programs. USDA is making additional forms available in electronic form, including applications for loan deficiency payments. However, these forms must still be faxed or mailed back to the Department for processing. This kind of electronic access is a good first step, as it saves having to visit a Service Center to obtain a form, and requires a minimal infrastructure investment (a web server accessible from the Internet). USDA is also currently providing a large variety of program information on its Web sites, including news releases, program fact sheets, program activity information, and office locators.

As part of our Electronic Access Initiative—EAI—within the SCMI, the next level of electronic access planned is to enable farmers to complete and submit USDA forms over the Internet. Current paper forms often assume the customer is sitting with and being assisted by a Service Center employee. Many of the forms being converted to electronic format for access over the Internet must be enhanced with easy to understand instructions and when fully interactive prompt customers in a way that prevents submission without the customer having provided all the required information. The current technology infrastructure does not adequately support access to the Internet for USDA staff or full access via the Internet for customers. Achieving this level of access requires a fully implemented CCE under the SCMI of the county-based agencies. The EAI is developing electronic authentication (electronic signature) methods to verify the identity of the sender and the integrity of the content of the electronic document.

Achieving the vision of electronic access to USDA programs offered through Service Centers so America's farmers and other rural residents can conduct their business with the Department online is an enormous undertaking. Additionally, submission of a document to the Department electronically does not mean that processing of the document is automated. Electronic access will require reengineering numerous existing programs and systems, as well as training employees in new roles, responsibilities, and technologies. From a technical perspective, Web-enabling USDA's business means investing in hardware, software, and telecommunications to securely connect the existing county-based USDA Service Centers to the Department's national network and the Internet. The level and timing of these investments play an important role in determining which electronic services the Department can provide to farmers and when it can provide them. CCE IT acquisition and maintenance estimated costs for fiscal years 2000, 2001, and 2002 include support for these Internet based processes.

USDA recently contracted for a major study to address the security issues associated with this initiative. The Department plans to use $1 million of the fiscal year 2000 CCE appropriation to provide the initial web servers and security tools needed to start the process. Additional investments required for full electronic access are planned for fiscal year 2001 and 2002, as outlined in the CCE Implementation Plan.

In April 1999, the Service Center Agencies began working on the EAI with the objective of establishing an infrastructure that enables them to make the web a mainstream way of doing business. Although the primary purpose of the project is to build the IT infrastructure necessary to support e-business, the program owners in the agencies are actively participating in pilots, process reengineering, staff assignments and other innovative activities.

One of the major requirements for USDA to move forward with technology acquisitions was for it to have reengineered business processes for the service centers.

Question. Has USDA completed reengineering business processes for the service centers?

Answer. Business Process Reengineering—BPR—is at the heart of the Service Center Modernization Initiative—SCMI. BPR analyzes the service center agencies' current program and administrative processes to see how they can be streamlined and integrated to improve the effectiveness and efficiency of USDA's service to customers. Our BPR efforts to date have given us the understanding of our basic business processed needed to move forward with the CCE and have served as the basis for defining the CCE technology architecture. We recognize that the CCE will need

to support business as we know it today, as well as any changes in business over the next decade. That is why our CCE architecture is designed around open, interoperable and scalable systems. We look at the CCE as the basic technology infrastructure to support county-based program delivery through the first decade of the 21st century. Failure to move forward will hamper our ability to service our customers and respond to the needs of the future.

Question. If not, what is left to reengineer and when will this be completed?

Answer. There are 20 active BPR projects focusing on core business areas such as lending, managing risk, conservation and environment, community development and outreach, and administration. Each of these projects is tested in a laboratory environment before being piloted in the field and deployed nationally.

SCMI has initiated the reengineering design of approximately 60 percent of the Service Center business processes and will reengineer the remaining 40 percent of the buisness processes as resources permit. The BPR project designed to strealine human resources administration has completed all testing and piloting and is being deployed nationally. BPR projects involving lending, community development, managing risk, conservation, and administrative areas are scheduled to complete testing and piloting in fiscal year 2000 and be deployed nationally in fiscal year 2001.

Question. What are the estimated savings that USDA will achieve from processes already reengineered?

Answer. CEE is also designed as a fully scalable infrastructure that can quickly respond to and support future business needs as dictated by new legislative or policy changes.

The SCI Business Case developed in fiscal year 1998 provides an economic analysis and cost benefits for the implementation of the CCE and reengineered business processes. It shows a return on investment of 40 percent over the full 10-year life span of the project. The calculated dollar value of benefits from staff time savings and improved efficiencies of operations total $5.486 billion over this period. This analysis has been validated by actual measurement of increased process efficiencies at two of the field pilot sites. In fact, staff reductions have already been made (over 10,000 from fiscal year 1993) and the technology tools and streamlined processes will be the only way this reduced staff can continue to deliver quantity service and meet the demands of cyclical workload such as that associated with natural and economic disasters.

Question. USDA's budget for fiscal year 2001 shows that the department plans to spend $86 million for equipment for the CCE/Service Center Modernization. What will this investment acquire?

Answer. The following table shows the planned investment for CCE components in fiscal year 2001.

[The information follows:]

CCE Fiscal Year 2001 Investments	*Estimated Costs*
Network/Communications Servers	$32,240,000
Application Servers (includes GIS and public access servers)	15,000,000
Workstation/Server Software	7,000,000
Enterprise GIS Software	5,000,000
Relational Database	2,640,000
Peripheral Equipment (includes digital cameras and portable data accessories)	8,095,000
Printers	6,150,000
Workstations	10,000,000
Total	86,125,000

Question. With the Internet, many companies can now deliver services to anywhere by having computer equipment at a central location. How is USDA's planned investment of $86 million going to move the Department to this capability and new business model that other companies are moving to?

Answer. At this point we are very limited in our ability to do business with our producers electronically. Currently they can get on our Web pages and download information and application forms, but cannot submit them to us electronically. They are able to fill out the forms and then bring them to us or mail or fax them to our office.

Moving forward to provide full electronic access to our programs and services is one of our top priorities. Our primary obstacles are that (1) many of our forms need to be redesigned to a user friendly format with clear instructions so that our customers can use them and (2) our current technology infrastructure is outdated and cannot support full electronic access. We now have an Electronic Access Initiative

underway that will provide for staged roll-outs of infrastructure improvements, security and privacy protocol to support this effort. Also, agencies are working to redesign forms and instructions so that some interim improvements in this area can be made. We plan to use part of the $12.6 million appropriated by the Congress in fiscal year 2000 for CCE to acquire the infrastructure needed to support electronic access. We also expect to pilot several electronic access applications by mid 2001 and to provide full electronic access when the basic CCE infrastructure is installed at the county office level by the end of fiscal year 2002.

Question. USDA's budget for the CCE shows $44.5 million was spent in fiscal year 2000 for other services and that another $50 million will be spent in fiscal year 2001 for other Services. What do these other services comprise?

Answer.

[In thousands of dollars]

Activity	Fiscal year		
	1999	2000	2001
Program Management	1,770	600	600
BPR	8,192	12,314	18,850
LAN/WAN/Voice	10,432	3,500	.....
Base Data Acquisition	15,050	23,550	23,550
Common Computing Environment (CCE)	1,707	4,500	7,000
Total Other Services	37,151	44,464	50,000

The program management funding represents support contracts for the change management training, improvement of customer service, and overall program management. The BPR amount represents support contracts for the development and pilot testing of reengineered processes. The LAN/WAN/Voice represents the contractor costs for installation and maintenance of equipment in LAN/WAN/Voice sites. The base data acquisition constitutes the digitizing of all soil, common land unit, and other data; and the purchase of ortho-imagery data from the Geological Survey Service. Finally, the CCE amount is for architecture, systems, and data integration studies.

USDA is requesting $75 million under a special account for the CCE/Service Center Modernization. The budget indicates that fund requested under this account would provide the essential capital investments that are needed to achieve the goal of a fully operational CCE in 2002.

Question. Does this mean that USDA will only need the additional $75 million to complete the CCE implementation? What assurance can USDA give us that if the $75 million is funded, that USDA will not come back to request additional funds in fiscal year 2002 and thereafter?

Question. Once USDA does fully implement the CCE, what does the Department estimate its annual costs will be to maintain, update, provide, provide communications, and manage the CCE?

Answer. The estimated CCE total cost for fiscal year 2001 is $91.2 million. The additional $16.2 million would come from the Service Center agencies' budgets. An additional $91.2 million would be needed in fiscal year 2002 to complete CCE implementation. After the fiscal year 2002 investment, the CCE installation would be largely complete. The maintenance and operations costs would be included in the Service Center agencies' budgets.

When fully implemented, annual estimated costs for CCE vary between $146 million to $178 million, depending upon whether or not a major technology upgrade to CCE components is anticipated during that year. These costs are for the acquisition, maintenance, operation, telecommunications, and other related costs to support the CCE after its initial implementation. These include staff salaries and administrative costs that would also be incurred for the maintenance of the CCE. These are not, however, new costs that would need to be borne by the department, but a re-direction (with a significant reduction) of current spending to support and operate the legacy systems of the three Sevice Center agencies.

SERVICE CENTER IMPLEMENTATION OVERSIGHT

USDA's OCIO fiscal year 2001 budget narrative says that for service center implementation oversight the department, among other things, conducts independent verification and validations (IV&V's).

Question. How much does OCIO plan to spend on IV&Vs in fiscal year 2001 for the service center implementation, and what specific areas will the IV&Vs be focused?

Answer. OCIO has projected a need to spend about $100,000 in fiscal year 2001 on IV&Vs related to Service Center implementation. IV&Vs are generally done on a specific technical or management issues that need outside, objective review and will be determined based on the progress of the overall project.

Question. How many IV&Vs were completed in fiscal year 1999, and will be completed in fiscal year 2000, for the service center implementation?

Answer. Two IV&Vs were completed in fiscal year 1999 and three are estimated to be completed in fiscal year 2000.

Question. For those IV&Vs completed for the service center implementation, how many recommendations were made and how many of these recommendations have been implemented to date? Please discuss each recommendation and the actions taken by the Department to address each one.

Answer. The two 1999 IV&Vs involved (1) a task to observe and evaluate work being done by FSA and the Service Center Implementation Team (SCIT) on a technical solution to connect FSA legacy systems to the network and (2) a task to review the process by which the SCIT identified and selected an Enterprise Geographic Information System—GIS—software. The recommendations and follow-up actions for each of these IV&Vs follow:

FSA system 36 legacy system IV&V

The IV&V evaluation made seven key recommendations. The recommendation and status of each follows:

Recommendation.—Drop the IDEA gateway from the completion for architectural reasons because it is an interim solution that does not offer any long term migration path or hardware recovery.

USDA Action/Status.—The IDEA gateway was dropped from consideration.

Recommendation.—Prior to final selection, perform a load test in the lab and field-test a performance-based pilot to verify that the performance of the Microsoft SNA Server solution is adequate to support the largest service center on busy days.

USDA Action/Status.—The additional testing was completed.

Recommendation.—If the performance tests indicate that the Microsoft SNA Server cannot support the required performance metrics of the Service Center, then select the A/36 upgrade.

USDA Action/Status.—The conclusion from this testing was that the Microsoft SNA solution performance metrics were not satisfactory. The FSA has selected and proposed the AS400 upgrade for the connectivity solution.

Recommendation.—If the Microsoft SNA Server passes the performance test, then select it for the A/36 connectivity solution. By selecting the Microsoft SNA Server as the solution, USDA will gain other uses for the server. In order to take advantage of COTS applications and associated plans for future business requirements, the Service Centers will require a file server. The Microsoft SNA solution, while providing connectivity to the A/36 and associated legacy equipment, can be utilized to perform everyday LAN/WAN related support (file and print sharing, electronic mail, etc.). Further, since the IBM Mainframes in NITC are IP-enabled, once applications and data are either transferred or rewritten for use on another platform (Operating System and DBMS), the SNA connection (Dial Up XOT modem line) can be dropped.

USDA Action/Status.—Because of the performance testing results, the Microsoft SNA solution was not selected.

Recommendation.—Obtain a best and final cost from the selected vendor.

USDA Action/Status.—We will obtain a best and final cost as part of the procurement process that will occur after a solution is decided upon.

Recommendation.—In order to expedite deployment of the Microsoft SNA Server solution, should it be selected, consider reconfiguring 2,600 of the 16,000 existing workstations already purchased or part of the 6,000 workstations to be purchased for use as the NT Server to host the SNA server. This will reduce start-up and deployment time. More robust NT Servers can later be procured to replace these converted workstations when their usage increases and funding allowed.

USDA Action/Status.—As noted above, this solution was not selected and this recommendation has not been implemented.

Recommendation.—Investigate the use of A/36 migration or porting software companies to help rehost FSA applications from the A/36 to the new target platform. This will help USDA save on the A/36 maintenance costs and potentially also save on the field software deployment costs. Furthermore, it could help ease the complexity of migration since FSA will only have to be concerned with one hardware platform.

USDA Action/Status.—Some work in this regard was done by FSA, but an OCIO sponsored evaluation is currently underway to respond to this issue. This evaluation of connectivity alternatives sponsored by OCIO will be completed in May with a decision by the CIO expected by June 1, 2000.

Evaluation of SCIT enterprise GIS software selection process

The IV&V study made six key recommendations. The recommendations and status of each follows:

Recommendation.—Due to the pace and structure of the overall Service Center Program, there are a number of system architecture issues that cannot be thoroughly investigated prior to GIS solution selection and therefore pose a significant risk. These issues include performance, maintenance, administration, and incomplete business case development. The USDA should undertake a study to understand the nature and potential magnitude of the risks posed by the current level of uncertainty and to develop migration plans to address these risks prior to deployment.

USDA Action/Status.—The USDA GIS Team evaluated the IV&V recommendations and developed a risk mitigation strategy which was incorporated into their final recommendation document.

Recommendation.—The USDA should perform both stress testing and performance testing before making the final selection of GIS products. This includes defining realistic environments (infrastructure and loads) and testing perspective vendor products in these environments. The results of performance testing should be used to assess implications on hardware suite acquisition and maintenance costs to achieve desired response times.

USDA Action/Status.—The USDA GIS Team developed a series of discrete event simulation performance models to test candidate GIS architectures. These models were used to test the top software candidates. Additional models will be developed in the future to test other components.

Recommendation.—The USDA should define system support requirements including software and hardware maintenance requirements, and data distribution and administration requirements. Assess vendor products implications on support costs to adequately install and maintain the system.

USDA Action/Status.—The USDA Team incorporated consideration of support requirements and availability as part of their analysis and final recommendation for a GIS product.

Recommendation.—Identify key GIS interfaces with other CCE components and assure that there are no incompatibilities. Ensure that, if there are requirements not derivable from the business case, they can be justified by some other means—reasonable performance, interfaces with existing/future products, product, and data support. Consider adding these requirements to the business case.

USDA Action/Status.—The USDA GIS Team documented the interfaces and compatibility issues and developed an "Enterprise GIS Business Requirements" document that specifically addressed the business case issue pointed out in the IV&V.

Recommendation.—The USDA should provide clear rationale for prioritizing the numerous functional capabilities demonstrated through the LTD. This prioritization should reflect a clear concept of how these capabilities will be transitioned to the field to achieve projected benefits.

USDA Action/Status.—The USDA GIS Team provided documentation regarding the rationale and prioritization in the final recommendation document and the business requirements analysis.

Recommendation.—The scope of the Draft CCE GIS Results Report produced by the AMS subcontractor should be modified to just present the results of the LTD. A separate report produced by the USDA GIS Team should develop recommendations as to how the USDA should proceed, taking into account the USDA prioritized functions.

USDA Action/Status.—The USDA GIS Team chose not to limit the contractor to a presentation of the test results, but allowed the vendor to include a recommendation based on those results. The recommendation was non-binding on the government, but provided a third party, objective perspective. The team did prepare its' own report and recommendations as suggested by the IV&V.

CONSOLIDATING/OUTSOURCING USDA HEADQUARTERS INFORMATION TECHNOLOGY FUNCTIONS

Question. What analyses has USDA completed to determine where there would be opportunities to consolidate internal IT activities across agencies throughout the department?

Answer. The Department is increasingly exploring opportunities where the USDA agencies might benefit from consolidated IT activities. An interagency team is currently working on several issues in the area of asset management. For example, the team is currently analyzing the potential benefits of USDA standardizing on one tool set for querying large data sets, a need which has been identified by several agencies.

In November 1999, the Secretary directed the Chief Financial officer, working with the Chief Information Officer and the Assistant Secretary for Administration, to lead a group of senior executives in developing a corporate strategy for administrative/financial systems that affect the entire Department. The group will look at a range of systems, including accounting/budget execution and formulation functions, procurement, property, human resources, travel, and the associated telecommunications and security.

The Department is working to establish a corporate or enterprise telecommunications network to support interoperability for interagency communications and data exchange among agencies and programs and enhance program delivery and eliminate redundant services, facilities, resources, and operations. An enterprise network is also an integral component of our efforts to strengthen cyber-security. With mergers occurring throughout the telecommunications industry, often resulting in reduced unit costs for telecommunications services, an enterprise network will enable USDA to leverage the apparent successes documented by our industry partners and take advantage of these reductions. The aggregation of telecommunications services and equipment from a corporate perspective can also significantly reduce the unit costs that are incurred by individual agencies by allowing the Department to take advantage of the economies-of-scale that exist. The bottom line is improved USDA program delivery.

Another area where we are making progress with consolidating IT activities across agencies is at our National Information Technology Center (NITC), located in Kansas City and Ft. Collins. NITC already consolidates and centralizes some of the client server platforms across agencies; with several agencies running applications on NITC servers and reaping the benefits of a shared environment. FSA and RD have also consolidated some data warehouse operations on a single server procured by NITC. In addition, the data warehouse for our Foundation Financial Information System (FFIS), serving multiple USDA customers, is hosted on its own mainframe at NITC.

This centralized approach to hosting agency IT applications at NITC benefits USDA agencies by offering: a 24 hour/day, 7 days/week, 365/366 days a year operating environment; an Uninterruptible Power Supply (UPS), including a dual power feed UPS, and diesel generators; a secure infrastructure (including physical access to facility, security clearances, biometric entry controls, cameras, dry sprinklers, and halon fire suppressants); system administration/management (including Commercial-off-the-shelf (COTS) software support, storage management, operating system management, change and problem management, capacity and performance management, and help desk facility; disaster recovery(including backup recovery, off-site storage, and hotsite recovery program); and centralized hardware maintenance. Most importantly, it allows costs to be spread across all clients, while freeing up agency FTE to work on applications.

The Service Center Modernization Initiative's Support Services Bureau is designed to consolidate internal IT activities across our county based agencies. In our view, the only way to successfully maintain and operate the shared CCE that we plan to put in place is by consolidating the three separate IT organizations of the Service Center agencies into one integrated staff. Otherwise, it is just a matter of time before the stovepipes begin to form and we no longer have a "common" environment. That is why the Secretary is asking Congress to remove the restrictive fiscal year 2000 appropriations language that prevents us from moving forward with the Support Service Bureau.

Question. What analyses has USDA completed to determine whether outsourcing for some of its IT functions would be cost-effective?

Answer. In accordance with the Federal Activities Inventory Reform (FAIR) Act, the Department has developed a list of all functions that are not considered "inherently governmental" and thus could potentially be outsourced. However, we have not yet conducted any systematic analysis to determine whether or not outsourcing for specific IT functions would be cost-effective. I do plan to look at outsourcing in the area of software services—that is, determining where it might be cost effective for the Department to use application services providers (ASPs) to lease software, rather than buy and maintain it using our in-house technical staff.

SECURITY

Question. USDA's CIO budget includes an increase of $6.6M for expanding its USDA Cyber Security Program and identifies numerous activities related to security that it will be undertaking.

Answer. The $6.6 million includes funding for the following activities:

—$1,392,000 for salaries, benefits, travel, and contract support for the Cyber Security Program Office;

—$1,280,000 to conduct risk assessments;

—$2,325,000 for contract support to create a USDA Information and Telecommunications Security Architecture, which will provide the corporate products and services necessary to securely use USDA's information assets (commensurate with the sensitivity and value of those assets);

—$1,200,000 for contract support to design and implement a USDA Information Security Awareness and Training Program; and

—$437,000 to develop a USDA Software Import Control and Licensing Program;

Question. What are the current general areas of security weaknesses at USDA that this program will address?

Answer. The general areas of security weaknesses to be addressed by the cyber security Office are: Risk Management—vulnerability assessments, risk mitigation programs, monitoring of safeguards, building of risk management models, Telecommunications weakness, Internet access—firewall, intrusion detection, reporting—Logical access in tiers I Mainframe, II Minicomputers and servers, and III Workstations, configuration management, Operations, Critical Infrastructure, Disaster recovery, Security Awareness, Personnel security, insufficient and ineffective tools, Skills and Security and System Administration training.

Question. What are the milestones and time frames and estimated total costs to fully address these weaknesses?

Answer. The Department's Associate Chief Information Officer for Cyber Security began work in February, 2000. His early estimates are that, if funding is available, it will take at a minimum 3 years and could be dependent upon the magnitude of spending to adequately mitigate these weaknesses and to have the processes to adequately manage the risks. Specific milestones and time lines will be developed based upon the funding that is made available.

Question. How much will be spent in fiscal year 2001 across USDA on information security management for staff, software and other related expenses? (Please break out the number of information security management staff in and total security dollars spent at each agency and office.)

Answer. The following two tables provide that information. USDA does not collect data on security in the aforementioned categories. However, based on the most recent data, security expenditures are estimated to be devoted to the following categories: Personnel—64 percent, System Protection—10 percent, Threat and Risk Assessment—7 percent, Intrusion Monitoring and Response—7 percent, and Education and training—5 percent.

[The information follows:]

TABLE 1. USDA INFORMATION TECHNOLOGY SECURITY BUDGET (BASED ON INFORMATION COLLECTED IN JULY 1999)

[Dollars in thousands]

Agency	Security Budget (fiscal years)			Total IT Budget (fiscal years)			Percent for Security		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
AMS [1]	.....	.....	.....	$17,505	$15,978	$17,363	.....	.....	.....
APHIS	$367	$624	$624	37,645	31,060	38,324	0.97	2.01	1.63
ARS	151	348	965	38,991	37,097	39,765	0.39	0.94	2.43
CR [1]	.....	.....	.....	2,355	1,943	2,277	.....	.....	.....
CSREES	778	738	4,732	7,308	8,527	.....	10.65	8.65	
ERS	190	172	179	5,031	5,725	6,027	3.78	3.00	2.97
DA [1]	88	160	185	3,014	10,408	8,080	2.92	1.54	2.29
FAS [3]	.....	.....	.....	10,103	11,538	14,002	.....	.....	.....
FNS	662	819	781	350,529	351,731	389,294	0.19	0.22	0.20
FS	505	972	911	304,705	306,644	297,481	0.17	0.32	0.31
FSA	300	471	313	161,355	162,121	166,912	0.19	0.29	0.19
FSIS	192	252	500	28,456	26,748	46,531	0.67	0.94	1.07
GIPSA [1]	.....	.....	.....	3,705	3,893	4,089	.....	.....	.....
NAD [1]	.....	.....	.....	761	570	589	.....	.....	.....
NASS	500	528	3,144	16,533	16,272	17,514	3.02	3.24	17.95
NRCS	903	758	820	96,021	66,447	67,255	0.94	1.14	1.22
OBPA [1]	.....	.....	.....	689	559	559	.....	.....	.....
OC [1]	.....	.....	.....	513	525	972	.....	.....	.....
OCE	9	9	9	767	760	750	1.17	1.18	1.20
OCFO [2]	2,266	2,527	2,905	162,454	183,997	191,321	1.39	1.37	1.52
				(162,454)	(183,997)	(191,321)			
OCIO [2]	3,723	3,327	5,316	72,941	71,073	81,513	5.10	4.68	6.52
				(59,872)	(60,988)	(63,799)			
OGC	4	5	5	1,490	1,591	2,441	0.27	0.31	0.20
OIG [1]	.....	.....	.....	5,272	5,743	3,241	.....	.....	.....
RD	510	720	1,860	79,970	98,345	127,462	0.64	0.73	1.46
RMA [3]	.....	.....	.....	28,076	27,329	29,338	.....	.....	.....
SCIT [1]	.....	.....	.....	35,193	85,796	237,994	.....	.....	.....
Total	10,370	12,470	19,255	1,246,480	1,286,216	1,544,501	0.83	0.97	1.25

[1] No security budget estimates provided.

[2] Numbers reflect total Appropriated and Working Capital Funding. Percentages computed for security are approximations. Not adjusted for collections in fiscal year 1999: $5,737,438; fiscal year 2000: $5,595,787; fiscal year 2001: $6,507,860.

[3] These agencies submitted combined security budgets.

TABLE 2. USDA IT SECURITY STAFFING—FISCAL YEAR 1999

(Percent of time Spent on IT security)

Agency	FTEs	Collateral Duty (Percent)			Contractor Support
		0-10	26-49	50-99	
FFAS	13				
FSA					
FAS					
RMA					
FNCS	2	11			
FNS	2	11			
CNPP FOOD SAFETY	1	4			
FSIS	1	4			
M&RP	3	19	3	2	2
AMS	1	15	3	2	2
APHIS	1	1			
GIPSA	1	3			
NR&E	4	136	2	5	.5
FS	2	135	2	3	
NRCS	2	1		2	0.5
RE&E	4	2	2	1	
ARS	1			1	
CSREES	1		1		
ERS	1	2			
NASS	1		1		
RD	5				2
RBCS					
RCD					
RHS					
RUS					
STAFF OFFICES	39	7	6	1	2
OCFO	28	1			
OCIO	11	3	6	1	2
All Other Offices		3			
Total	71	179	13	9	7

The Forest Service was only agency to report field staff, who spend 0–10 percent of their time on security related administrative tasks. FTEs provide both operational and policy support.

Question. What performance measures has USDA established to measure the effectiveness, progress, and benefit of all the information security management activities? And where and how are they being tracked within USDA?

Answer. The Department has recently established metrics to measure the effectiveness and progress for information security management activities in new systems under development—for example adherence to the five core information security requirements in the Department's Security Architecture—and is working on establishing the metrics for all information security management activities. The Office of the Associate Chief Information Officer for Cyber Security will track security management activities. They will be tracked through activity reports and on-site visits.

Question. How much does USDA plan to spend in fiscal year 2001 to further implement its FFIS and related improvements?

Answer. The implementation budget for fiscal year 2001 is $25.2 million.

Question. How much will have been spent through fiscal year 2000 to implement FFIS?

Answer. To ensure a better understanding of the FFIS project budget and costs, in fiscal year 1999, the new project management team was asked to develop a budget that segregated implementation costs from the ongoing operational costs of implemented USDA agencies. Through fiscal year 1998, $57.4 million had been spent for development and implementation activities. This amount includes USDA personnel

costs and contractor costs in support of the overall project and individual agency implementation efforts. It does not include any internal agency costs for business process re-engineering or similar activities. In fiscal year 1999, implementation costs were $16.9 million. For fiscal year 2000, one of the two most intensive years for implementation of USDA agencies, the implementation budget is $25.5 million. The total amount spent through fiscal year 2000 will be approximately $100 million.

Question. What are the milestones for completing the implementation of FFIS, and what will be the final costs?

Answer.

Fiscal Year	FFIS Production Operation Date	Agency Name
1998	October 1, 1997	Office of the Chief Financial Officer, Forest Service (approximately 1/3 of Forest Service)
1999	October 1, 1998	Risk Management Agency
2000	October 1, 1999	Remaining 2/3 of Forest Service and Food Safety and Inspection Service
2001	October 1, 2000	Animal and Plant Health Inspection Service, Farm Service Agency, Natural Resources Conservation Service, and Rural Development
2002	October 1, 2001	Agricultural Marketing Service, Departmental Administration/Staff Food and Nutrition Service, and Research, Education and Economics Mission area
2003	October 1, 2002	Foreign Agricultural Service, Grain Inspection, Packers and Stockyards Administration, and Six Non-USDA Cross-Serviced Agencies

Question. How many agencies are currently using FFIS to input their financial information, and when does the Department expect all agencies/offices to be using FFIS?

Answer. The Forest Service, Food Safety and Inspection Service, the Risk Management Agency, and the Office of the Chief Financial Officer, about 44 percent of the USDA workforce, all rely on FFIS for their administrative accounting services. By October 1, 2000, four additional agencies, Rural Development, Animal and Plant Health Inspection Service, the Farm Service Agency, and the Natural Resource Conservation Service will utilize FFIS for these same services. The following table shows the number of USDA employees served by fiscal year.

[The information follows:]

USDA FFIS IMPLEMENTATIONS

Fiscal Year	Total USDA Employment [1]	Number of USDA Employees Served	Percentage of Total USDA Workforce
1999	104,661	528	.005
2000	101,772	44,544	43.76
2001 [2]	104,220	75,257	72.2

[1] Based on fiscal year 1999 Actual Staff Years.
[2] Projected fiscal year 2001 Implementation.

Question. To its credit, USDA recently made a successful transition into the year 2000. In preparing for Y2K, the Department spent more than $50 million to get its information systems ready. What were the positive lessons learned and how are they being applied today at USDA? Aside from making the actual transition itself, to what extent has the Department been able to capitalize on its Year 2000 investment and make added improvements in the Department-wide use of information technology?

Answer. The Y2K experience enhanced the capability of USDA managers to use proven project management techniques to ensure completion of complex tasks on time and within cost:

—Process owners and business resumption team leaders have an increased understanding of and skills in strategic planning and risk management, such as the use of assessment tools, mitigation and contingency planning, and management track-

ing, as well as greater appreciation for the value of exercises to test their plans and train critical staff members.

—The Office of the Chief Information Officer (OCIO) developed capabilities and processes to centrally coordinate a set of major IT initiatives to leverage investments and promote Department-wide efficiencies that will be applicable to future IT investments and system rollouts, especially as investments are considered as part of the Department's Capital Planning and Investment Control (CPIC) process.

This successful experience is the impetus for initial plans to establish an enterprise program management unit within OCIO. The purpose will be to plan, manage and evaluate proposed major IT investments to identify and take advantage of economies of scale, coordinate with the enterprise architecture development to establish consistency in IT investments, manage risk from a corporate perspective, and to track actual return on investment.

Question. For the record, what was the total dollar amount spent by the Department on Year 2000 fixes and what does this include?

Answer. Total overall Y2K spending obligations, including agency appropriations, is reflected in the following chart.

Fiscal Year	*Cost in Millions*
1996	$1.4
1997	14.1
1998	64.1
1999	95.4
Est. 2000	13.5
Total	188.5

These funds were spent for: hardware upgrades and replacements; embedded chip and scientific equipment remediation; Independent Validation and Verification; telecommunications systems remediation; remediation of other systems; software upgrades and replacements; business continuity and contingency planning; program management; technical assistance to states; and outreach.

OTHER AREAS

USDA INFORMATION TECHNICAL INFRASTRUCTURE

Question. A primary goal for USDA's CIO has been the development of a Department-wide information and technical infrastructure to improve service delivery through more effective information systems and data management. What efforts are now underway in connection with this overall goal? Where does the Department stand on carrying out these initiatives and what are the time frames for their completion?

Answer. USDA began its enterprise architecture initiative in September 1996. The USDA Information Systems Technology Architecture was published in February 1997. The architecture was developed as part of USDA's IT Modernization Plan. Since that time, the architecture has been used in the development of core business processes for each mission area for their Y2K business continuity plans, establishment of the applications baseline for the Y2K initiative, development of the proposed enterprise telecommunications network, and creation of the baseline architecture for use by the Service Center Initiative and the Common Computing Environment. In addition, the architecture processes have been integrated with the CPIC process to ensure architectural compliance.

The February 1997 version is now being expanded and updated to address recommendations of the independent verification and validation, align USDA's architecture approach and model with the Federal architecture model, and broaden the architecture to include current industry best practices. We have also developed a direction for our future architecture that focuses on an enterprise-centric approach for shared information and applications. It recognizes the movement toward electronic government. The future architecture is also being developed based on the concept of technology domains, which represent common areas that USDA can approach from an enterprise perspective such as electronic signature and collaboration tools.

We have also developed a draft ISTA Management Framework which includes ongoing processes that, when finalized, will guide agencies regarding selecting business processes for improvement projects, working together to define specific technologies, standards, products and configurations that will be common across USDA, and standardizing USDA information systems across USDA, where there are common requirements

Our fiscal year 2000 Architecture initiatives include: publishing the USDA ISTA in both paper and electronic forms; continuing outreach to agencies regarding edu-

cation and awareness of architecture principles, standards, and processes; and implementing the ISTA Management Framework. This includes establishing the groups who will oversee and operate specific architecture processes.

PRESIDENT'S DECISION DIRECTIVE (PDD) 63

Question. Under the President's 1998 Decision Directive (PDD) 63, departments and agencies are required to develop infrastructure protection plans and strategies for achieving them by May 2000. What efforts are underway in connection with the implementing PDD63 at USDA? What is the status of the work and when will each effort be completed?

Answer. USDA and its agencies has developed a strategy for protecting its critical infrastructures. Most Business Resumption and Disaster recovery plans are in the development stage except for our major computing facilities—NFC & NITC—which have executable Disaster Recovery plans. Efforts are underway to define the security risks and establish risk management processes. Funding of the $6.6 million is critical in establishment of the risk management process, performing vulnerability assessments, building a security architecture all of which are necessary for the successful implementation of PDD63.

IT ACQUISITION MORATORIUM

Question. USDA has had an IT Acquisition Moratorium in place for several years that requires waivers for IT investments exceeding $25,000. In fiscal year 1999, many of the waivers granted by USDA involved acquisitions supporting Y2K-related improvements. What was the total number and dollar amount of waivers granted for non-Y2K-related acquisitions during the fiscal year 1999? With the Y2k crisis now over, does USDA plan to continue its IT moratorium and if so, what will be the basis for granting waivers?

Answer. The total number and dollar amount of waivers granted for non-Y2K-related acquisitions during the fiscal year 1999 is 203 waivers at a total of $281 million.

With the successful Y2K transition behind us, USDA recently restored the threshold back to the original level of $250,000 for information technology acquisitions needing Chief Information Officer approval. The $250,000 threshold was established when the IT acquisition moratorium originated in November 1996. In July 1997, Secretary Glickman directed USDA agencies to concentrate as many resources as possible on correcting the Year 2000 problem so the moratorium threshold was lowered to $25,000. Since the USDA transition was successful, the moratorium threshold was raised back to its original level except for administrative and financial systems. Again, Secretary Glickman wants USDA to focus on strengthening the corporate management of the Department's administrative and financial systems; the Chief Information Officer must approve all money expended on any administrative and financial systems. As stated in the answer to question 11, we are also using the moratorium to continue USDA's move towards a comprehensive capital planning process.

Question. As part of the USDA's effort to develop Business Continuity and Contingency Plans for Y2K, agencies conducted business analysis assessments to identify their core business processes and mission-critical IT systems. How has USDA integrated the results of these agency assessments into its overall IT planning?

Answer. As a direct consequence of its investment in Y2K preparations, USDA has many new or improved capabilities. The main collateral benefits of Y2K preparation include enhanced IT systems management capabilities and an improved focus on core business process support.

Enhanced systems management

Business Continuity and Contingency Planning (BCCP) preparation included a thorough inventory of current IT assets. Assessment and preparation of IT systems for remediation necessitated updating IT architecture diagrams. Older systems, particularly desktop hardware and applications, have been updated or replaced to ensure Y2K compliance. The enhanced IT architecture and information will enable improved capital investment management decisions in the future.

The experience of designing and implementing comprehensive hardware and software tests has improved USDA's capability to test new applications and components and will reduce the time and cost to deploy new applications.

Improved Focus on Core Business Process Support

The tension of preparation for Y2K led to the identification and prioritization of core business processes and critical IT systems. The business focus on core processes had the benefit of increasing management awareness of the critical role of IT in

daily business. This increased management awareness of dependence on IT for day-to-day business has led to improved coordination between program and IT personnel. Identification and prioritization of core business processes also revealed which IT systems are most critical and when, whether on a daily basis or periodically. Sustaining this awareness will aid in allocating scarce IT resources and will help continue improving the Department's Capital Planning and Investment Control process.

TELECOMMUNICATIONS ENTERPRISE NETWORK

Question. Several years ago, in connection with USDA's work to develop an integrated overall IT architecture, the Department also embarked on an effort to establish an enterprise network to better integrate the Department's many disparate telecommunications systems. What is the status of that work and what has been accomplished thus far?

Answer. Our previous attempts to establish a Telecommunications Enterprise Network—TEN was ultimately put on hold. However, we believe that a USDA enterprise network is now even more imperative. Consequently, armed with lessons from previous efforts, we are now in the process of identifying agency business requirements and redefining the architecture of a USDA telecommunications enterprise network to ensure that it meets the Department's and individual USDA agencies' requirements. Working jointly with the agencies, we are developing a framework that consists of technology standards, policies, change control mechanisms, and common processes. Consolidation and optimization opportunities are also being address using a collaborative approach. The Department will manage USDA's wide area network and perimeter security. USDA agencies will continue to administer security, metropolitan and local area networking and security.

The Department's telecommunications network is analogous to the nation's highway system, with many local and state roads and highways feeding into the Interstate system—allowing traffic to flow across the country. Similarly, our telecommunications backbone consists of a corporate network with feeder networks managed at the agency level. Our vision is to develop a modern and efficient corporate network, which is the backbone of the Department's telecommunications operation.

As you know, the operation of agency-specific stovepipe networks has historically resulted in reduced inefficiencies to program delivery and has hampered USDA's interoperability efforts. A corporate or enterprise network is necessary to support consolidated telecommunications operations; provide interoperability for interagency communications and data exchange among agencies and programs; enhance program delivery and eliminate redundant services, facilities, resources, and operations. Most importantly, an enterprise network is also an integral component of our efforts to strengthen cyber security.

The formulation of the enterprise network infrastructure will provide us with the opportunity to implement a "centralized management" concept which will allow the department to monitor and measure network performance and result in improved planning and security functionality.

Question. As part of its enterprise network, USDA also began reengineering telecommunications management processes throughout the department to address long-standing problems and achieve savings. What are the results and what savings have been achieved?

Answer. We are taking steps to improve telecommunications management and more efficiently utilize our resources even as we work to transition to an enterprise network. For example, we have made progress in correcting deficiencies raised in previous GAO audit reports. To ensure that telecommunications services and leased telecommunications equipment are terminated upon office closures, a checklist to be used when closing offices was provided to the agencies. Steps have also been taken to eliminate redundant, uneconomical or unused services and equipment. In response to another GAO recommendation, we have developed a plan to establish a telephone fraud incident reporting mechanism between the long distance exchange carriers and USDA's System Network Control Center—SNCC—in Kansas City, MO. We are also taking advantage of every opportunity during the current FTS2001 transition to improve our performance in this area.

We are confident that the USDA enterprise network solution makes good business sense and that the Department will benefit from significant unit cost reductions, (not necessarily savings), once it is implemented. Achieving "savings" will be difficult given the growing need for increased bandwidth and other services as more and more programs and services are made available over the Internet. Still, with mergers occurring throughout the telecommunications industry, often resulting in

reduced unit costs for telecommunications services, an enterprise network will enable USDA to leverage the apparent successes documented by our industry partners and take advantage of these reductions. The aggregation of telecommunications services and equipment from a corporate perspective can also significantly reduce the unit costs that are incurred by individual agencies by allowing the Department to take advantage of the economies-of-scale that exist. The bottom line is improved USDA program delivery. Our phased approach to the implementation of an enterprise network is evolving. We anticipate that the enterprise network strategic plan will be fully documented this fiscal year. We will also begin the process of obtaining funding in fiscal year 2000 and look to complete that effort during fiscal year 2001.

E-GOVERNMENT

Question. USDA's OCIO has requested funding for E-Government related activities aimed at promoting the use of Internet-based technologies to make agency programs and services more accessible to customers. What plans have been developed for executing such initiatives and what programs do they involve?

Answer. As noted earlier, USDA agencies have several initiatives already underway. Most encompass providing customers information on USDA programs and services, as well as market information, over the Internet. Other applications are being developed which would allow customers to actually transact business with the Department online. These include the Electronic Access Initiative in the Farm Services agencies that will allow farmers to download the forms they need, fill them out online, and electronically submit them back to the Department.

The funds we have requested will enable the Department to develop a corporate strategy to implement E-government and are critical for implementing the recently passed Freedom to E-file legislation. At present, agencies are planning numerous initiatives without the necessary level of coordination at the Departmental level. A Department-wide E-government working group is being established to address this issue. Our plans include conducting an education and outreach campaign to ensure that all senior USDA program managers are aware of and understand the potential impact of E-government and their role in ensuring that USDA provides the kinds of services that our customers are increasingly expecting. Most importantly, our plan includes developing a corporate wide strategy to ensure the necessary level of coordination and to develop standard approaches to cross-cutting issues. Once the strategy is in place, agencies can develop and implement specific plans in an environment which ensures that USDA will leverage resources across the Department.

INFOSHARE BALANCES

Question. The Committee recommended that unobligated funds made available to the Office of the Secretary in fiscal year 1996 for "InfoShare" be used to fund various activities related to information technology for which increased funding was requested in the President's fiscal year 2000 budget. Have "InfoShare" funds been proposed to meet any of these requirements? If so, what investments are proposed from unobligated "InfoShare" funds?

Answer. Because of funding needs to support implementation of the Service Center Modernization—SCM—and Common Computing Environment—CCE—all of the funds are being used for that purpose. Where possible, the Department is leveraging work done in support of SCM activities such as computer assistance and other work on computer and privacy issues, for the benefit of all of USDA. For example, in the process of analyzing requirements and solutions for intrusion detection for the SCM Electronic Access Project, the Department will utilize that process and information for the broader USDA environment.

SUBMITTED QUESTIONS ON GOVERNMENT PERFORMANCE AND RESULTS ACT

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. CSREES has developed an annual Performance Plan that links to that of the Research, Education, and Economics—REE—Mission Area. The Plan relates program activities to the mission and goals of the agency—as described in the Agency strategic plan—to the budget request submitted in support of research, extension

and education activities. More importantly, it reflects the role of CSREES in enabling land-grant universities and other partners who carry out the research and extension activities authorized in the CSREES budget, and frames our ability to use reports and databases to document accomplishments against expectations.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. We use a process of continuous dialogue with our land-grant partners to identify emerging issues that are of the highest priority to include in our budget. This takes place in quarterly meetings with system administrators, while program reviews are conducted by National Program Leaders, and during annual reviews of research and education programs. In all instances, these relate to issues of importance included in the Administrator's budget request. The difficulty we experienced is one of not being able to describe in sufficient detail the specific impacts of the Federal investment in research and education in advance of the completion of research and education activities by those institutions that receive funding. Using existing databases and the Research, Education, and Economics Information System—REEIS—which has not yet been completely developed, and our past experience with the land-grant system, we feel confident that projects are focused on issues important to the taxpayers and producers. This is reflected in the "Impact" statements that are being developed to share the results of research and education with the public. These impact statements relate to our agency performance goals and our budget activities.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The agency performance plan is linked to performance measures that relate to the President's budget. Because of the complexity of the agency budget and the large number of components in its accounts, individual components were aggregated around five broad agency goals for more efficient planning and reporting. Using the five goals gives a national, issue-based focus to programming planned and conducted in a dynamic process in the states by eligible partner institutions. All program and budget activities relate to one or more of the following CSREES Strategic Goals: (1) An Agricultural Production System that is Highly Competitive in the Global Economy; (2) A Safe and Secure Food and Fiber System; (3) A Healthier, More Well-Nourished Population; (4) Greater Harmony between Agriculture and the Environment; and (5) Enhanced Economic Opportunities and the Quality of Life among Families and Communities.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Again, because of the complexity of the agency budget and the large number of components in its accounts, activities were aggregated in the performance plan around the five agency goals for more efficient planning and reporting. This means that the individual components in the account and activity structure do not have performance measures that are specifically linked to those accounts. We do however believe that we have enough flexibility to effectively link planning with the budget.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. CSREES does not plan to propose any changes to its account structure for fiscal year 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. At this time, CSREES does not plan to propose any changes to the program activities described under that account structure.

Question. How were performance measures chosen?

Answer. Performance measures were chosen to reflect critical actions necessary to achieve shared and national priorities in agriculture and which describe the purposes and impact of the Federal investment in research, extension, and education.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Our agency did not employ additional staff to collect and verify data, but utilized existing staff and data sources, such as the Current Research Information System—CRIS—Food and Agricultural Education Information System—FAEIS—and the Impact Data Base. We believe that these provide reliable sources of data in identifying performance measures. The 1998 Farm Bill also developed a Plan of Work requirement for institutions receiving formula funds in which institutions must list output and outcome measures that will be addressed in perspective plan-

ning—five years. This will become another data source when annual Plan of Work reports are submitted in March 2001.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No. The agency plan includes performance measures for which reliable data will be available for the first performance report.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The key performance goals that we recommend the subcommittee use to track program results by goals are: Goal 1—Develop new and value-added products and improved production systems; Goal 2—Develop and improve detection and prevention methods to reduce pathogens in foods, and decreased contaminants in the food supply; Goal 3—To improve the health of consumers through changes in diet, quality of food, and food choices; Goal 4—To understand the compatibility of agricultural practices on the natural resource base and environment; and Goal 5—To improve economic and social indicators of community well being.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. CSREES has performance plans for each of our strategic goals. An example of an output measure under Strategic Goal 1 would be to develop new and value added products. An outcome measure example would be improved risk management skills and practices of agricultural producers, and processors, and marketers.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked?

Answer. Our Strategic Plan is linked to five general goals: 1) Agricultural Production System that is Highly Competitive in the Global Economy; 2) A Safe and Secure Food and Fiber System; 3) A Healthier, More Well-Nourished Population; 4) Achieve Greater Harmony between Agriculture and the Environment; and 5) Enhanced Economic Opportunity and Quality of Life for Communities; and one agency specific goal—Responsive and Effective Management Systems. Our annual performance goals are linked to the objectives and general goals contained in both the Annual Performance Plan and Strategic Plan. An example of an Annual Performance Goal is to develop and improve detection and prevention methods which links to the Objective to improve food safety by controlling or eliminating food-borne risks, and links to Strategic Goal 2 to provide a safe and secure food and fiber system.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The agency plan reflects substantial internal and external partnership discussions to identify outcome/output measures which demonstrate that the goals in the plan have been met, including those noted in the previous answer.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, the plan specifies agency and collective program activities as outputs and university partnership and grantees' work as the outcomes which address objectives. We support an annual process that ensures our success in using output and outcome measures. We are continuing to work with our partners to insure performance measures contained in our Annual Performance Report are updated and refined.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Customer satisfaction measures for the agency will include, but will not be limited to expert assessments—such as would be needed to assess impacts of genome research and discovery—customer surveys—such as would be needed to measure scope and effectiveness of selected extension programs—economic data or social survey data, and physical monitoring—such as would be valuable to determine effects of research-based changes in best management practices affecting environmental quality of public health indicators. Examples of customers would include Federal agencies—e.g., the Agricultural Research Service, the Department of Energy, the National Science Foundation, the Environmental Protection Agency, colleges and universities, and producers and consumers of information related to the food and agricultural sciences.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The agency identified approaches to addressing relevant national issues such as food safety, water quality, waste management, youth and families at risk, food genome initiative, pest management strategic, biobased products, and small farms in the formation of the budget. The measurable goals—and budget necessary to achieve the goals—contribute to achieving the strategic plan of CSREES.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. In collaboration with university partners, we will be able to describe the likely impact on programs and achievement of goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. We do not currently have the capacity; however, we are working to develop the technological capability to measure and report performance throughout the year. We have completed modernization of CRIS, are developing REEIS, and are in the final phases of a three-year project to establish integrated grants tracking and financial management. With university partners, we have developed a National Impact Data base and are updating the form and format of state plans and reports so that they can be submitted and updated through a World Wide Web-based system.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. The technology capable of measuring and reporting program performance is accessible to senior and mid-level managers. We have program analysts who assist in these efforts.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Program related data bases are available for use by program and mid-level managers.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Because of the complexity of the agency budget and its many lines, individual programs were aggregated around five general agency goals for more efficient planning and reporting. While the current account structure has offered a challenge in the way we respond to the requirements of GPRA, we feel we have been successful in using the five goals to give a national focus to programming that is planned and conducted in a dynamic process in the states by partner institutions and grantees.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Although changes in the budget account structure might clarify linkage of dollars to results in a meaningful way, that is not the solution to the challenges CSREES faces in responding to GPRA. This becomes problematic because the CSREES budget structure is based on congressional authorities. Through a partnership with the system of State Agricultural Experiment Stations, land-grant and other colleges and universities, and other public and private research and education organizations, CSREES is USDA's principal link to the university systems for the initiation and development of agricultural research and education programs. Additionally, CSREES is the Federal partner in the Cooperative Extension system, a nationwide non-formal educational network. The challenge CSREES faces is capturing and reporting research and education results of our partners who conduct and deliver activities supported in the CSREES Budget. We are currently engaging our Partners in dialogue to help them understand. This will allow CSREES to be more responsive to the GPRA mandate. In concert with our Partners, we have prepared impact statements highlighting research, education, and extension accomplishments supported by the Federal investment.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee that the present structure?

Answer. CSREES does not propose to modify its budget account structure at this time.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. CSREES does not propose to modify its budget account structure.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise. $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to the goals?

Answer. The dollars associated with the performance goals represent the total amount appropriated for CSREES programs including Federal administration funds retained by the agency to administer the programs. In addition, estimated reimbursable funds and mandatory funds for programs administered by CSREES are included.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. We have no specific regulatory reform measures associated with the development of the agency's performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The strategic plan does mention external factors that could influence goal achievement. While we cannot predict how the factors will influence goal achievement, we attempt to engage customers and stakeholders in a way that would minimize the impact of external factors on programs.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. To anticipate and plan for the influence of external factors, we look to other Federal agencies for mechanisms to coordinate research and education programs. This permits joint identification of issues and the appropriate role of all participants. These steps help us to understand, predict, and respond to the external factors that influence goal achievement.

Question. What impact might external factors have on your resource estimates?

Answer. While we cannot predict how the factors will influence goal achievement, we attempt to engage customers and stakeholders in a way that would help our agency respond to their concerns through the research and education programs that we manage.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. CSREES manages formula funds, special grants, and competitive grants in a way to minimize unnecessary program duplication. All programs/projects are subject to merit and peer review and internal reviews to address this concern.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. The agency performance plan is written to eliminate the overlap and duplication of funding in support of programs.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Agencies should address management challenges and potential duplication. Our agency has included a specific agency goal "Responsive and Effective Management Systems." This includes strategies that improve information management systems and financial management.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. GPRA has challenged our agency to focus on those issues and program areas that are important rather than solely focusing on the funding mechanisms to support programs. With a diverse funding portfolio consisting of formula funds, competitive grants, multi-state, and integrated projects, we should be in a position to respond to issues that are of the greatest national importance.

Question. Will this use increase in the future and if so in what ways?

Answer. We will continue to use GPRA, as well as other accountability strategies, that demonstrate a willingness to respond to national programs of importance.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. We believe that we can with some degree of confidence establish milestones that demonstrate movement towards targets—outputs and outcomes.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The questions raised under GPRA relate to accountability expectations associated with the budget. While we have always responded to questions of accountability, there appears to be a difference in expectations between the agencies and those who review the results of our expectations. As we submit future reports and receive feedback, these differences will be minimized, and we will be on target in reporting outputs and outcomes. For example, in the Performance Plan, we recognize that in our research and education activities, results and performance measures occur over time, and in many instances, over several years. However, when the performance plan is read, the reader expects all performance measures to be reported within one year.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. CSREES is not requesting any waivers of non-statutory administrative requirements.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. CSREES is requesting no relaxation of transfer or programming controls in return for specific accountability commitments.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. We are supporting the revision of the REE mission area strategic plan. However, the agency does not expect to make substantive revisions to our strategic plan.

OFFICE OF BUDGET AND PROGRAM ANALYSIS

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. They link to OBPA's mission and sole program activity by assessing the quality, value, and usefulness of information provided to the Office of the Secretary and policy officials; they link to the strategic goals by measuring specific activities and products that support the provision of useful information.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. OBPA examined activities supported by its single budget account and established goals to evaluate the products and services it provides to its stakeholders while ensuring that they are consistent with Departmental policy and valuable to the decision making process. Quantifying the value of these products was the greatest challenge. This value is dependent, to a large degree, on subjective judgement of those parties OBPA supports. OBPA learned that it could capitalize on existing consultation processes to seek feedback on the utility of its products and services. Additionally, OBPA has learned to use some quantifiable measures under its management initiatives to gauge progress in staff development and training that is integral to successful performance.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Performance measures are associated with OBPA's single account.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification? Do you plan to propose any changes to your account structure for fiscal year 2001? Will you propose any changes to the program activities described under that account structure?

Answer. The performance planning structure can be easily related to OBPA's single account. We are not planning changes to the account structure.

Question. How were performance measures chosen? How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data? Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Measures were chosen based on an analysis of OBPA's mission and role, the products and services it provides, and the resources necessary to maintain high performance. Cost considerations, balanced with OBPA's role, led to a determination that quantifying the utility of its products and services would add little to no value at a high cost. Data will be available in time for the first report.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure or an outcome measure. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. All of OBPA's performance goals under its three strategic goals are of equal value in tracking program results. They represent outcomes that validate and confirm the outputs OBPA produces are useful, valuable, and consistent with Departmental policy—these outcome goals are further supported by performance indicators which predominantly represent outputs. OBPA's quantified performance goal under its management initiative to "maintain or increase the percent of all employees who receive training or other professional development" is worthy of tracking. While the actual percentage is an output, it contributes to the outcome that OBPA maintains a highly-skilled staff. This relates to OBPA's general long-term Management Initiative to "Build a more productive and diverse workforce."

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Realizing that it is difficult to measure the performance of a staff agency such as OBPA, performance goals were developed that would capture the utility of products and services through informal feedback and consultation with key stakeholders.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, OBPA has a staff of highly-skilled managers and support analysts with backgrounds and on-the-job experiences that equip them with the necessary

skills and knowledge to assess the efficiency and effectiveness of the agencies and programs they oversee.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. While OBPA does not directly measure customer satisfaction, the performance goals do seek feedback from its internal customers—the Office of the Secretary and other senior level policy officials—and external customers—OMB and Congress—as to the utility of its products.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 Budget? If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. To ensure that OBPA's goals would be met, OBPA assessed its resource and staffing needs. It determined that the desired level of program performance is becoming increasingly difficult to maintain as staff resources have decreased and program and budget complexity has increased. To meet these needs, OBPA requests an increase for pay costs to maintain staff levels and be in a position to use base funding to provide staff training and professional development. Without this increase, staff resources will be strained and the absorption of pay costs will make it difficult to maintain a high level of performance or to provide for employee development. If a proposed number is changed up or down, OBPA would be able to indicate the likely impact on performance.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results? If so, who has access to the information—senior management only, or mid- and lower-level program managers, too? Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes, senior as well as program managers have easy access to the performance data OBPA maintains on its information systems.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty? Would the linkages be clearer if your budget account structure were modified? If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure? How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. As a staff office, OBPA only has one program activity and does not believe its budget structure represents a significant challenge or that it should be modified.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Because OBPA is a small staff office, it relies on the Office of the Chief Financial Officer (OCFO) for budget and accounting services and expertise. Based on OCFO guidance and additional direction provided by OMB, OBPA links GPRA to the budget process.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting Requirement, and are you using Activity-Based Costing? Will you be able in the future to show this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation? By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities? Will you be able to show us the per-unit cost of each activity and result? To what extent do the dollars associated with any

particular performance goal reflect the full cost of all activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. This issue will be further dealt with as USDA moves to a Department-level approach. At the present time, OBPA does allocate the full cost of activities to its goals.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. OBPA does not issue program regulations and therefore has not put in place any such measures.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate and plan for such influences? What impact might external factors have on your resource estimates?

Answer. External factors OBPA attempts to prepare for include changing policy priorities and funding levels. While the 2000 performance plan does not specifically mention these as external factors with identified response strategies, OBPA does have the processes in place to respond to such challenges. By monitoring policy trends and critical issues in the agricultural sector, OBPA tries to anticipate changing priorities and shift staff resources as appropriate.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify overlap or duplication?

Answer. No, OBPA has clear lines of responsibilities divided among its budget, program analysis, and legislative, regulatory, and automated systems divisions.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Certainly, in a decentralized agency such as USDA, this is a key issue. GPRA planning efforts should address these challenges in the means and strategies sections of agency performance plans as well as through management initiatives.

Question. To what extent has GPRA been used by agency leadership to guide decision making? Will this use increase in the future and if so in what ways?

Answer. As mentioned previously, it has been difficult for staff offices like OBPA to use GPRA as an effective guide. Many of the activities OBPA has described in its plans have always been critical components of its performance. The office has long valued good management practices and effective coordination. As USDA moves to a new strategic planning approach, staff offices will then be able to focus more on how they contribute to overall departmental success.

Question. Future funding decisions will take into consideration actual performance compared to expected or targeted performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Keeping in mind the difficulties associated with measuring the performance of a staff office such as OBPA, the performance measures are adequate.

Question. Are you requesting any waivers on non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. OBPA's 2000 Performance Plan contained changes from previous plans by eliminating indicators that did not contribute to the measurement of program performance, but there is no need for substantive change.

OFFICE OF THE GENERAL COUNSEL

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. OGC's annual performance plan defines our performance goals and measures that are used to assess progress over the coming years. OGC's mission and strategic goal is centered around providing effective legal services in a responsive manner that is consistent with the priorities of the Secretary. In order to respond effectively to those priorities, we have established in our budget activity a request to increase legal services provided to the Department, as well as a goal to improve computer technology and communication tools in order to improve the productivity of employees of the agency

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. OGC only has one strategic goal and one budget activity. As previously stated, the goal centers around making OGC more responsive by ensuring that demands for legal services are prioritized in a manner consistent with the priorities of the Secretary. Our budget is consistent with that goal and those priorities.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Because the budget activity for OGC is requested via a single line item in the budget, we did not encounter any difficulties.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. The performance plan for OGC does link performance measures to its budget.

Question. Does each account have performance measures?

Answer. Performance measures exist for OGC's account for legal services

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. OGC's performance planning structure does not differ from the account and activity structure in the budget justification.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. OGC does not plan to propose ant changes to the account structure for fiscal year 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. We do not anticipate any need to change or modify the program activities under the account structure.

Question. How were performance measures chosen?

Answer. The performance measures were based on the fact that OGC is a staff agency which responds primarily to the needs of the USDA agency clients. Thus, interviews of Under and Assistant Secretaries, as well as other officials, were conducted to determine what aspects of OGC's performance were of most importance.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Interviews and surveys of agency heads were chosen as the most effective and cost-efficient way to measure performance.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Data from the performance surveys are not likely to be available for the first performance report in March 2000.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well"). State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The mission of OGC is to provide legal services necessary to support activities of the USDA. OGC provides legal services primarily to the Secretary of Agriculture and officials at all levels of USDA as well as members of Congress concerning the programs and activities carried out by USDA. All legal services are centralized within OGC and the General Counsel reports directly to the Secretary. The Office of the General Counsel will provide legal services in a responsive manner to USDA officials, executive branch officials and members of Congress. OGC has 6 objectives that support its mission and strategic goal. They are: (1) OGC will provide effective legal services in a responsive manner to support USDA activities, consistent with the priorities established by the Secretary of Agriculture, (2) OGC will review for legal sufficiency, draft regulations submitted by USDA agencies and advise the appropriate USDA officials of the results of the review, (3) OGC will draft and conduct a legal review of documents as requested by USDA and Executive Branch officials, (4) OGC will conduct litigation on behalf of USDA officials and will provide litigation support services to the Department of Justice in cases arising out of USDA programs and activities, (5) OGC will draft legislation and review for legal sufficiency legislative reports and testimony as requested by USDA officials, (6) OGC will provide counseling to USDA officials concerning issues arising out of USDA programs and activities. Each of these objectives is measured by a combina-

tion of customer satisfaction measures (outcome) and output measures of OGC's workload.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The efforts to ensure that the goals in the plan included a significant number of outcome measures were both external and internal. Externally, OGC's interviews of Under and Assistant Secretaries focused on the responsiveness of OGC both quantitatively and qualitatively. The surveys of agencies will also include both measures. Internally, OGC is requiring quarterly workload assessments from its managers. These workload assessments measure both the objective quantifiable number of OGC cases and the complexity and difficulty of the cases. Managers are asked to critically report, in various forums, on the outcome of significant legal efforts throughout OGC.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The managers clearly understand the difference between workload and effectiveness. The range of OGC legal work, from routine and quantity-driven paper filings to complex class actions, requires that the managers assess both output and effectiveness.

Question. What are some examples of customer satisfaction measures that you intend to use? Please indicate examples of both internal and external customers.

Answer. OGC will be using surveys of agency clients and management reports which reflect anecdotal evidence regarding customer satisfaction.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. In order to develop the fiscal year 2001 budget, OGC conducted reviews of our fiscal year 2000 Annual Performance Plan. That review included surveys of agency officials concerning OGC's performance—effective, responsive legal services especially with respect to priority matters—as it relates to the performance indicators in the plan. Throughout these surveys, it became clear that agency officials wanted legal reviews to be provided in a more responsive and effective manner, taking into account established priorities. Therefore, OGC's fiscal year 2001 budget focused on ensuring that resources would be made available to meet the foremost legal service needs of the Department.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Should funding be provided at a level that is greater or less than requested, OGC would be able to indicate the impact the change would have on the level of program performance and the achievement of various goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. The Office of the General Counsel has a Work Tracking System, (WTS) which utilizes Paradox software and which has the capability to track OGC performance indicators on a regular basis.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. The information provided by the WTS is available and easily accessible to all of managers.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Performance-related data is easily accessable.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. OGC's present budget structure does not make it difficult to link dollars to results in a clear and meaningful way.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. N/A.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. N/A.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standard Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial cost Accounting. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing.

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation.

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the programs, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. None.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate and plan for such influences? What impact might external factors have on your resource estimates?

Answer. External factors that could influence goal achievement are increased litigation at all levels, but particularly in the civil rights and environmental sectors. Substantial increases in litigation have a substantial impact on OGC's resources, particularly staffing requirements.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. There are no overlapping functions or program duplication within OGC.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. N/A.

Question. To what extent has GPRA been used by agency leadership to guide decision making? Will this use increase in the future and if so in what ways?

Answer. GPRA has been used to assist both managers in OGC and throughout USDA in planning for how legal resources will be used and prioritized. If the leadership shares a common set of priorities, OGC resources can be used more effectively to meet program goals. Also, a management seminar for OGC managers is planned for late spring which will incorporate the GPRA.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Since the implementation of the WTS we have continued to refine the system to assure its accuracy in meeting management's desires objectives.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. OGC is not requesting any waivers of non-statutory administrative requirements.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. More emphasis should be placed on the substantial rise of litigation throughout OGC, particularly in the civil rights and forest service sectors, and the resources needed to adequately address the increased workload.

OFFICE OF THE CHIEF FINANCIAL OFFICER

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The mission of the Office of the Chief Financial Officer—OCFO—is to shape an environment in which USDA officials have and use high quality financial and performance information to make and implement effective policy, management, stewardship, and program decisions. The OCFO has established three strategic goals to support this mission, identified strategic objectives under each goal, and developed key performance goals to accomplish the objectives.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The performance goals in the Annual Performance Plan are clearly linked to OCFO's strategic goals. These goals link to OCFO's single appropriation account—program activity—and to the Working Capital Fund. The major share of appropriated funds, approximately 85 percent of the total in fiscal year 2000 and fiscal year 2001, support Strategic Goal 1: Promote sound financial management through leadership, policy, and oversight. The remainder supports Strategic Goal 2: Create an infrastructure to carry out financial management policies. In addition, OCFO has reimbursable funds, which support Goal 1 only. Working Capital Funds, provided through client payments for goods and services, support Goal 2 and Goal 3: Operate a financial center that produces timely and reliable information and services. The allocation of funds and FTEs for fiscal year 2000 and fiscal year 2001 are shown in the following table.

[The information follows:]

OCFO RESOURCES BY GOAL AND SOURCE OF FUNDS

[Funds in thousands of dollars]

Funding	Fiscal Year 2000				Fiscal Year 2001			
	Goal 1	Goal 2	Goal 3	All goals	Goal 1	Goal 2	Goal 3	All goals
Appropriated	$4,191	$769	.....	$4,960	$5,462	$1,003	.....	$6,465
FTEs	58	11	.....	69	58	11	.....	69
Reimbursable	$2,130	.....	.....	$2,130	$2,252	.....	.....	$2,252
FTEs	19	.....	.....	19	19	.....	.....	19
Working Capital Fund	.....	$19,531	$172,773	$192,304	.....	$25,160	$176,016	$201,176

OCFO RESOURCES BY GOAL AND SOURCE OF FUNDS—Continued

[Funds in thousands of dollars]

Funding	Fiscal Year 2000				Fiscal Year 2001			
	Goal 1	Goal 2	Goal 3	All goals	Goal 1	Goal 2	Goal 3	All goals
FTEs	.....	44	1,626	1,670	.....	44	1,626	1,670
Total	$6,321	$20,300	$172,773	$199,394	$7,714	$26,163	$176,016	$209,893
FTEs	77	55	1,626	1,758	77	55	1,626	1,758

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Our organizational structure did not reflect the strategic plan. We have taken the necessary steps to restructure the organization so the staff resources will be better positioned to meet the strategic plan's goals.

Question. Does the Agency's Performance Plan link performance measures to its budget?

Answer. Yes, it does. Resource increases to accomplish the budget year performance targets are discussed in the Annual Performance Plan with respect to means and strategies for accomplishing the performance goals. Total resource requirements in the plan tie directly to the budget request.

Question. Does each account have performance measures?

Answer. Our Plan has performance measures for both our single appropriation account and the Departmental Working Capital Fund. The performance measures for the direct appropriation are primarily linked to Goal 1. Those for the Departmental Working Capital Fund are primarily linked to Goals 2 and 3.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Currently, performance planning occurs along organization lines, mainly within each Division, and resources are allocated along organizational lines. Because the budget also is developed along organizational lines, plans and resources feed directly into the budget activity structure.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. At this time, we do not anticipate any.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No, not at this time.

Question. How were performance measures chosen?

Answer. After careful review of the OCFO's primary business lines, we identified those business outcomes that would best illustrate USDA's progress in financial management.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Our performance goals are based primarily on information we already have available or expect to have available for performance reports. As we improve our plan and report, we must achieve greater specificity in our plan, emphasize quality in financial management data, and move toward outcome-oriented performance measures. We expect these changes to be reflected in our revised Strategic Plan and subsequent Annual Performance Plans.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No, it does not. Our current measures can be quantified.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. We recommend that you track performance goals related to achieving an unqualified audit opinion on the USDA consolidated financial statements, thus improving the quality of USDA financial information; reducing the ratio of collectable delinquencies; implementing the Foundation Financial Information System; and increasing the number of clients currently using the NFC payroll facilities.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. All four annual goals include elements of both measures. For example, if OCFO issues a policy, that policy reflects and output. The Department achieves

an outcome if this policy results in better decision-making that reduces costs or improves services.

Question. State the long-term—fiscal year 2003—general goal and objective from the agency Strategic Plan to which the annual goal is linked?

Answer. This information has been incorporated into the following table.

[The information follows:]

Strategic goal	Strategic objective	Key performance goal
1. Promote sound financial management through leadership, policy, and oversight.	1.1. Achieve an unqualified audit opinion on USDA's consolidated financial statements..	Unqualified audit opinion on the USDA consolidated financial statements for the prior fiscal year.
	1.3. Reduce outstanding delinquent debts to USDA and limit the increase in number of new delinquencies, and increase use of Electronic Funds Transfer (EFT) for payment.	Improve the ratio of collectable delinquencies to total receivables.
2. Create an infrastructure to carry out financial management policies.	2.1. Implement an integrated financial management information system for USDA.	Implement the Foundation Financial Information System (FFIS)
3. Operate a financial center that produces timely and reliable information, and services..	3.2. Expand the NFC customer base to increase volume and reduce unit cost..	Increase in number of newly implemented payroll accounts (number of new employees)

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The OCFO Annual Performance Plan is realistic and reflects current priorities, given the financial management challenges facing the Department. As OCFO gains experience with GPRA and strategic planning, and, as an integrated financial management system is established throughout USDA, we expect we will shift to even more outcome oriented measures, so we can better establish how well we are performing. A better financial infrastructure, complete with compliant systems and sound business practices, will lead to more outcome-oriented measures.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Our managers do understand differences between outputs and outcomes. OCFO managers have had GPRA training and we have facilitated discussions on strategic planning and GPRA.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Measures of customer satisfaction have not yet been established for OCFO, but we are developing several measurements, particularly with respect to the National Finance Center and the multiple administrative services we provide there.

Question. How were the measured goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The fiscal year 2000 Plan describes what can be accomplished with current resources. Using that information, we established our priorities, the desired goals and requisite performance level needed for fiscal year 2001, and identified the additional resources required to achieve desired performance. Many of the initiatives were proposed in response to deficiencies brought to our attention by the General Accounting Office, the Inspector General, and central guidance agencies. The need for an additional $1.5 million is justified in the Explanatory Notes for fiscal year 2001.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and achievement of various goals?

Answer. Yes, we will. The performance improvements identified for fiscal year 2001 above the fiscal year 2000 level shown in Goal 1 are clearly quantified, and we would be able to explain the impact of any significant change to the request.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Based on our current measures, we have the technological capability; however, we are discovering that there is a need to make refinements in the level of detail reported and how it is reported.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Currently, information is available to management at varying levels of the organization depending on the measure. We are reviewing our internal planning and reporting processes with a view toward making them more inclusive, available to all management levels, and used in the every-day planning and decision making process.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Based on our current measures, we are able to compile the necessary data from several systems. This does, however, require cooperation from our client organizations, particularly with respect to our debt performance measures.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. No, we have not. Our budget structure is relatively straight forward, which makes the necessary linkages easy to accomplish.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No, our budget structure is adequate.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. We do not believe that a modification is necessary.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We believe that the current structure provides sufficient accountability for program performance.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions: and (2) how to allocate agency resources to perform theses functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. The number of personnel currently assigned to cost accounting and their respective levels of expertise vary widely from one agency to another. However, we are making progress. Several agencies have implemented cost accounting techniques, including Activity-Based Costing—ABC, in their financial management activities. The Animal and Plant Health Inspection Service, the Food Safety Inspection Service, Agricultural Research Service, Office of Inspector General, and the Farm Service Agency each have implemented ABC in their operations and currently use it for performance measurement and reporting, as appropriate. In addition, the Office of Chief Financial Officer has begun implementing ABC at the National Finance Center and plans to use it for performance measurements in selected situations.

OCFO recognizes the need to lead a Department-wide effort to enhance its cost accounting expertise and has included $240,000 in its fiscal year 2001 President's Budget request to provide such leadership. In addition, the OCFO's on-going Professional Development Program requires its candidates to complete two courses on cost accounting, along with several other financial management courses. This professional development program and the specific cost accounting training will contribute considerably to enhancing USDA's reporting capabilities under GPRA. Currently, all USDA agencies have linked budget program activities to strategic goals, with some linked down to performance goals. Ultimately, with the additional fiscal year 2001 resources and a better trained workforce, USDA will continue to implement improvements in cost accounting.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standard Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each one of the activities of an agency. What is the status of your

agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing.

Answer. USDA still needs to make progress to fully implement FASAB's cost accounting standards. To advance this initiative we identified responsibility segments, for which we provide financial statement reporting, employing full cost techniques that include allocation of unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate to allocate. Currently USDA uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation.

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all of our agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. We are moving with a very aggressive schedule to implement the remaining agencies by fiscal year 2003. As we improve our basic accounting and reporting processes, we will be able to better identify activities and outputs for unit costing. At that time, we will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the programs, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As we implement activity based costing, we will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Our approach will be to capture the full cost of doing business, capturing overhead and all other applicable costs associate with performance measures and goals.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. There are no regulatory reform measures involved in OCFO's Annual Performance Plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievements?

Answer. With respect to the direct appropriations, we believe that the performance targets set in our Plan are realistic and achievable as long as OCFO receives the resources requested for fiscal year 2001. With respect to the Departmental Working Capital Fund, our Revised fiscal year 2000 and fiscal year 2001 Annual Performance Plan contains a brief discussion of the need for continued customer support of the systems and services provided by the National Finance Center—NFC. NFC provides a variety of services to USDA and non-USDA customers. To remain competitive, NFC must continually improve the quality and the cost-effectiveness of services to those customers. NFC's success depends on its ability to retain current customers and the need to attract new ones. Consequently, NFC is currently re-engineering its business processes to improve its operations and is aggressively pursuing new customers. Because customer satisfaction and an increased customer base are so critical to the continued viability of NFC, OCFO has developed performance goals addressing these two areas.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. OCFO has identified the following actions to mitigate the impact of external factors: (1) The Secretary directed the Chief Financial Officer, in conjunction with the Chief Information Officer and the Assistant Secretary for Administration, to upgrade and modernize USDA's administrative systems in a corporate environment to meet the customers' needs. This process will assure the quality and integrity of information in USDA's Foundation Financial Information System, as well as mixed systems in USDA, provide the corporate reporting required to better manage

USDA, and improve corporate decision making. (2) The National Finance Center—NFC—is conducting a survey to assess the level of customer satisfaction with the services it provides to its USDA and non-USDA customers. This survey will provide important information on customer perceptions about the quality of NFC's existing services, desired services not currently performed, and current services that might potentially be discontinued. This information will improve our ability to assign priorities and target resources to meet customer needs. (3) NFC plans to improve its operations through implementation of the Capability Maturity Model—CMM—Level II throughout NFC by fiscal year 2003. CMM is part of a discipline for increasing product quality and team productivity, or reducing development time that helps an organization improve its software development and management activities. CMM serves as a standard for software engineering and management practices and is essential to support the increasing maturity of NFC's software engineering capabilities. (4) NFC will apply the principles of "Activity Based Costing" to its operations to improve its cost estimating techniques and to identify operating efficiencies.

Question. What impact might external factors have on your resource estimates?

Answer. Improved business processes can make NFC operations more efficient, which will reduce the unit cost of providing services. Although savings to customers may be difficult to quantify, low costs makes these services more attractive to current and potential customers.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. Our mission is well-defined, and we do not believe there is duplication or overlapping functions. Interestingly enough, we did find structural problems in our performance objectives that gave the appearance of overlap and duplication. We have modified and streamlined the strategic objectives that appear in the Revised fiscal year 2000 Annual Performance Plan to eliminate possible confusion.

Question. If so, does the Performance Plan identify the overlap or duplication.

Answer. Our Plan contains no overlapping functions or program duplication.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. As the lead for implementation of GPRA in USDA, we believe that it is essential that these issues are addressed in agency Annual Performance Plans. Whether these issues are addressed in the general discussion of annual performance goals, in the means and strategies for accomplishing performance goals, or as external factors will depend on the agency and its circumstances. We are in the process of developing a Department-wide Strategic Planning process for USDA, and this is one of the issues that will be addressed as part of that process.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. GPRA has made us aware that we need to utilize the principles of strategic planning more effectively in our daily operations and our decision making processes. As we begin development of the new strategic plan and the fiscal year 2002 Annual Performance Plan, we will take steps to integrate GPRA more fully into our program management. We intend to establish a working group to institutionalize strategic planning within OCFO. This group will concentrate on ensuring the proper linkages are made between resources, performance, and outcomes. They will ensure that lessons learned in working with our customers and stakeholders are incorporated into our management processes.

Question. Will this use increase in the future and if so in what ways?

Answer. We expect that GPRA will become standard practice within OCFO in the future. We will be reviewing our planning processes in the very near future and will be better able to describe how we will apply GPRA at the conclusion of that review.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The performance measures in the fiscal year 2000 Annual Performance Plan include elements of output and outcome measures.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. There is a learning curve associated with GPRA implementation, but we are making progress. We are trying to ensure that staff at all levels are properly trained and that the proper tools are available to our managers to link costs to performance. We also are attempting to ensure that GPRA principles are applied in our daily operations.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No, we are not requesting waivers of non-statutory administrative requirements.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. We are not requesting relaxation of transfer or reprogramming controls.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997.

Answer. We have gained substantial insight into GPRA implementation since the initial strategic plan was issued and expect that there will be substantive revisions in our strategic plan and qualitative improvements in our Annual Performance Plans and Reports.

FARM SERVICE AGENCY

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The annual performance goals measure incremental achievement of the agency's strategic goals and, ultimately, the agency's mission. Annual performance goals were developed for, and are directly linked to, the objectives for each strategic goal. Furthermore, the Annual Performance Plan reflects the program activities in the agency's budget request, summarized on a GPRA basis, including FTEs and funding, associated with achievement of annual performance goals.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. As part of the budget process, an fiscal year 2001 Annual Performance Plan was developed and submitted which contained performance goals relating to the agency's strategic plan. The Annual Performance Plan includes all program activities in the agency's budget, and reflects the program activities associated with identified performance goals. Both the Annual Performance Plan and the fiscal year 2001 budget relate the need for resources to achievement of program performance goals. This linkage also enables decision-makers to assess the FTEs and funding requirements of the strategic plan goal encompassing the program activities to the achievement of annual performance goals.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Difficulties associated with establishing this linkage included developing outcome measures for each of the major program activities included in the budget, while maintaining an Annual Performance Plan that is informative and concise; and, establishing quantitative performance goals for program activities to show a definite cause and effect relationship between the funding requested for program activities and the expected outcome.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes. Performance measures were incorporated in budget material to indicate the performance level needed to achieve the goals outlined in the 5-year strategic plan and annualized in the performance plan.

Question. Does each account have performance measures?

Answer. Performance measures were developed for each major FSA budget account. Performance measures were developed for the strategic goals and annual performance goals and then linked to budget accounts. Budget accounts were aggregated to tie in with strategic goals.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The performance planning structure was aligned with the structure reflected in the Strategic Plan. As such, annual performance goals, measures, indicators, and baselines were developed for each of the agency's strategic goals and management initiatives. The budget account structure, however, differs from the performance planning structure. The performance planning structure encompasses both program and salaries and expenses funding requirements, whereas the budget account structure is based on individual program funds, broken out by major activity, with a separate administrative expense account that consolidates all administrative resources needed to carry out every agency program and activity.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. Presently, there are no plans to change the FSA account structure for fiscal year 2001, since there is linkage between the account and activity structure in the budget and GPRA program activities.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. We do not plan to propose any changes to the program activities under the account structure.

Question. How were performance measures chosen?

Answer. Agency representatives within their respective areas of responsibilities developed performance measures. The FSA Strategic Management and Corporate Operations Staff worked closely with agency representatives to ensure performance measures captured significant, vital operations. This ongoing interaction continues as the agency strives to develop a greater number of outcome measures reflecting results, or impact, of agency programs.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance?

Answer. In many instances, data collection systems and verification methods were already established prior to the development of performance measures. As such, managers were able to utilize existing technology, processes, and resources to collect and evaluate data. Instances in which data collection systems and/or verification methods were not available required consideration of several factors to evaluate the cost versus benefit of data collection and verification methods. Factors considered included actual/anticipated changes within program and administrative operations, available technology and funding, internal and external risk factors, and the degree to which FSA operations are capable of influencing performance results.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. As reflected in the Annual Performance Plan, there are a limited number of performance measures for which data are not available for inclusion in the fiscal year 1999 Annual Performance Report, which is due in March 2000. Instances in which data are not available are identified in the Annual Performance Report, accompanied by an explanation supporting the reason data is unavailable and anticipated timeframes to obtain the data. In lieu of final numbers, the report contains preliminary data.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

—For each key annual goal, indicate whether or not you consider it to be an output measure ("how much") or an outcome measure ("how well").

—State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The agency was diligent in ensuring that the most critical performance goals were included in the annual performance plan. We recommend that the subcommittee track all of the annual performance goals in the fiscal year 2000 Annual Performance Plan. We feel that the set of performance goals/measures established for Farm Loan programs are particularly helpful for tracking program performance (see the following table).

Strategic foal	Objectives	Performance goals	Type
Assist eligible individuals and families in becoming successful farmers and ranchers.	Improve the economic viability of farmers and ranchers.	5. Reduce direct loan delinquencies	Intermediateoutcomes.
		6. Reduce first year delinquency rate on new loans and restructured loans.	
		7. Increase the percentage of guaranteed loans made to direct borrowers.	
	Reduce losses in loan programs	8. Reduce losses on direct loans	Intermediateoutcomes.
		9. Maintain the guaranteed loan loss rate at or below 2 percent.	
	Respond to loan making and servicing requests in a timely manner.	10. Reduce direct and guaranteed loan processing times.	Intermediateoutcomes.
		11. Process primary loan servicing requests within 60 days.	
	Maximize financial and technical assistance to under served groups to aid them in establishing and maintaining profitable farming operations.	12. Increase the number of loans to socially disadvantaged farmers/ranchers.	Intermediateoutcome.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. During the development of the fiscal year 2000 Annual Performance Plan, agency managers were reminded of the distinction between output and outcome measures and were encouraged, to the extent possible, to develop outcome measures in their area of responsibility. Currently, the majority of the performance measures in the Annual Performance Plan are outputs rather than outcomes. Furthermore, output measures are often most appropriate for evaluating achievement of annual performance goals, because it often takes multiple years for outcomes to be achieved and evaluated. The Strategic Management and Corporate Operations Staff, however, will continue working with program managers to develop outcome measures, where applicable.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Agency program managers well understand the distinction between output and outcome measures. However, developing outcome measures is often not feasible for interim timeframes, such as the short-term timeframes encompassed in Annual Performance Plans. In fiscal year 2000, FSA will be revising its strategic plan, emphasizing the identification and development of outcome (including intermediate outcome) measures for objectives and strategic goals.

Question. What are some examples of customer satisfaction measures that you intend to use? Please use examples of both internal and external customers.

Answer. As indicated above, one of the agency priorities in fiscal year 2000 is the development of improved performance measures, particularly the use of intermediate outcomes to show how our programs are impacting our customers. FSA conducted an extensive customer satisfaction survey, in conjunction with our USDA service center partner agencies, in fiscal year 1999. The revised strategic plan and subsequent annual performance plans will contain measures of overall customer satisfaction, satisfaction with program delivery timeliness, and effectiveness of program delivery efforts. The fiscal year 1999 survey results will be used to develop our performance baselines. Additionally, each of these measures can be disaggregated by major program as well as by minority and non-minority customers.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The measurable goals in the fiscal year 2000 Annual Performance Plan served as a basis for establishing performance goals for fiscal year 2001. However, the achievement or non-achievement of specific performance goals during fiscal year 2000 was not the primary factor in determining the level of funding requested in the fiscal year 2001 budget. Funding proposals relative to the fiscal year 2001 budget were primarily based on agency funding priorities associated with carrying our the agency's mission, and were greatly influenced by the current economic crisis in production agriculture.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. The ability to assess the impact of proposed budget changes on targeted performance will vary among program areas depending on the extent and nature of proposed funding changes. For instance, the ability to effectively administer farm loan programs is dependent on adequate administrative funding levels, and the ability to improve the economic viability of farmers is dependent on appropriated loan levels. Farm loan program personnel can immediately assess the impact on performance and the achievement of various goals if proposed budget numbers are changed, up or down.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. In most instances, FSA will be able to measure and evaluate program performance throughout the year. However, data will not be available for all measures included in the fiscal year 2000 Annual Performance Plan until new software and/or systems are in place.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Performance data is available to all levels of management in the agency.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes, we are able to gain access easily to various performance-related data.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. No, we have not experienced that difficulty. The program activities in the Annual Performance Plan are linked to the budget. As a result, performance goals have been developed for each program activity in the Annual Performance Plan that define the level of expected performance.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Since there is linkage between the budget and the activities in the Annual Performance Plan, we believe, at this time, there is no need to modify the agency's budget account structure.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. We do not propose to modify the budget structure because linkage exists between the Annual Performance Plan and the budget.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. At the present time, we do not think the modification of this agency's budget account structure would necessarily strengthen accountability for program performance.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. The FSA implemented an activity-based costing pilot project in 1997 to capture the full cost of administrative services by using the "Activity-Based Costing" process. During the pilot stage of the project, FSA used the support of a private contractor. Presently, the agency has three people with one year's experience in cost accounting. This year FSA will add two additional staff who have limited experience.

With respect to linkage, the program activities in the agency's fiscal year 2001 budget request are summarized on a GPRA basis, including FTE staffing and funding associated with achievement of annual performance goals. FSA funding and staff year estimates for the Salaries and Expenses Account support the four GPRA program goals in the FSA Annual Performance Plan. The funding and staff year estimates reflect a cost allocation of agency resources based on reviews of county office workday estimates and functional responsibilities identified to FSA organizations which are then prorated by Program Goal to derive Federal funding and FTE's. However, the Farm Loan program goal estimates are taken directly from the Agricultural Credit Insurance Fund budget estimates. Within each Program Goal, funding for implementing Management Initiatives is included, except for State Mediation Grants, which is separately appropriated.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all Federal agencies are required to have a system of Managerial Cost Accounting.

The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

Question. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. The FSA has been using the "Activity-Based Costing" (ABC) process to capture the full cost of administrative services since 1997. FSA has continued this process each year since the inception of the pilot. FSA has successfully used the ABC methodology to substantiate reimbursable agreements with its customers and to determine the administrative costs to support the Farm Service Agency (FSA) and Commodity Credit Corporation (CCC). FSA/CCC's future plans include an activity-based costing pilot project within a major program area and to expand the project to other FSA/CCC programs in upcoming years. FSA/CCC has identified responsibility segments for financial statement reporting.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. We are presently determining the full cost of our responsible segments which includes multiple programs. In the future we plan on capturing the full cost of each program and for certain programs the full cost of each activity. The level to which we will drill down into the activities will be determined by the measurements required to evaluate the performance against the annual performance plan and management's need for information to control cost, allocate resources and measure performance against goals.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. If the full cost of each activity for a program is captured, you will know the cost of administering the program by activity plus the program expenses paid to the farmers. It will also provide information on activities which consume the most cost, resources and unit cost and volume.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. Based on ABC results for administrative services, per unit costs and results were reflected for critical activities. Although the ABC process has not yet been implemented agency-wide, we anticipate that this type data will be available for other areas of agency operations.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Performance goals in the agency's budgets are not reflective of the full costs of all associated activities performed in support of that goal. However, performance goals and program activities in the budget are linked to the four agency goals in the annual performance plan, which are presented on a full cost basis. For example, Goal 1, Farm Programs, includes the salaries and expenses needed to support that goal. Agency performance goals for specific program activities in the annual performance plan are not reflective of the full costs. A basis for determining full cost at this level has not been developed.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. We have not put any significant regulatory reform measures in place in conjunction with the development of the agency's performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate, and plan for such influences?

Answer. The discussion of external factors is primarily reflected in FSA's Strategic Plan. The measures in the Annual Performance Plan are linked to the goals, objectives, and measures in the Strategic Plan. Therefore, the same external factors identified in the Strategic Plan will influence achievement of annual performance goals. However, there are instances where the performance plan does specifically address external factors and FSA's efforts to mitigate their impact.

Question. What impact might external factors have on your resource estimates?

Answer. External factors, such as unexpected changes in the agricultural economy, make it difficult to use past performance goals as reliable indicators of the level of resources needed in future years to achieve the agency's mission. External factors, such as policy debates, also make it extremely difficult to adequately request the level of resources needed to address critical agency priorities.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. The agency did not identify overlapping functions or program duplication, within the agency, as a result of the performance planning process. However, the discussion of partnerships and coordination in the FSA Strategic Plan reflects government and private entities with which FSA administers complementary program functions. The same partnerships and coordination also apply to the program activities included in the Annual Performance Plan.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Agencies should address the most significant management challenges in GPRA plans. However, where possible, the challenges should be included within the context of improving program performance. Differing viewpoints among reviewers

and users of GPRA plans as to which "management challenges" should be included in plans make it difficult to address these issues in the plans.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. To date, strategic plan usage by agency senior management has been limited.

Question. Will this use increase in the future and if so in what ways?

Answer. We believe that as the planning process becomes more ingrained in the agency culture, and as the quality of the planning documents improve, their usefulness for high level decision making will increase.

Question. Future funding decisions will take into consideration actual performance compared to expected or targeted performance. Given that, to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The agency has established measures enabling FSA to compare targeted to actual performance. However, the planning process is constantly evolving. The agency is continuing efforts to develop better measures of program performance. As newer, improved performance measures are developed and implemented, sufficient time will be required to facilitate a comparison between targeted and actual performance, and for establishment of trend data.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The primary reason for requesting funding is to achieve expected or targeted performance, given certain assumptions. However, the uncertainty relative to expected changes in the agricultural economy, which can not be easily quantified, has an impact on what can be achieved with available as well as requested resources. Given this reality, future funding requests will continue to reflect agency funding priorities with consideration given to performance in the prior year relative to expected or targeted performance. Although data available from actual performance will be a factor in deciding on resources estimates in future years, it is and will continue to be only one of many factors considered in determining appropriate funding levels, because much of the agency's workload is imposed by external sources; i.e., the volatile farm economy and resulting mandatory producer assistance legislation enacted in response to downturns.

Question. Are you requesting any waivers on non-statutory administrative requirements: Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. We are not requesting any waivers on non-statutory administrative requirements.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. FSA's strategic plan will be revised in fiscal year 2000 to reflect additional programs implemented, revisions to existing programs, and to improve on the overall content of the fiscal year 1997 plan. One of the ways FSA intends to improve the plan is by reducing the overall number of strategic goals, objectives, and the volume of performance measures so that only the most important items are represented in the agency-wide strategic plan. Secondly, we plan to incorporate, where feasible, the existing "Management Initiatives" into the major program goals. Currently, major activities, such as outreach, are shown separately from the program goals to which they are intricately linked. Another area we intend to incorporate into the program goals is information technology initiatives, better explaining the relationship between IT investments, program results, and improved customer satisfaction. Finally, we believe that a more concise plan will be a more useful tool for managers to guide the agency.

RISK MANAGEMENT AGENCY

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. RMA's performance goals were derived directly from the Agency's objectives contained in its strategic plan. RMA documented its business processes (life cycles) in line with its strategic planning efforts. These business processes contain the activities that support the achievement of RMA's performance goals. RMA is currently working to establish the capability to more directly link program activities, performance goals, and resource requirements with the strategic plan components.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The activities described in the budget justification support the one general goal "To strengthen the safety net for agricultural producers through sound risk management programs and education. The budget justification links the program activities with funding for the desired results for program delivery. Performance goals and indicators in the Agency's Annual Performance plan gauge progress toward achieving the long-term general goal and objectives found in its strategic plan.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. RMA's major difficulty at the moment is instituting better cost accounting.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes, and we are improving in this regard. The performance measures specifically link resources to goals, as many of the goals are financial. The Agency also uses the approach of establishing annual performance goals and indicators that gauge progress toward achieving the long-term general goal and objectives found in its strategic plan. As a result, all resources directly support the general goal of the Agency, "To strengthen the safety net for agricultural producers through sound risk management programs and education."

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. RMA's performance planning structure and the account and activity structure in its budget do differ significantly in format and structure. However, RMA's budget estimates and justifications do include linkage to the performance goals and indicators found in the Annual Performance Plan as well as goals and objectives found in the agency strategic plan. This linkage can be found throughout the agency's fiscal year 2001 Explanatory Notes package and 2000 and 2001 Annual Performance Plan. In addition, it is important to note that RMA's performance plan is consistent with the Agency strategic plan and fiscal year 2001 budget request, as required. The following is a description of both the performance planning structure and program activities found in RMA's budget request:

—The performance planning structure in the annual plan outlines the performance goals and indicators that RMA would like to accomplish in the given fiscal year. This structure is very similar to that found in RMA's 5-year strategic plan which focuses on the mission, goal and objective of the agency.

—RMA's budget account and activity structure currently includes two accounts, the mandatory Federal Crop Insurance Corporation Fund (FCIC) and the discretionary Administrative and Operating Expense Account. The FCIC Fund is further broken out by the following program activities: premium subsidy; delivery expenses; research and development reform costs; and apportionment for excess losses. For fiscal year 2001, the A&O account includes only one program activity, salaries and expenses.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. At the present time, RMA does not propose any changes to the budget account structure for fiscal year 2001. However, changes may be necessary if legislation is enacted to reform the Crop Insurance Program.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. Not at this time.

Question. How were performance measures chosen?

Answer. RMA documented the life cycles for its core business processes. These life cycles contained the activities as well as specific inputs and outputs to our process steps. Out of this process, RMA selected measures that we felt would best allow RMA management to determine agency results in line with the components defined in the strategic plan.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. RMA's current measures are primarily based on activity, not on results. RMA continues to have an interest in collecting performance measures that are based on results (outcomes). But, to do so would require considerable resources and additional funding.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Yes. We had difficulty in gauging farmers' use and knowledge of risk management tools. The collection procedures need to be improved to assess information regarding the number of producers attending risk management education

courses (RME) and the number of RME sessions being coordinated or facilitated. We are reviewing steps necessary to improve the collection process for reporting.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. RMA recommends that its performance measures that are outcome based be used to determine applicable program results. RMA's output based measures are intended to help support or determine additional specifics regarding the outcome measures. RMA intends to conduct quarterly reviews of its available measures and determine their appropriateness as management tools. RMA fully expects adjustments to be made to its performance measures as experience is gained in being a results-based Agency, and new measures are developed.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. RMA's strategic plan includes outcome measures for each objective and management initiative in support of our strategic goal. The intent was to include at least one outcome measure for each objective and management initiative. RMA recognizes that work needs to be done to establish or refine these measures. RMA experience with these measures should increase the maturity and potential benefits that can be derived for the Agency.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. These measures (i.e., output and outcomes) were explained and briefed to the Agency's senior management. Discussions and comments were used to clarify and/or adjust both kinds of measures. RMA intends to ensure program manager understanding of all GPRA concepts as implementation progresses.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. RMA has created two projects that will institutionalize the development and administration of surveys to internal and external customers. RMA is currently in the definition stage working to determine: what data elements are needed; what specific questions should be asked; who should be asked; where are they; what vehicle/instrument should be used; what should be the frequency of data collection; and, at what cost. Examples of internal customers include: employees, unions and other agencies. Examples of external customers include: private reinsured companies and agricultural producers.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. Actually, the fiscal year 2001 budget process began prior to the developmental stage of RMA's Annual Performance Plan. However, throughout the budget preparation process, RMA was able to incorporate portions of its annual plan throughout the fiscal year 2001 Explanatory Notes. For example, justifications in the budget request link to the annual and strategic plans and support the goals within those plans. The Purpose Statement and Status of Programs sections of the justification outline the contents of the annual plan and reflect the resources required to accomplish those goals and measures. RMA feels that together, these two tools will provide clear direction to manage RMA's activities for fiscal year 2001. In addition, the annual plan and budget documents clearly define the Agency's commitment to meet it's goals.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. If a budget number is changed RMA can determine the likely impact the change would have on program performance and goals. For example, in fiscal year 2000, the FCIC Insurance Fund was apportioned approximately $953.8 million less than was needed to cover estimated program expenses because FCIC's unexpended appropriations carried forward from prior fiscal years had increased. This increase was due to excellent insurance experience during those prior fiscal years. This did substantially decrease the FCIC Insurance Fund reserve that would have been available to cover losses when FCIC experiences loss ratios which are higher than budgeted loss ratios.

In the future if FCIC's Insurance Fund is apportioned insufficient funds to cover estimated expenses and the FCIC experienced severe losses, the FCIC would have to rely on Treasury to immediately provide funds which the FCIC can use to cover these losses or the FCIC would not have the funds to reimburse the reinsured companies (ultimately producers) for losses. The FCIC Act does provide for FCIC to re-

ceive such sums as necessary to cover the mandatory expenses of the FCIC. In addition, shortages in funding would impact the FCIC's ability to timely reimburse the reinsured companies for administrative and operating subsidy per the Standard Reinsurance Agreement.

If appropriations to the Administrative and Operating Fund (A&O Fund) were cut, RMA would not have sufficient funding to meet all of the program goals. For example, program expansion and pilot programs may not be initiated and producers may not be made aware of various risk management alternatives through educational seminars. In addition, program oversight would be reduced. One of the more difficult items to budget for in the A&O Fund is the computer costs which cover costs to edit data which is transmitted by the reinsured companies and additional computer costs due to program changes made during the current fiscal year. Also, the volume of data could increase substantially and one cannot budget two years in advance to cover these type of costs. It would be very advantageous if computer costs could be paid for with mandatory rather than discretionary funding. If RMA's computer funding is cut, RMA would not be able to edit and validate data being submitted in order to reimburse companies for losses and expenses.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes, but it is limited. Budget limitations have hindered efforts to make access to data more readily available. Budget constraints have also impacted RMA's ability to move forward on Pattern Recognition efforts. Pattern recognition systems will be initiated (fiscal year 2001) to facilitate trend analysis studies, enabling the Agency to timely identify performance strengths and deficiencies and seize opportunities for improvement. RMA is working to identify the technological elements necessary to review, analyze, and make adjustments in priorities or process steps to ensure achievement of our performance goals.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Information generated from systems are available to lower-level program managers as well as senior management. For example, the Summary of Business Report which contains detailed crop insurance data is available to all RMA personnel and is maintained on RMA's web-site.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes, for some aspects. For example, our Research and Development Office utilizes two integrated data processing systems to receive and validate data transmitted by reinsured companies. Data validated by RMA's Data Acceptance System (DAS) and Reinsurance Accounting System (RAS) are used to generate all accounting reports. Together they provide RMA with a mechanism to ensure that data received is accurate and reliable to make management decisions.

The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Question. Have you faced such difficulty?

Answer. Yes. RMA has faced difficulties in linking dollars to results under the current budget structure, especially in the mandatory FCIC Fund. For example, it was very difficult to produce quantifiable and measurable performance goals for program activities such as delivery expenses paid to reinsured companies. RMA will continue to make improvements in establishing performance measures to capture the performance of services provided.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. RMA, to date, has not thoroughly analyzed the impacts or potential results of changing the budget account structure for either the discretionary A&O account or the mandatory FCIC Fund.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. To effectively link dollars to results, RMA will need to modify its present budget account structure. RMA will continue to work with the Office of Management and Budget to improve its cost accounting system.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. RMA has not yet conducted any analyses to determine an appropriate account structure. Therefore, it is unclear how any modifications would strengthen accountability.

Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions.

Question. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting.

The clearly preferred methodology for a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

Question. What is the status of your agency's implementation of the Management Cost Accounting requirements, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permits us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Not yet, our overhead is funded from discretionary dollars, not the mandatory account as is the FCIC fund. Thus, we tend to view them separately. We maintain program cost data by cost centers and object class, not by crops or counties. The costs are then allocated to the performance goals.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. There have not been any regulatory reform measures put into place specifically for RMA Compliance during the past year.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. In our strategic plan, RMA identified several key external factors that could significantly affect progress in our efforts to achieve our goal.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. RMA conducted Business Process Reengineering (BPR) that allowed for the opportunity to address some of these factors. The reengineering plan focused on targeted oversight reviews, shared program integrity roles, and better communications.

Question. What impact might external factors have on your resources estimates?

Answer. External factors can have a significant impact on RMA resource estimates. For example, the level and degree of private sector involvement in risk management activities will require RMA to adjust its current expenditures to meet variations in costs.

More importantly, Senate and House conferees are now considering major crop insurance reform legislation. RMA management has requested that Congress provide full funding for the implementation of this law, if it is passed. Substantial changes are planned for the development of crop insurance policies for specialty crops and under served products, geographic areas, and producers. Other extensive changes would include the training of FSA "fact finding" case workers, the creation of a new project to reconcile FSA and RMA data, and the expansion of IT capabilities to support the new structure.

In the event the proposed legislation is not enacted, current RMA funds will be insufficient to support its current and approved programs. RMA recently imposed a moratorium on product expansion and development because of a shortage of funds: In the past 3 years, its programs have tripled, while its funding has not appreciably changed. RMA needs to finance new crop program development, maintain the current program, expand IT capabilities that will make it possible for farmers to interact electronically with the agency and insurance companies, and expand the agency's compliance division for the improved maintenance of program integrity.

For overall Agency function, the enhancement of RMA's ability to enter into contract agreements for the development of new insurance products to accommodate specialty crops, and for the expansion of the Compliance Division's error rate and data mining capabilities, is an absolute necessity. If not done, the payment of fees to other agencies that act on RMA's behalf in contracting matters will require the use of extensive capital originally intended for more useful purposes.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. The performance planning process did not identify any significant duplicative functional or process steps.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. The Annual Performance Plans should include appropriate discussion of management challenges. Agencies should coordinate crosscutting programs so that duplication does not occur in the plans.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. In January of last year, the Risk Management Agency initiated a series of quarterly executive meetings for the purpose of discussing and improving Agency performance. At the first meeting, six macro performance measures were identified: (1) loss ratio, (2) market information, (3) financial audit, (4) public awareness, (5) program integrity, and (6) administrative costs. These measures were developed in consultation with the private insurance sector. At the second meeting, these macro-level indicators were merged into our operational strategy to ensure effective and efficient progress in achieving performance targets.

Question. Will this increase in the future and if so in what ways?

Answer. Yes, RMA will continue to integrate GPRA in the managerial decision making process. We will continue to examine our strengths and weaknesses through program evaluations, audits, and conducting quarterly executive meetings. Congress can encourage this by holding hearings and providing oversight not on plans, but on the actual management of the agencies and Departments.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. RMA's measures are still being tested to ensure they are the right measures allowing for proper results and management of the Agency. Through time and

empirical evidence, RMA will refine its measures and become more confident in its ability to manage actual performance with targeted performance.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Many of RMA's traditional measures are activity based. While we are still in the process of accessing our outcome measures, we expect time and experience will improve the degree to which our resource estimates are accurate.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. RMA's fiscal year 2000 performance plan was directly derived from our strategic plan. RMA expects that changes to the 1977 issued strategic plan will result in adjustments due to program changes and the legislation on crop insurance reform.

OFFICE OF COMMUNICATIONS

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. As a support entity, the Office of Communications—OC—has only one program activity, public affairs. OC's budget structure is a single line item that fully supports its one performance goal.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. Since OC has only one goal, which is supported by its entire budget, the link between the budget activities and the goal is established by this relationship.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. In assessing its performance goal, OC was confronted with the problem that it is a support agency, and as such, an evaluation of its performance does not rely on the quantifying of communications products, but rather, on how well the communication products created/coordinated by OC support the Secretary and agencies, who are the prime initiators of communications products. It is not logical for a support entity such as OC to propose that it will produce more press releases each year or more video products because the needs to the Department and its agencies to disseminate information to the public are ever changing and dependent on such unpredictable variables as weather, plant and animal disease, and health and safety issues. Regardless of the circumstances, it is OC's responsibility to be able to provide the maximum support possible to the Department whether that means being able to produce 100 press releases or 1,000 press releases. This means that an evaluation of a support agency such as OC cannot be focused on a quantitative analysis of what has been produced, but must concentrate on an assessment of their capacity to provide the services required by those entities it serves.

Question. Does the Agency's Performance Plan link performance measures to its budget?

Answer. OC's budget structure is a single line item that fully supports its one performance goal and the measures used to meet that goal.

Question. Does each account have performance measures?

Answer. There is essentially only one "account" and as noted above, it is related to the performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. OC's budget structure is a single line item that fully supports its one performance goal.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No changes will be proposed because no change is necessary to improve the linkage between the performance planning structure and the account structure.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. Again, no changes will be proposed because no change is necessary.

Question. How were performance measures chosen?

Answer. Through a series of meetings and the process of developing the OC Strategic Plan, OC's key managers chose the "outcome" measures that most accurately describe how well OC provides support to the Department and its agencies.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Discussions were held with the National Agricultural Statistics Service to determine the general costs associated with developing and administering surveys. This data, along with data derived from OC's past use of surveys, was used to determine a general cost for surveys. Because OC's budget has limited operational funds, it was obvious that OC's efforts to conduct surveys could not be expanded without additional funds being provided.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. OC's fiscal year 2000 budget included a request for additional funding to expand or enhance the evaluation mechanisms used for GPRA purposes. Since funding was not provided, OC revised its plan and will rely on existing feedback and evaluation techniques which provide measures in time for the first report.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. There is one key performance goal for OC. We will ensure the use of all available communications products, technology and techniques to reach employees and all segments of the American public to strengthen public knowledge and understanding of USDA's effective customer services and efficient program delivery to all citizens.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. Our measure is an outcome measure.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked?

Answer. To support the Department in creating a greater awareness among the American Public about USDA's major initiatives and services.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. OC managers and the key personnel involved in identifying the agency's measures engaged in extensive consultations with the staff of the Chief Financial Officer to ensure that the plan contained the appropriate outcome measures.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, because our work requires that we be responsive to our customers' communication needs, we are sensitive to the differences between a workload measure, such as how many copies of a particular brochure they may need, versus an effectiveness measure, such as whether that brochure is distributed or designed properly to achieve a desired outcome of awareness, action, or education.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. There are two primary means that OC will use to measure customer satisfaction. First, comments received by our staff from USDA agencies (our internal customers) or the public (our external customers) are conveyed to management during the daily and weekly OC planning and coordination meetings. Second, results of random and periodic surveys that will be conducted of our internal and external customers, as funds permit, will be used. Such measures will help gauge whether the intended populations are receiving the information and whether the information was useful.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The Office of Communications' determined that it needed to develop a budget request to obtain the resources critical to accomplishing the goal in its GPRA plan. The increases proposed in the fiscal year 2001 budget will be used to add technological enhancements that allow measurement of communications performance—e.g., Internet counters or feedback on use of radio and TV products; train OC staff in the use of the latest technologies; effectively and efficiently provide information to under served client populations; and to obtain a limited amount of consulting assistance to gain specialized skills not currently available on OC staff. Our requested funding for fiscal year 2001 is directly related to our annual performance plan.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and achievement of various goals?

Answer. The impact of such a change would be difficult to quantify, although it would be possible, in general, to identify the expansion or limitation in OC's capacity to provide support to the Department and its agencies communications efforts that would result from an up or down decision.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Automated systems are not essential to the measuring of OC's performance. OC uses a constant stream of feedback from the media and the public to evaluate our performance. Positive or negative performance indicators are used in evaluating individual performance. Work accountability is measured by weekly activity and management reports. Remedies and additional actions are established if performance falls below the plan.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. All levels of managers participate in the weekly meetings and have access to the necessary information.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. We utilize a system that allows work tracking and cost measurement for many of our work processes. We also rely on National Finance Center—NFC—systems to provide financial and administrative data in support of our performance measures.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure make it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. OC's budget structure is a single line item that fully supports one performance goal, therefore we have not faced this problem.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No modification is necessary.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. No modification is necessary.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. No modification is necessary.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions: and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standard Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based

Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the programs, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. Since OC has only one performance goal, all of its funding resources are devoted to this one goal.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Since OC has only one performance goal, all of its funding resources, including overhead costs are devoted to this one goal.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. OC does not require the implementation of any significant regulatory reform measures.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievements?

Answer. The plan identifies a change in the public need for information and funding as the two most significant external factors that could influence goal achievements.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. There are weekly and often daily consultations with the Department's agencies to anticipate the public's information needs. Based on these consultations, OC's efforts are continually refined to meet the needs of the public. The fiscal year 2001 budget request includes a request for additional funding to expand or enhance the evaluation mechanisms used by the Office of Communications. If the requested funding is not provided, OC will rely on existing feedback and evaluation techniques, and modify them to the degree practical, if it is apparent that a problem exists in monitoring a specific aspect of OC's performance.

Question. What impact might external factors have on your resource estimates?

Answer. Significant changes in either the public's requirements or the technology required to meet those requirements may require additional funds to meet those needs.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No duplications were identified during development of the Performance Plan.

Question. If so, does the Performance Plan identify the overlap or duplication.

Answer. Not applicable.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Agencies should address the challenges by linking the management challenges to their impact on the agency's ability to meet its performance goals, as well as, their impact on the resources needed to meet those goals. Obviously, duplication should be eliminated where feasible. These can be addressed through management initiatives.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. Successful accomplishment of OC's mission has always been the basis for executive decision making in OC. GPRA has been useful in emphasizing the focus on performance, but OC's role as a support entity combined with a lack of funding to refine the tools necessary to measure performance place some limits on the extent to which GPRA directly influences executive decision making.

Question. Will this use increase in the future and if so in what ways?

Answer. It is likely that GPRA and the development of performance reports and plans will be much more integrated in the OC budget development process as time passes and OC's GPRA efforts build a baseline of information for use by managers.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Much of the work OC does in support of the Secretary's or Department's primary goals is very visible and is an integral part of program and mission successes, and in one sense, OC is very mature in evaluating its performance on actual achievements. We can count number of products produced and cost to produce them. However, as a support entity is it very difficult to establish measures that assess OC's efforts as stand-alone entities rather than as part of the agencies' programs. OC can be left powerless to provide support if funding is not appropriated directly or provided from other program sources.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. OC faces three significant challenges: first, the lack of funds necessary to acquire better and more extensive data related to internal and external customer satisfaction; second, lack of funds to upgrade and add new communication technologies offering greater public access electronically; and third, the difficulty associated with attempting to independently measure the performance of a support entity. The lack of funds for survey instruments makes it difficult to build and maintain a repository of information on OC's performance. The lack of funding for capital investment for new communications technologies will soon take its toll in a decreased productivity and response by OC in supporting Departmental goals. OC's dramatic staffing reduction over the past 5 years and the aging of computer and broadcasting technologies will continue to reduce actual performance unless technology additions bolster or replace staff reductions. Also, changes in communication technology are so dramatic that communications products will become less marketable or acceptable causing a decline in actual performance.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. OC is not requesting any relaxation of transfer or reprogramming controls.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997.

Answer. As operations continued during the past year, it became apparent that the original objectives identified in the 1997 strategic plan were not representative of the full scope of OC's support of USDA's goals. After reviewing the plans of other departments and guidance from OMB, it was determined that a more refined objective and set of means and strategies would be required. As a result, the original objectives and means and strategies were replaced by those given in the fiscal year 1999 performance plan.

Office of the Inspector General

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. OIG's annual performance goals are linked to the agency's mission, strategic goals, and program activities by providing an implementation methodology that in each year moves the agency closer to achieving the strategic goals. The performance indicators used in the Annual Performance Plan provide a target and basis for measurement that provide an assessment of how well OIG has progressed toward achieving the performance goals.

OIG has three strategic goals that support its mission to conduct and supervise audits and investigations to prevent or detect fraud and to improve the effectiveness of USDA programs by recommending changes that will increase efficiency and reduce wasteful and fraudulent activities.

The first is to "Promote economy, efficiency, and effectiveness in the administration of USDA programs and operations." Two performance goals are directly linked

to this strategic goal: (1) audit and investigate the most significant programs or areas identified in OIG's planning process and (2) promote economy, efficiency, and effectiveness of USDA programs by recovering inappropriately spent costs, putting funds to better use, and avoiding costs.

The second strategic goal is to "Promote USDA's conformity with the applicable principles, standards, and related requirements by fostering improvements in financial systems and financial reporting, which will enhance the Department's fulfillment of its fiduciary responsibilities." Two performance goals are also directly linked to this strategic goal: (1) foster improvements in financial systems and financial reporting by timely issuing financial statement audits and (2) reduce noncompliance with the applicable principles, standards, and related requirements in the Department's financial systems and financial reporting.

The third strategic goal is to "Promote program integrity by detecting criminal activity involving USDA programs and personnel." Two performance goals are directly linked to this strategic goal: (1) investigation of fraud within USDA programs and (2) investigation of allegations involving the integrity of USDA employees.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. OIG has only one budget activity, "OIG salaries and expenses." All performance goals are directly related to this budget activity.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. OIG has not encountered any difficulties in linking its performance goals to its budget activity. With only one budget activity, all performance goals directly support this activity.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes. Each strategic goal includes a planned proportion of the budget for each fiscal year. Within that structure, the performance measures provide a means of assessing how well OIG has succeeded in achieving its annual performance goals under each strategic goal.

Question. Does each account have performance measures?

Answer. There is only one account: "OIG salaries and expenses."

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. There is no difference between the performance planning structure and the account and activity structure in the budget justification.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No changes are planned.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No changes in program activities are planned. OIG is unlike a typical programmatic agency in that our activities, audits, and investigations, while subject to improvements in methodology and application of improved technology, are required to meet prescribed standards and, therefore, are not subject to changes in the same manner as other programmatic agencies.

Question. How were performance measures chosen?

Answer. The performance measures employed by OIG were carefully chosen to provide a clear means of assessing our annual progress toward achieving our performance goals. In selecting our performance measures, we reviewed the measures used by other benchmarking agencies, attended training seminars provided by outside vendors, consulted with the Congress, and held focus group sessions with a diversity of members of other USDA agencies and our own OIG employees. Based on these activities, we made a determination as to the strategic and performance goals, objectives, and performance measures that we would apply.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The cost of data collection was considered in the process of developing performance measures. We considered several measures and determined which measures were most appropriate to provide clear and supportable evidence of our success in achieving our performance goals. We then assessed the cost of collecting the supporting data for the measures and selected those that provided reliable information at the most efficient cost. We already had a data collection system in place termed "Consolidated Assignments, Personnel Tracking, and Administrative Information Network" (CAPTAIN). We were able to utilize existing OIG expertise to make modifications to the CAPTAIN reports that provided the data we required for most of our measures. Nevertheless, the data for some measures, such as the num-

ber of recommendations made to strengthen financial controls and foster compliance with laws and regulations, were most efficiently collected by manual means.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No. All the performance measurement data in the OIG performance report is in final form.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

—For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

—State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. General Goal—"Promote economy, efficiency, and effectiveness in the administration of USDA programs and operations." Objectives: (1) identify the most significant programs or areas for audit and investigation and allocate resources accordingly and (2) devote audit and investigative resources in the areas identified.

Annual performance goals linked to the general goal.

"Audit and investigate the most significant programs or areas identified in OIG's planning process." This goal is assessed by an output measure that shows how well OIG was able to anticipate those audits and investigations of most importance to the Department, the Congress, and the public and how much of the planned work was carried out.

"Promote economy, efficiency, and effectiveness of USDA programs by recovering costs, putting funds to better use, and avoiding costs." This goal is assessed by an outcome measure in that it reflects the financial recovery that results from OIG's activities.

General Goal—"Promote USDA's conformity with the applicable principles, standards, and related requirements in financial systems and financial reporting, which will enhance the Department's fulfillment of its fiduciary responsibilities." Objectives: (1) identify the system, control, or compliance weaknesses, which preclude the safeguarding and accountability over funds, property, and assets.

Performance goals linked to the general goal.

"Foster improvements in financial systems and financial reporting by timely issuing financial statements audits." This goal is assessed by an output measure as it relates to the completion of an activity by a set date.

"Reduce the noncompliance with the applicable principles, standards, and related requirements in the Department's financial systems and financial reporting." This goal is assessed by an outcome measure as it reflects improvements in the Department's financial systems and reporting as a result of OIG's audit activity.

General Goal—"Promote program integrity by detecting criminal activity involving USDA programs and personnel." Objectives: (1) identify potential criminal violations impacting the Department, (2) identify potential misuse of USDA funds, and (3) identify instances of serious USDA employee misconduct.

Performance goals linked to the general goal.

"Investigation of fraud within USDA programs." This goal is assessed by an output measure as it relates to the number of fraud investigation reports completed. The percentages of fraud investigations resulting in (1) criminal prosecutions and (2) fines, penalties, recoveries, restitutions, cost avoidances, and other payments are outcome measures that reflect and assess how well we have performed investigative work.

"Investigation of allegations involving the integrity of USDA employees." This goal is assessed by an output measure as it measures the number of employee misconduct investigation reports issued. The percentage of total reported employee misconduct investigations resulting in corrective or disciplinary actions is an outcome measure that reflects and assesses performance of investigative work.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. In selecting the goals in the Annual Performance Plan, we made sure that, among the potential measures that could be used to assess progress in achieving the goals, at least one outcome measure was included for each goal. While we consider output measures to be significant, outcome measures provide a means of assessing how well OIG is performing its mission and, thus, carry a greater significance.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes. Our program managers were involved in the process of developing the goals and measures and, therefore, are aware of the difference between output and outcome measures.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. We assess external customer satisfaction by providing a survey request to our auditees upon completion of each audit and compiling the results. This measure is not included in the Annual Performance Plan because we use it as an analytical tool in our detailed audit planning to identify specific areas where our attention can be applied to improve customer service. We have found that the overall measure of success remains high and is relatively consistent from year to year, and, in our case, we do not believe the general overall result of this survey would be a particularly useful measure. In addition, as we develop our OIG Annual Plan each year, we request input from USDA agency managers, State-level agencies, and members of congressional committees as to the areas in which they believe OIG should perform work. We also solicit information from our internal staff on ways in which our work can be improved.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The results of our fiscal year 1999 measurable goals were used to revise targets for fiscal year 2001, as the fiscal year 2000 results will not be known until after September 30, 2000. The targets were revised proportionately with the level of increase in the projected budget activity and in consideration of the results achieved in fiscal year 1999.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes. Projected outputs would be adjusted in conformity with the level of percentage of change in the final appropriated budget.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. We have such capability with some of the performance measures through our CAPTAIN system, which provides current data on audit activity; however, certain of the performance measures are dependent on the completion of activities and cannot be assessed until that time. For example, the timely issuance of financial statement audit reports and related results cannot be assessed until the audit reports are issued but can be monitored through the use of the audit plan.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. The information can be obtained from the CAPTAIN system by mid-level and above personnel based on password-protected access.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes. We have an extensive tracking system that is used to manage resources, as well as the progress, status, and results of our audit and investigative efforts.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Answer. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Question. Have you faced such difficulty?

Answer. We did not encounter such difficulty since our only budget account is "OIG Salaries and Expenses."

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. There is no need to modify our budget account structure.

Question. If so, would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. Modification is not necessary.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Modification is not necessary as we have full accountability for program performance in the use of budgeted dollars with the current structure.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions.

Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Our agency has a professional level of cost accounting expertise, and GPRA performance goals are already linked to our budget process—from the initial strategic planning stage through execution of operations.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting.

Answer. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

Question. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. OIG is using activity-based costing to manage its resources.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. Yes. OIG can provide full activity costs for internal appropriated funds and, in coordination with Department efforts, can identify overall costs, including indirect costs.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Providing the full direct and indirect costs associated with each program should provide a more complete picture of the benefits of the program versus its overall costs.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. OIG can provide costs of each activity, which can then be related to specific program performance goals and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Dollars allocated to the agency's performance goals are direct appropriated funds only and include all internal OIG overhead costs. However, they do not include indirect related costs such as retirement paid by the Office of Personnel Management or depreciation.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. No regulatory reform measures have been put into place in conjunction with the development of OIG's performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. No. External factors were not identified in the performance plan. However, external factors were identified in the strategic plan. OIG, as a part of its mission, must be prepared to respond rapidly to unforeseen events that could have a significant impact on OIG resources, which could affect workload and goal achievement.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. We prepare our OIG Annual Plan to ensure that all assignments are prioritized and that all OIG resources are fully and efficiently utilized during the following fiscal year. We also anticipate that there will be unforeseen external demands on OIG's resources, and, by prioritizing our workload, we ensure that the most significant and important work is addressed first.

Question. What impact might external factors have on your resource estimates?

Answer. Unforeseeable external demands, such as responding to emergency requests for OIG assistance, can deplete a portion of resources necessary to complete our workload. Therefore, unforeseen external factors that consume these resources

reduce the amount of planned assignments that OIG can complete in each fiscal year.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

If so, does the Performance Plan identify the overlap or duplication?

Answer. No overlapping functions or program duplication have been identified.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Yes. This issue should be addressed within individual agency plans, as well as between plans of other agencies, to ensure that Federal funds are used in the most efficient and effective manner to accomplish programmatic goals. By structuring strategic goals and objectives and performance goals and measures to focus on the key elements of an agency's mission, it should be possible to identify instances where differing elements of an agency or Department are performing similar functions and to note which element can perform that function most effectively. This is not an easy task, but as performance plans and reports are developed over a number of years, it should be possible to determine which changes can be made to various processes to improve efficiency and effectiveness and which have peaked. Based on this accumulated data, it should be possible to address management challenges and selectively eliminate duplication and overlapping functions.

Question. To what extent has GPRA been used by agency leadership to guide decision-making?

Will this use increase in the future and if so in what ways?

Answer. GPRA has been used to guide decision-making. GPRA is used in planning ensuing years' assignments and in assessing satisfaction of those programs impacted by current activity. In the future, as performance plans and reports continue to be developed and a foundation of data and experience is developed, the impact of GPRA on decision-making will likely increase.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Our performance measures are sufficiently developed to allow for these kinds of uses.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data that might affect the accuracy of resource estimates?

Answer. Such factors definitely have an impact, but the extent of the impact is dependent on the types of performance measures applied. For OIG, the resources consumed to conduct individual audits and investigations, for example, may vary and exceed estimates; but over the course of a year and the conduct of many audits and investigations, the variations should cancel out, and, therefore, allow for reasonably accurate estimates. We believe that we have sufficient experience to capably estimate our resource needs for the activities depicted in our performance plan.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No, OIG is not requesting any waivers or relaxation of administrative requirements.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. We do not see any need for substantive revisions to the strategic plan at this time. We routinely review the plan to determine if revisions need to be made.

FOOD AND NUTRITION SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. All fiscal year 2001 performance goals are linked to the mission and the strategic goals and objectives in the FNS Strategic Plan 2000–2005 to which they contribute, as well to the Department-wide goals, objectives, and management initiatives listed in the USDA Strategic Plan Overview.

FNS resources (financial and staff-year) are linked to the performance goals in two ways:

—First, total resources required to accomplish the performance goals under each strategic objective are listed under that objective in the performance plan. Over

99 percent of fiscal year 2001 resources requested for FNS are linked to the performance goals in this way.

—Second, portions of requested fiscal year 2001 resources in each FNS program account that contribute to each strategic goal are identified in the plan. This latter division by strategic goal includes the activities in support of each performance goal under those strategic goals, as well the small remainder of additional resources that contribute more generally to each strategic goal.

Question. Could you describe the process used to link performance measures to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. FNS developed direct measures for the majority of its goals and objectives. These performance measures were constructed in collaboration with FNS staff and were shared with our stakeholders and cooperators. Because performance goals are linked directly to the agency's budget activities, their measures are, by definition, linked to the budget activities as well. Among the most difficult problems the agency encountered were developing valid measures for which data could be obtained with reasonable cost and effort. FNS learned that, in developing performance measures, it is necessary to specify measures that both assess goal achievement and communicate results clearly.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. FNS's performance plan links its performance measures and goals directly to its budget. Each account has performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. FNS's performance planning structure is different from our budget structure. This is because our appropriation request focuses on programs, while our performance planning is structured around outcomes.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. We do not plan to propose any changes at this time.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. We will not propose any changes at this time.

Question. How were performance measures chosen?

Answer. FNS developed direct measures of programs' performance. A work group, composed of staff representing all FNS divisions was responsible for developing, revising, and finalizing the performance measures. The measures were reviewed by cognizant program staff to ascertain their appropriateness to performance goals.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Where possible, FNS used extant data sources to minimize data collection and verification costs.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. FNS's 1999 performance plan contains a significant number of performance measures for which data will not be available for the March 2000 Annual Report. Most of these data will be available later in 2000. This is because FNS relies substantially on the agency's existing data collection schedules, which have due dates after March 2000.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well"); state the long-term (fiscal year 2003) goal or objective from the Strategic Plan to which the annual goal is linked.

Answer. FNS recommends that, for tracking program results over time, the subcommittee focus on the performance goals in the fiscal year 2001 Annual Performance Plan, which is based on the FNS Strategic Plan 2000–2005, a major revision of the agency's 1997–2002 strategic plan. The new plan is designed to be simpler and more comprehensive, consolidating the old plan's six program-focused goals and 20 objectives into two cross-cutting goals with five related objectives. It better reflects the ways that Federal nutrition assistance programs work together to achieve the agency's mission, and permits a more complete allocation of the budget across the plan.

While some of the measures in this plan are clearly more important than others, we do not consider the plan to be at a sufficient level of refinement to make selec-

tion of a subset of these measures an appropriate or useful overall performance assessment tool. FNS intends to continue refining and improving these measures over time, in order to achieve the "critical few" performance plan measures that focus clearly on key program performance outputs and outcomes.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. To the extent possible, FNS attempted to develop outcome measures for the performance goals in its Annual Performance Plan. For other goals, we developed output measures, to enable the agency to track its progress in achieving its targets. These output measures allow us to provide annual data on the program performance metrics used by managers in making administrative decisions.

OMB guidance with regard to annual performance planning states that, while "[a]n annual plan should include outcome goals when their achievement is scheduled for the fiscal year covered by the plan...[m]easures of output can be the predominant goals and indicators in an annual plan for several reasons:

—Outcome goals, other than those being accomplished at a continuing, sustained level, may not be scheduled for achievement in the fiscal year covered by the annual plan;

—An agency is likely to have more output goals than outcome goals; and

—As the frequency and nature of performance data for outputs allows for periodic assessment and intervention, managers often manage to outputs." (OMB Circular A–11 (1999), Section 220.9, p. 493.)

To this list of reasons we would add a fourth: critical outcome measures, including many of those in the new FNS strategic plan, are meaningful only when assessed over a multi-year period, so that even when annual data is available, it frequently does not provide a useful explanation of program performance.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. FNS believes that our program managers understand the difference between output and outcome measures. FNS conducted briefings of all agency staff on GPRA requirements, including the difference between output and outcome measures.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Customer satisfaction measures have not been incorporated as key performance indicators in the Annual Performance Plan. However, FNS has participated in the American Customer Satisfaction Index (ACSI) survey being conducted under the auspices of NPR. Data was collected and the index calculated for the WIC Program in 1999 (the program scored 83 out of 100 overall). FNS plans to expand its involvement to include the Food Stamp Program and the National School Lunch Program in 2000.

Examples of external questions used in the Government-wide Customer Satisfaction Survey for the WIC Program are given below:

Q. Before you entered the WIC Program, you probably knew something about it. Now think back and remember your expectations for the overall quality of the WIC Program. Please give me a rating on a 10-point scale on which "1" means your expectations were "not very high" and "10" means they were "very high." (The program scored 8.8 on this question.)

Q. Was it difficult or easy to get into the WIC Program to get its food benefit and support? Using a 10-point scale on which "1" means "very difficult" and "10" means "very easy" how difficult was it for you to get into the WIC Program? (The program scored 8.7 on this question.)

Question. How were the measurable goals of your 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The vast majority of the resources included in FNS's budget request are allocated for benefit dollars and State administrative expenses and are driven by statutory requirements. The measures of program participation used to develop those requests were not included in the fiscal year 2000 Annual Performance Plan. For this and other reasons, the fiscal year 2001 Performance Plan was extensively revised from the fiscal year 2000 Performance Plan. The new plan, based on FNS's revised strategic plan, does include these measures.

Measures of other activities, such as delivery of nutrition education, link to specific allocations of resources in the fiscal year 2000 Performance Plan; FNS assessed the measures of performance included in that plan in developing its fiscal year 2001 Performance Plan, as well as the budget request to support it.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. In general, FNS would be able to estimate the impacts of changes in the budget, but the precision of these estimates would depend on the nature of the changes. In addition, some of the performance measures in the plan (those related to benefit accuracy, for example) are influenced significantly by the efforts of our program partners and other external factors. Nonetheless, FNS intends the Plan to serve as a useful framework to identify the impact of different funding levels on key program performance issues.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Program data related to participation, benefit levels, and certain aspects of benefit delivery are collected and reported on a monthly basis. These data are collected primarily in support of FNS's responsibility to disburse, and oversee the use of, program funding, rather than performance measurement. Therefore, not all areas of performance are covered in this collection; for some measures, information is developed on an annual or ad hoc basis.

FNS is constrained in its capability to collect the data required for measuring and reporting program performance throughout the year by two major factors. First, the Agency no longer has the ability to set an operational and performance-focused studies and evaluation agenda; funds for this purpose were transferred to another USDA agency, which has to date focused on other areas of inquiry. Second, because the programs operate primarily through partnerships with State and local agencies, FNS depends on those agencies to collect and deliver performance data in many areas. The agency is heavily constrained in adding to State and local reporting burdens, beyond basic requirements needed to ensure effective controls over Federal funding.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Our program data are available to all program managers and staff.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Program data is generally consolidated and reported, verified, and consolidated in the National Data Bank, which is used to prepare a single monthly report that is widely distributed in the agency, and which is also available for individual queries by program analysts and managers.

Question. Agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. In our fiscal year 2001 Annual Performance Plan (APP), each individual objective under the respective strategic plan goal is associated with estimated dollar resources and associated staff years. Although the FNS budget structure remains unchanged, the FNS Strategic Plan was significantly changed (from six goals to two goals) to better align with our current budget structure. The improved alignment significantly improved our abilities to match budgeted resources with the strategic plan objectives identified in the APP.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Since FNS only recently modified the FNS Strategic Plan to better align with our budget structure, we would like the opportunity to assess the results of the change relative to our current structure before addressing the issue of a budget structure change.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. We do not see a need to modify the present structure at this time.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We do not see a need to modify the present structure at this time.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. FNS demonstrated our cost accounting expertise through the planning and development of a Managerial Cost Accounting model which was implemented

and subsequently approved by the USDA Office of Inspector General. Our model was designed to provide reliable and timely information relative to the full cost of our programs.

With regard to linking GPRA to the budget process, the FNS annual performance plans (for fiscal years 1999, 2000, and 2001) are linked to the FNS President's Budget for each respective fiscal year by means of a crosswalk which aligns program and sub-program dollars and staff years to the respective strategic plan goals. The crosswalk linking the budget with the strategic plan goals is developed off-line—that is, the crosswalk is not generated using the agency's official budget and accounting systems.

Question. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. FNS implemented a cost accounting design in fiscal year 1998 using a model which follows the five standards as described in the Managerial Cost Accounting Concepts and Standards for the Federal Government, Statement of Federal Financial Accounting Standards, Number 4: (1) accumulating and reporting costs, (2) establishing responsibility segments, (3) determining full costs, (4) recognizing the costs of goods and services received from other entities, and (5) using appropriate costing methodologies. FNS is not currently using activity-based costing and has no plans to do so.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. FNS has the capability to show full cost (including administration, employee benefits, and depreciation) at the sub-program activity level, which we define in our model as "level 1" under each responsibility segment. This means that within our accounting code structure, FNS can report full cost at the "school breakfast" level under Child Nutrition.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. The FNS Managerial Cost Accounting model shows a clear relationship between the dollars spent and the activities accomplished, as summarized at the "level 1" sub-program level. Alternatively, the level at which we have implemented Managerial Cost Accounting would not provide a meaningful relationship to the costs or results of activities accomplished at any level below "level 1".

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. For each GPRA activity and related results, the associated per unit cost will have to be developed off-line; that is, outside of the formal budget and accounting systems. This is principally because the FNS annual performance plan goals generally would not have a one-for-one relationship with any defined "level 1" sub-program.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Because we have implemented a Managerial Cost Accounting model which is supported by our current accounting code structure and since our goals are not directly aligned with our accounting code structure, dollar costs associated with any particular performance goal will be generated off-line (outside the formal budget and accounting systems).

Overhead costs would not be assigned or allocated to a particular annual performance plan goal. As indicated above, in our model, indirect cost allocations are made at a level which is no lower than the sub-program level (i.e., school breakfast program under Child Nutrition). Since any annual performance plan goal would be a level below sub-program (level 1), the "full cost" of that plan goal would, if necessary, have to be done off-line and would be done on an estimated basis.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. There are no such regulatory reform measures.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Yes, some external factors are identified. The fiscal year 2000 Performance Plan refers to the FNS Strategic Plan 1997–2002, which identifies a wide range of external factors that could influence goal achievement.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. The most significant external factors on the performance of the nutrition assistance programs administered by FNS include the overall status of the economy and the efforts of our State partners. With regard to the former, the programs are structured to respond to economic changes; our budget request projects program participation and expenditures based on economic forecasts used by the government at large. For the Food Stamp Program, benefit reserves are included in the request to ensure that the program can respond rapidly to unanticipated changes.

With regard to the efforts of State partners in, for example, improving benefit accuracy, the Performance Plan and budget request include earmarking of resources to support and provide incentives to States to improve performance.

Question. What impact might external factors have on your resource estimates?

Answer. FNS will require additional resources to cope with external factors, such as those identified above, that are likely to impede the agency' achievement of its goals.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. FNS has identified no significant overlapping functions and duplication. While FNS programs are designed to work together to provide both a basic level of nutrition assistance, and targeted supplemental benefits for those with special needs, these are not duplicative functions.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. The Performance Plan does not identify any significant overlap or duplication. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Agencies should address potential duplications and overlapping functions in their GPRA plans. The overlapping and duplication must be carefully analyzed to determine the reasons for their existence and whether elimination would result in savings and improved program efficiency and effectiveness.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. FNS is using its Strategic and Annual Performance Plans as an integral part of its Leadership 2000 Initiative, which is designed to improve agency management, operations, and effectiveness.

Question. Will this use increase in the future and if so in what ways?

Answer. Yes. As agency management and staff get more experience with GPRA, they will be able to integrate it even more into the agency's day-to-day operations.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. FNS believes that additional time may be needed for some of the performance measures to mature. For those measures for which data are available, we believe that they are sufficiently mature to influence budget decisions.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might effect the accuracy of resource estimates?

Answer. In a number of areas, FNS hopes to extensively refine its performance measures, particularly with regard to measures of performance regarding benefit accuracy, fraud reduction, and administrative efficiency. More extensive analysis of the factors that contribute to good performance in these areas could allow the agency to develop better measures and more reliable estimates of resources needed for specific performance levels. Notably, FNS is hampered in this area by a lack of study and evaluation funding that could permit the agency to conduct such analyses.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. At this time we are not requesting any waivers.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued September 30, 1997?

Answer. In 1999, FNS identified the need for a major revision of the agency's 1997–2002 strategic plan. A revised plan, FNS Strategic Plan 2000–2005, was released in January, 2000. The new plan is designed to be simpler and more comprehensive, consolidating the old plan's six program-focused goals and 20 objectives into two cross-cutting goals with five related objectives. It better reflects the ways that Federal nutrition assistance programs work together to achieve the agency's mission, and permits a more complete allocation of the budget across the plan.

FNS engaged in an extensive stakeholder input process in revising the plan, including regional and National stakeholder meetings, discussions with FNS employees, and a website offering information on the proposed revision and soliciting com-

ments. FNS received a large volume of input; most was supportive of the revised plan structure, though some changes were suggested and made. The agency intends to use the revised plan, and related performance plans, to work with our program partners toward shared goals.

RURAL DEVELOPMENT SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals and program activities in its budget request?

Answer. Rural Development established one strategic plan which supports the three agencies constituting the mission area. The Rural Development Strategic Plan contains a mission statement which encompasses the role of the entire mission area. This statement is cited in the Purpose Statement of the budget request. The strategic plan also contains three Goals, one for each agency, and four broad Management Initiatives which support the entire mission area. By having a Goal for each agency, alignment with the existing budget structure, which is agency and program based, is achieved.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. For loan and grant programs the performance goals and indicators in the Annual Performance Plan are tied directly to the level of funding requested for each program.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The primary problem we have encountered is establishing performance measures for new programs when we have no historical data on which to base future performance. Also, new programs may require several years to become fully functional, which results in unused funding. Since the performance target was based upon full usage of funding, the target performance cannot be met regardless of our best efforts.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. The performance goals in the mission area Annual Performance Plan, which align with the objectives in the strategic plan, are supported by one or more quantified performance indicators to be achieved during the fiscal year. The performance goals are linked to the President's budget request at the agency level and for each major category of programs. For example, funding requested for the Rural Business-Cooperative Service is linked at the total agency level and then linked again for business and industry programs and cooperative development programs. The business and industry programs consist of several accounts and the plan does not provide separate performance measures for each account. However the contribution of the account to the larger goal is often indicated.

Question. Does each account have performance measures?

Answer. We do not have performance measures for each account. With over 50 accounts in the Rural Development budget, a plan with performance measures for each account would cause the plan to be too large and too segmented to be useful.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The performance planning structure is based upon the eight basic programs of the mission area. These are business and industry programs; cooperative programs; single family housing; rural rental housing; community development programs; water and waste programs; telecommunication programs; and electric program, rather than the account and activity structure of the budget.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No, we do not plan to propose changes for fiscal year 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No, we will not propose changes to the program activities described under that account structure.

Question. How were performance measures chosen?

Answer. The performance goals and indicators were selected by the agency administrators in consultation with their program managers.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Since we have limited funds for systems development, the decision was made to rely on existing data sources, or those under development for other pur-

poses, when developing performance goals. The data comes from a variety of sources. Much of it comes from the various loan accounting systems which contain edit checks and are audited annually. The data from these systems are considered reliable and valid. Other data is provided by the field staff and, while its validity cannot be verified, it is considered adequate for the purposes it is being used.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. All of the data included in the performance report is considered final. The performance plan does includes a few performance indicators, primarily in support of the rural rental housing program, which are under development and were not available for the first report. The indicators under development primarily relate to rent overburden of the tenants living in the rural rental housing projects.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well). State the long-term (fiscal year 2003), general goal and objective from the agency strategic Plan to which the annual goal is linked.

Answer. We recommend the subcommittee track all of the key performance goals from the Annual Performance Plan. These are:

Key performance goal	Output or Outcome	Long-term general goal in the strategic plan supporting the key performance goal
Rural Business-Cooperative Service:		
Create or save jobs in rural areas	Outcome	The following general goal supports all of the key performance goals:
Assist marketing networks and cooperative partnerships in the expansion of business outlets.	Outcome	Rural Development will improve the quality of life in rural America by encouraging the establishment and growth of rural businesses and cooperatives.
Direct program resources to those rural communities and customers with the greatest need.	Outcome	
Manage the B&I portfolio effectively to minimize the delinquency rate.	Outcome	
Rural Housing Service:		
Improve the quality of life of residents of rural communities by providing access to credit for decent, safe, and sanitary housing.	Outcome	The following general goal supports all of the key performance goals:
Improve the quality of life for the residents of rural communities by providing access to decent, safe, sanitary, and affordable rental housing.	Outcome	Rural Development will improve the quality of life of rural residents by providing access to technical assistance, capital, and credit for quality housing and modern, essential community facilities.
Improve the quality of life for rural residents by providing new or improved essential community facilities.	Outcome	
Maximize the leveraging of loan funds to increase the number of rural residents assisted by Rural Development programs.	Outcome	
Direct resources to those communities and customers with the greatest need.	Outcome	
Provide effective supervision to minimize delinquencies and future losses.	Outcome	
Rural Utilities Service:		
Provide rural residents with modern, affordable water and waste services.	Outcome	The following general goal supports all of the key performance goals:
Provide modern, affordable telecommunications services to rural communities.	Outcome	Rural Development will improve the quality of life of rural residents by promoting and providing access to capital and credit for the development and delivery of modern affordable utility services.
Provide distance learning and telemedicine services, utilizing telecommunications technologies, to rural communities.	Outcome	
Provide modern, affordable electric service to rural residents and communities.	Outcome	
Direct program resources to those communities with the greatest need.	Outcome	

Key performance goal	Output or Outcome	Long-term general goal in the strategic plan supporting the key performance goal
Maximize the leveraging of loan funds to increase the number of rural residents assisted.	Outcome ...	

While all of the goals are considered to be outcomes, most of them are measured with a variety of performance indicators, many of which are outputs.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Throughout the process of implementing GPRA, we have encourage staff to think about the impact of the programs and how that impact, or outcome, could be quantified. Information on the impact of our loan and grant programs on the families, communities and businesses recipients is not available and would be costly to obtain. As an alternative we have elected to establish unquantified performance goals, which are written from an outcome perspective, and measured with several quantified performance indicators, most of which are output oriented.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, program managers understand the difference.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Our customer service activities in the Performance Plan are focused on conducting customer satisfaction surveys for most of the major program areas. We have no indicators related to internal customers. Limited staff and financial resources have impaired our ability to meet our targets in these areas. The Cooperative Development program has conducted annual surveys of its customers for a number of years and it has a target for the customer's rating of the quality of the technical assistance provided. The Service Center Modernization Initiative (SCMI) includes RHS' single family housing borrowers in its surveying activities. The SCMI annual performance plan includes targets related to customer satisfaction by those customers using the field service centers. In addition, RHS is interested in determining if its customers were attaining favorable outcomes through their participation in the agency's programs. RHS contracted with USDA's Economic Research Service (ERS) to survey the Section 502 direct loan borrowers and the Section 515 multi-family housing tenants to determine whether their participation in these programs had improved their quality of life. ERS released its report on Section 502 borrowers last December under the title "Meeting the Housing Needs of Rural Residents: Results of the 1998 Survey of USDA's Single Family Direct Loan Housing Program." This report is available electronically at http://www.econ.ag.gov/Prodsrvs/rept-rur.htm.

The report shows that 90 percent of the borrowers surveyed said the quality of their current home was better than that of their previous home; 77 percent rate their new neighborhood as 8, 9, or 10 on a scale of 1 to 10, with 10 being the best; and 75 percent rate the schools in their neighborhood as good or very good. These results indicate that participation in the Section 502 direct loan program has helped borrowers change their lives for the better.

Once we obtain the results of the Multi-Family Housing survey, we will share them with you. As you know, reports such as these take years to develop and are expensive. However, as resources are available, we will continue to pursue research on how well RHS programs accomplish our central mission of improving the quality of life of rural Americans.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. Funding requests for Rural Development programs are based on many factors, especially our customer's needs. The fiscal year 2000 Annual Performance Plan did not have a major impact on the development of the fiscal year 2001 budget request.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Since most of the performance measures are directly related to the amount of funds available, the impact on a performance measure can be determined if the committee is considering a change in a budget number.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Data utilized by Rural Development comes from a variety of sources. Much of it comes from the program loan accounting systems and this information is basically available on a regular basis with routine reports printed on a monthly or quarterly basis. Some of the data comes from the Rural Communities Facilities Tracking System (RCFTS). This system is updated by the field offices and, while it is always available, it is not always current. Some of the data comes from surveys of field offices and this information is only available once a year.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. This information is available is available to all levels of program managers.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Trained program staff is able to query most of the systems to develop ad-hoc reports. In order to make access easier, and to make more information available, Rural Development is developing a data warehouse which will include not only program data but also data from outside sources, such as the Bureau of Census.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. By linking performance goals and indicators at the agency and broadest program level only, we have avoided this difficulty. If we attempted to develop performance measures for each of our over 50 program accounts, the task would be monumental and the plan too large to be useful.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No. We believe the linkage, as we presently present it, is appropriate and easy for someone unfamiliar with Rural Development's programs to understand.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. We propose no modification. .

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We do not believe any modification would strengthen accountability.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions, and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Rural Development's accounting systems do not currently support cost accounting. Enhancing the systems to support cost accounting will require the investment of substantial resources.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies, are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. Rural Development will not implement a cost accounting system in the near future. Resources available to enhance the accounting systems are either being directed to improving their ability to account for program funds or to the implementation of the Department's Foundation Financial Information System (FFIS). Rural Development is scheduled to implement FFIS effective October 1, 2000. After FFIS is implemented, Rural Development will work with Department representatives in the development of a plan for obtaining and integrating the data needed for an activity-based cost accounting system.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. It is unclear at this time what costs will be included in the cost accounting system.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. The dollars spent on a program and the cost of activities related to a program would be apparent with a cost accounting system. The results of those activities would then be related to this data.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. It is unclear at this time how the cost of activities could be displayed and how those costs would be tied to results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. The Annual Performance Plan contains salary and expense costs at the mission area level. Costs are not allocated to the individual goals. The costs in the Plan do include all overhead costs.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. Several regulatory changes have occurred to make the programs easier for our customers to use, to encourage leveraging, to make it easier for the neediest customers and communities to access our programs, and to strengthen oversight of the programs with the goal of diminishing future delinquencies and losses. Over the past several years, we sought to reduce the regulatory burden while also implementing handbooks that enable us to more rapidly react to changes, make it easier for staff to deliver the programs to the customers, and provide the guidance needed to operate and manage the programs. In conjunction with this process, we have implemented a number of improved automated systems to help staff accomplish their work more effectively and efficiently. Work on these improvements continues.

The Intermediary Relending Program regulation were revised in August 1998. Some of the significant changes to these regulations included:

—State Offices are authorized to accept and process applications without the application having to go through the National Office.

—The contents of a complete application and work plan are revised to eliminate some unnecessary items; provide more detail on what should be covered regarding re-lending plans; add certifications regarding debarment, Federal debt collection policies, and lobbying; provide goals, strategies, and anticipated outcomes; provide information on technical assistance available to ultimate recipients; and provide for streamlined applications for subsequent loans.

—The priority scoring system is revised by reducing the number of points for other funds, adjusting the threshold for points based on service area income compared to the poverty line, adding a category of points based on service area income compared to statewide income levels, adding a category of points for service to under-represented groups, and providing additional guidance regarding justification for Administrative points.

The loan origination and servicing systems, which support the Single Family Housing direct programs, have been automated which increases the agency's ability to process and service loans. Through changes in the manner in which payment assistance is provided, the cost of providing families with opportunities for homeownership provided a 40 percent savings to the taxpayer and reduced paper work by over 75 percent.

We have implemented a series of Congressionally mandated reforms to the Section 515 program. We continued the task of reinventing the Section 515 and the Section 514/516 Farm Labor Housing programs. Through these changes, we eliminated the occupancy surcharge and are making equity loans available for all pre-1989 housing complexes. New processes have been developed for prioritizing funding assistance to the neediest communities, as defined by ruralness, incidence of substandard housing, and incidence of rent overburden. We implemented provisions to ensure that developers receive no more than a reasonable profit and that transfers of property are in the best interest of the government. In addition, we provided for penalizing property managers for equity skimming. Our streamlining efforts have reduced regulatory burden, simplified agency management and servicing responsibilities, and streamlined procedures for origination and prepayment of loans.

Oversight and management of the Multi Family Housing program has been an on-going concern. We have reinvented the approach to overseeing management and compliance for the Multi Family Housing programs. To address management inefficiencies and to combat fraud, waste, and abuse, we have undertaken a continuing

process of regulatory reforms. As a result of these reforms, debarment activity in the Section 515 program has significantly increased as we replace borrowers and management companies unable to meet their responsibilities. We have developed a loan classification system to quickly identify problem loans at a very early stage before there are serious loan losses or health and safety concerns for the tenants. The classification system identifies maintenance deficiencies, financial deficiencies, high operating costs and deficient reserve accounts, as well as other management indicators.

During fiscal year 1999, the regulations governing the Distance Learning and Telemedicine loan and grant programs were completely rewritten. These revisions are now in effect and more clearly delineate the application requirements for the loan, grant, and combination loan and grant programs. A new combination loan and grant program was introduced which pairs up loans with grants on a 10 to 1 ration. That is, for every $10 in loan applications, the applicant would receive an additional $1 in grant funds. The purposes for which loan funds can be utilized was also broadened and a new expedited application review process was implemented.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The Annual Performance Plan identifies two key external factors that can influence goal achievement—macroeconomic influences and reductions in funding.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. Should the economy start to weaken, we will need to increase loan servicing activities to help those borrowers who are impacted and to limit future losses to the Government. The availability of adequately trained staff to provide the servicing will be critical to our success.

Question. What impact might external factors have on your resource estimates?

Answer. Higher interest rates and higher unemployment will limit our ability to assist the weakest applicants and is likely to increase delinquencies within our portfolio. Higher interest rates will also reduce our ability to leverage loans, putting greater pressure on program funds. The impact will be a higher subsidy cost for the direct programs.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. We have not identified significant overlapping functions or program duplication through the strategic planning process. Most programs which may appear to be duplicates of another program are actually designed for a different clientele. There is always the need for agencies to coordinate on related activities.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. The Plan identifies those Federal agencies which mission area staff work closely with in the delivery of our programs.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Agencies should address management challenges and potential duplication and overlapping functions, to the extent they are within the agency's control, if they impact achievement of the performance goal. These items can be addressed in the means and strategies portion of the annual plan.

Question. To what extent, has GPRA been used by agency leadership to guide decision making?

Answer. During the strategic planning phase of the implementation of GPRA, senior management determined, with support from our stakeholders, that targeting of financial resources to the neediest individuals and communities and leveraging of our resources with other sources of technical assistance or credit would be priorities. These priorities are reflected in the objectives in the strategic plan and in the performance goals and indicators in the Annual Performance Plan for all of the programs. To ensure achievement of these priorities the Agency Administrators have established performance goals for each Rural Development State Office which are tied to the State Director's performance standards.

Question. Will this use increase in the future and if so in what ways?

Answer. As long as the strategic plan reflects the priorities of senior management, GPRA will help agency leadership make the decisions needed to guide the agency. The extent to which a manager uses the strategic planning in their management process varies widely depending upon the style of the manager.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Most of the performance measures are sufficiently mature for use in determining program performance. However, there are difficulties with some databases and systems that impact the quality of the data. For example:

—We are having problems with the reconciliation of data in the Rural Communities Facilities Tracking System (RCFTS) with the same data in the Guaranteed Loan Accounting System (GLAS) and the Program Loan Accounting System (PLAS). There is no automated single point-of-entry of duplicate data into GLAS/PLAS and RCFTS. Duplicate data has to be manually input into each systems by the field staff. This does not always happen and the result is inaccurate data. We are, through a GSA FEDSIM contract, attempting to develop a reconciliation process that identifies discrepancies in like-data between the systems.

For some of our direct loan programs we recently replaced our old servicing system with a new modern system. However, some of the historical information typically needed to track loan history was never centralized in the old system. We are presently building histories in the new system that will serve as useful comparison measures for trends in the future but accumulating the historical data needed will take several years.

In addition, there are other factors to consider in using these measures to compare actual performance with targeted performance. For example, the number of housing units we can finance is based on the average cost of each unit. Factors such as whether the unit is newly constructed or whether the house is in a remote or difficult-to-build area could influence the average loan amount since both of these situations generally increase the cost of construction. Additionally, the cyclical nature of the housing market can influence performance. An example is that rising interest rates or rising home prices may have a negative influence on the ability of low- and moderate-income families achieving homeownership.

For our Community Facilities programs, it is difficult to accurately predict the number and type of projects financed because of the vast number of different uses for this program. Projects can range from building a multi-million dollar hospital to purchasing a $30,000 fire truck.

Another factor that has a great deal of influence on our performance level is leveraging. As we work with more and more lenders, we are gaining experience with leveraging so that hopefully we can make better estimates of leveraging activity expected n the future, however this activity may also be sensitive to interest rates.

Question. Are there any factors such as inexperience in making estimates for certain activities or lack of data that might affect the accuracy of resource estimates?

Answer. Data used in the performance measures come from a variety of sources. The number of jobs created or saved is based upon information from the borrower for the business programs and through the use of job multipliers for many of the other programs. Estimating the number of jobs created through the Intermediate Relending Program (IRP) has been especially difficult. Impacts of IRP over the life of the loan (30 years) with regard to job retention/creation has been an estimate based on a study conducted several years ago by a private consultant. Currently, Agency accounting and management systems do not track actual job retention/creation as a result of re-lending to ultimate recipients under the program. The Agency has entered into a Cooperative Agreement with the Virginia Institute of Technology to develop a pilot database that tracks actual performance of ultimate recipient loans including job retention/creation.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No, we are not requesting any waivers.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No, we are not.

Question. Based an your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The strategic plan currently reflects the priority of senior management and substantive revisions are not needed. The strategic plan could be updated to be more reflective of current initiatives within the Department.

NATURAL RESOURCES CONSERVATION SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. Our strategic plan provides a statement of the fundamental mission of the agency and lays out long-term goals for achieving that mission, including strate-

gies to reach identified multi-year performance targets. It serves as a blueprint for agency budget formulation, and serves as a foundation for resource allocation, performance planning, business planning, and performance measurement.

Performance planning provides the link between the agency mission and strategic plan goals and the tasks performed by agency personnel on a day-to-day basis. The process converts the multiyear strategic plan goals into measurable annual goals and priorities. The annual Performance Plan contains specific performance measures to be monitored through the year that either directly, or as surrogates, represent each of the strategic objectives. The specific linkages between the annual goals and the Strategic Plan targets are explained in the Annual Performance Plan.

The performance plan also guides the allocation of staff time and resources. The agency budget request is based on measurable output and outcome goals defined in the agency performance plan. The establishment of measurable performance goals is the first step in the annual budget formulation process. The performance plan directly links the goals to the programs through which the agency receives funds. This information is contained in tables in the Performance Plan. The annual performance plan also describes how the funds the agency receives are used to achieve the strategic goals.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The process drew on the technical and program experience of a team of headquarters and regional staff. This team drew on a wider circle of state and field level employees and national program managers. The team studied each of the performance goals for 2002 that are established in the strategic plan and identified program activities that contribute to meeting the long-term goal. The team determined which activities were most clearly outcome-related and recommended those to be used as performance measures. The main problem that we encountered was data availability to establish baselines for some natural resources conditions. For some natural resource objectives, such as water quality, there are not currently reliable annual data sources to support an annual performance goal stated in terms of resource condition, that is, it is not possible to set an annual goal for number of stream miles improved and then reliably report annual performance.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The agency's Performance Plan includes several tables that map the linkage between the performance measures and the budget. Tables 2 through 5 of the document show the relationships between the objectives in the strategic plan and the long-term and annual performance measures. Tables 6a and 7 then show the relationship between programs and strategic objectives. Tables 9 and 10 present information, for fiscal year 2000 and fiscal year 2001, on the amount of funds from each budget activity that support each objective.

The performance plan includes measures that can be used as measures for each program. The measures, however, are designed to fit our larger programs. Some, but not all activities of smaller programs are covered by the current set of measures. For example, activities of the RC&D program that directly relate to resource conservation are covered by performance measures in the plan. RC&D activities that relates to community development are not.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Our budget provides funds through a structure of 12 accounts and activities. The authorizing legislation of each account defines the resource concerns that the program is intended to address. Some programs have a very narrow focus and address a limited range of resource concerns. Others are broader. The programs are delivered through a single workforce to customers who may participate in several programs. We are using the performance planning process as a means to integrate management of our program activities. Our performance planning structure, therefore, is natural-resource driven and very closely follows the structure of the outcome-related objectives in our strategic plan. All of the objectives in the strategic plan are supported by multiple programs. We have very few single-program performance measures in our performance plan.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No, we do not anticipate proposing changes to our account structure for fiscal year 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. At present, we are not proposing changes to the program activities. We are evaluating a possible redefinition of the Conservation Technical Assistance account to focus on reporting the outcomes of program actions. This redefinition should enable us to improve the linkage to program results as well as improve allocation of costs to the outcomes. It will not involve any fundamental change in the nature of the program.

Question. How were performance measures chosen?

Answer. A team that included representation of all regions identified possible measures and recommended those that most closely related to the long-term goals established in the strategic plan. We selected predominantly measures for which we are able to collect data or for which data was already being collected through existing efforts.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. In fiscal year 1999, we implemented a new performance reporting system designed to minimize field staff time required for reporting and to provide the essential data needed by agency leadership to make management decisions and respond to questions from the Administration and Congress in a timely fashion. The Performance and Results Measurement System provides a method for every office to report progress on mission-critical goals using a nationally consistent set of defined measures. The system is Web-based and user-friendly; it reduces the time staff must spend entering data and includes automated quality checks to improve the accuracy and consistency of the data. Tests conducted in the early stages of implementation indicated that the system will reduce the staff time required to enter data into the system by 195 staff years annually. These reductions result from the use of improved information technology and from focusing performance reporting on a set of clearly defined measures linked to agency outcomes and will allow our staff to use this time providing additional services instead of reporting past activities.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Our performance report for fiscal year 1999 includes data for all measures. For most measures, the reported performance will be based on expansion of data from a sample of offices. The sample was selected to provide a reliable picture of agency performance at the national level. We do, however, intend to continue refining measures over the next several years. We are currently looking very closely at our annual performance measures as we update our strategic plan. As we revise the strategic plan to address the changing needs of our customers and new guidance from the Administration, changes will also be needed in the annual performance measures that track progress toward strategic goals. This means that there likely will be one or more measures in the plan for any given year for which we may not have reliable baseline data or consistent current-year data.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The annual performance indicators that support our strategic goal for a healthy land are key measures that the committee can use to track the effectiveness of our combined programs. These indicators include acres of cropland and grazing land managed sustainably ("resource management systems"), acres of cropland protected against excessive erosion, acres of land managed to minimize offsite delivery of nutrients and pesticides, number of waste management systems installed to minimize risk of problems associated with animal wastes; acres of wetlands restored or enhanced, and acres on land where practices have been applied to enhance habitat for wildlife. In addition, the indicator for number of minority customers served is a useful indicator of the agency's commitment to providing services on a non-discriminatory basis to all customers.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure("how well").

Answer. Measures supporting the goal of a healthy land are all outcome-related measures. They measure "conservation on the land" as a result of action and investment of time and money by the target audience—private land managers—rather than internal processes and tasks completed by agency personnel. These intermediate outcome measures provide a more reliable picture of annual performance than would end outcome measures based on the impacts that the systems and practices have on the land. In many cases, the benefits of applying conservation cannot be documented in the environment until several years after the action is completed. In other cases, changes related to weather or market conditions can mask or intensify the impacts of conservation progress. The indicator for number of minority cus-

tomers served is an output measure of a key dimension of the quality of services provided. The measures for information products, such as number of surveys digitized, are outputs.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. All outcome-related goals for resource condition and health support our Goal 1: A healthy and productive land that sustains food and fiber production, sustains functioning watersheds and natural systems, enhances the environment, and improves urban and rural landscapes. The objectives for this general goal are:

—Healthy and productive cropland sustaining U.S. agriculture and the environment.

—Healthy and productive grazing land sustaining U.S. agriculture and the environment.

—Healthy watersheds providing clean and abundant water supplies for people and the environment.

—Healthy and productive wetlands sustaining watersheds and wildlife.

—High quality habitat on private land supporting the Nation's wildlife heritage.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. We identified outcome goals and objectives in our strategic plan and supported them with quantified outcome-related targets. The criterion for establishment of a performance goal was that the goal must be stated in terms of an outcome-related measure. The annual performance measures for resource condition, therefore, are all at least intermediate outcomes that measure improvements in natural resource management implemented by resources managers with NRCS assistance. We included few measures of internal processes in our performance plan, and those few apply to civil rights in program delivery or to support functions, such as resources inventory, for which output measures are more meaningful than end outcomes.

Question. Do your believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcomes)?

Answer. Yes, most NRCS managers at all levels have a general understanding of the difference between outputs and outcomes. We are a field agency in which most of our employees are front line staff providing services directly to the public. Most managers have first-hand knowledge of the results our customers want and can distinguish between the activities that employees perform and the changes on the land that result from that assistance to land users.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. The Natural Resources Conservation Service is conducting several activities in customer satisfaction measurement for fiscal year 2000 and fiscal year 2001. In 1998 and 1999, NRCS participated in the development of the USDA Service Center Customer Card. This card was piloted in six states and the results of the pilot are presently being evaluated.

In September of 1999, NRCS established a Chief's Feedback System to receive feedback from both internal and external customers. The system is user-friendly and Web-based. Incoming messages and responses are posted in question and answer format. Other customer feedback activities include the Conservation Summit and various Conservation forums that have taken place in 1999 and 2000 to solicit feedback from our external customers throughout the country.

NRCS is designing a plan to establish a national customer satisfaction measurement system. Due to funding shortages, the design and implementation of this system will not be fully accomplished in fiscal year 2000. The goal of the system is to establish a series of on-going customer satisfaction measures that, through internal and external customer feedback, will be used to guide NRCS programs and activities.

Question. How were the measurable goals of your fiscal year 2000 annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. In 1998, state conservationists provided estimates of the level of performance that could be expected for a set of performance measures, assuming level buying power over the following years. In early calendar 1999, state conservationists developed revised projections of performance for these outcome-related measures for several budget scenarios. They also conducted a field-level workload analysis to better define the level of outputs that could be produced by the current workforce. Agency leadership identified actions, including program strategies, and the funding

required to support the strategies, to achieve alternative goals developed in response to input from stakeholders.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. If the committee changes a proposed number, we will be able to tell you the eventual impact on the level of program performance in terms of program-specific outputs and the outcome goal most closely related to the program purpose. We could, for example, estimate with considerable accuracy the change in extent of acreage that could be placed under easement in the Wetlands Reserve Program (WRP) corresponding to a change in the WRP budget. Acreage enrolled in the program, however, is not the annual performance measure in our performance plan; acreage on which practices have actually been applied is the measure. The change in funding would likely have a lesser effect on the acres of wetlands created or restored in fiscal year 2001 than on the acreage in the following 2 or 3 years. This is because securing easements and applying restoration practices is generally a multi-year process. We do not yet have all of the information needed to precisely project the change that a funding change would have on such a outcome-related measure in the initial year. Nor are we yet able to trace all of the effects that a change in funding aimed at one goal would have on related goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. The new Performance and Results Measurement System that we implemented in fiscal year 1999 gives us the capability to monitor progress on a daily basis. Performance information from the field is entered in the Performance and Results Measurement System when the system or measure is completed. The standard reports available on the system website are updated daily at 2:00 am EST. Therefore, raw data is available on a real-time basis.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. A number of standard reports are available on the PRMS homepage, which is http://www.nrcs.usda.gov/prms. These reports currently provide data at the national, state, or county level. The standard reports are accessible to all NRCS employees and to the general public. They include both measures in the agency performance plan and additional reporting items needed by agency managers. A standard report now under development will provide a snapshot of current status of activities on all measures in the agency performance plan.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. We are developing an integrated accountability system that will provide a single point of access to performance-related information. The home page, which will be unveiled in the next few weeks, will allow access to the performance information in PRMS, estimates of the resource needs and associated workload in each county as projected by the National Partnership Workload Analysis, and information on the resource concerns and conservation partnership available to address those concerns. In addition, selected program management data will be automatically loaded into the integrated site on a quarterly basis. A security system has been designed to enable managers at all levels to have access to the data they need to manage their responsibilities, permit the general public access to appropriate levels of information, protect the integrity of the database, and ensure restricted access to confidential data.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. The difficulty we face in linking dollars to results in a meaningful way stems more from the nature of the results we seek to achieve than from our budget structure. Because natural resources are parts of an interrelated system, program activities that are undertaken primarily to achieve a specific goal will have effects on other components of the system. In our performance plan, we have attempted to show the linkage between programs and the primary performance goal(s) the funds support. However, the goal for any resource objective is based on the assumption that the funds requested to meet other objectives will also be available.

Question. Would the linkages be clearer if your budget account structure were modified? If so, how would you propose to modify it and why do you believe such

modification would be more useful both to your agency and to this committee than the present structure?

Answer. We have not identified changes in our budget structure that would make the linkages clearer. In the Performance and Results Measurement System, accomplishments on the performance measures is linked to the program or programs involved. In the time and attendance reporting system, time is reported by program and major activity. We are analyzing the initial year data from these systems to identify modifications in the reporting systems that would enable us to tie activities to dollars more precisely. As part of the strategic planning process, we are considering alternatives for stating strategic goals and objectives in an effort to design a framework that permits closer linkages between costs, outputs, and outcomes.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Our new time and attendance reporting system makes available improved data on how employees spend their time. We believe that this data will provide the basis for accountability for program performance without requiring modification of the budget structure.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Cost accounting within NRCS is not a new concept. As early as the 1970s the agency had a manual process in place that required employees to record time by program supported. Due to the staff time required for manual recording, however, the agency went to the cost offset type of process currently in use. The TCAS system of time and attendance reporting, implemented in 1998, will provide the information to ensure that the offset process supports fund accountability. Although NRCS accounting resources are very limited, there is an overall understanding of FASAB standard 4, Managerial Cost Accounting and its mandate to determine the full cost of programs and activities.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. Since 1998, NRCS has been implementing cost accounting in the agency. The process requires a cultural change in recording time and allocating costs to activities and programs. The process began with the implementation of the Total Cost Accounting System (TCAS). TCAS replaced the old methodology by which employees recorded only the time worked with a system that permits reporting amount of time by activity and by the program the activity supports. The second part of the process is to allocate the remaining costs of the agency to programs and activities using reasonable allocable bases. This process requires links to the future USDA financial information system called Foundation Financial Information System (FFIS) and to the NRCS Integrated Accountability System (IAS) to relate costs to performance data.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. Eventually, this will be possible. Once the TCAS system is linked to the FFIS and the IAS, NRCS will be able to determine the full costs of activities and programs and calculate administrative costs, employee benefits and depreciation.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, the agency would be able to document more precisely the dollars spent on programs, the costs of activities within the programs.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. The ultimate achievement of the per-unit cost will be possible once the previously mentioned systems are linked.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. The agency performance plan includes tables that estimate the amount of funds of each program that support each strategic objective. These tables show

estimates based on available information. In the current plan for fiscal year 2000 and fiscal year 2001, the estimates for an objective include overhead; all funds of all programs are distributed among the objectives. There are, however, significant limitations in the data on which the estimates are based. Efforts to improve the data are ongoing. We have concentrated first on developing a system to account for field-level activities in terms of outputs. We developed a national workload analysis that defines the great variety of field office activities as a set of well-defined, mutually-exclusive work processes and identifies the steps that compose each process. Local teams estimated the time required to complete these activities on a typical operation in each of the more than 200 time team areas that make up the nation. We are using this data to project the field time needed to achieve certain types of goals and the possible shifting of personnel that might be involved. We intend to expand the workload system to include other agency activities above the field level. In many cases, the linkages of the outputs in the workload analysis to the program accounts and to resource outcomes are weak at present.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. This agency does not have any regulatory authority or role.

Question. Does your fiscal year 2001 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Our strategic plan briefly describes key external factors that might influence the ability of the agency to achieve the goals in the plan. Our current performance plan also includes brief descriptions of key external factors that might affect certain groups of performance goals.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. We are strengthening our capability to analyze resource and other data to identify emerging trends in production patterns and resource use to help anticipate changes that might intensify pressures on the resource base. We are also moving to a system of more annual resource inventories for key indicators so that we can identify where change is occurring and revise strategies before severe problems can develop. In addition we are strengthening our working relationships with other natural resources agencies in order to draw on their data and expertise.

Question. What impact might external forces have on your resource estimates?

Answer. The transition to market-driven agriculture could result in changes in land use and cropping patterns that affect the conservation needs on agricultural land, impacting the level of assistance producers need from USDA. Enactment of new requirements for resource protection, at either the national level or by a significant number of states, could greatly affect the level and kind of resources NRCS would need to help landusers meet their responsibilities. Changes in domestic or international economic conditions could substantially alter agricultural commodity prices, farm incomes, and the ability of private individuals to maintain or enhance their investments in conservation of natural resources. Such changes could also affect the ability of state and local members of the conservation partnership to increase their contributions to joint conservation initiatives. Also, dramatic changes in weather patterns, such as those experienced with El Niño, could have significant impacts on resources needed for protecting natural resources and the environment.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. There is some overlap in the sense that several of our programs are authorized to address a wide range of resource goals. Rather than causing duplication, this overlap creates flexibility that permits us to tailor assistance to meet the wide range of conditions and needs in local areas across the country. In the performance plan, the programs that can be used to address goals are shown in the tables that map programs to resource objectives. In addition, there are areas of cooperation on outcomes for which other USDA agencies and agencies of other departments have a role. In these situations, our role as provider of technical assistance supports the efforts of other federal entities whose authorities and role are different from ours.

Question. Should agencies address management challenges and potential duplication and overlapping functions in the GPRA plans, and if so, how?

Answer. Agencies that have been identified as high risk may find it appropriate to include in their performance plans measures to track progress toward eliminating the risk. We do not, however, think that management challenges should become a primary focus of the GPRA process or that routine operational concerns should be reflected in most agencies' plans. GPRA focuses on the outcomes of agency activities.

There is a danger that requiring a major emphasis on internal management issues in GPRA plans will seriously dilute the focus on outcomes.

Because GPRA plans focus on outcomes, and most true outcomes are achieved as a result of actions by multiple agencies, GPRA plans are an appropriate avenue for analyzing the interaction of agencies' programs to ensure coordinated action rather than duplication of effort.

Question. To what extent has GPRA been used by agency leadership to guide decision making? Will this use increase in the future and, if so, in what ways?

Answer. Agency leadership has used performance information and workload information to formulate and evaluate alternative goals and strategies and to consult with partners on mutual activities. Use of GPRA information will increase in the future as the components of the system are fully implemented and as managers become more familiar with the data and its uses.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Some additional development and evaluation of our new accountability system must be conducted before we consider the system fully mature. For many measures, we do not yet have reliable baselines against which to measure future performance. Fiscal year 2000 is the first year of full implementation for the new performance reporting system. Not all quality control processes for the performance reporting system were in place at the beginning of the year. Also, mangers need some time to become familiar with the new system and ensure that performance information is being entered accurately and consistently in all offices. At present, there is inexperience with making estimates for some activities. The workload analysis has been conducted three times, resulting in a good quality product that field-level employees understand. However, more experience is needed to develop the linkages between outputs and outcomes so that reliable projections of performance can made. Additional training to increase the understanding of the several components of the system will be provided to field-level employees later this year.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No, we are not requesting any waivers.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. As NRCS revises its strategic plan for the next GPRA cycle, we anticipate changes in strategic goals and objectives as a result of new data and information available from the accountability system. We expect that accountability data will allow the agency to better evaluate alternative ways of framing goals and performance targets that take advantage of the ability to better evaluate the costs of achieving targets. We also expect to consider including sub-goals for regional concerns of national significance that can now be tracked through both performance and time expenditure systems, in addition to generalized national goals. The data available from the new system will enable us to make needed adjustments to previously established goals, objectives, and performance targets where analyses indicate they are needed. It will also enable us to refine performance measures to align them more directly with performance monitoring systems. Conversely, the flexibility of the integrated accountability system will now allow rapid changes in data collection to accommodate changes in performance measures on both a strategic and annual basis. We are also now able to establish more discrete performance targets for specific strategic objectives and use performance-related data to make adjustments to future year performance estimates from emerging initiatives and events based on real-time data linking performance, time expenditures, resource concerns, and workload.

In addition, during this GPRA cycle we have new data and analyses from the National Resource Inventory (NRI) that will help in evaluating progress. The combination of these data and information may lead to the development of strategic goals, objectives, or performance targets that are considerably more useful for measuring agency success than those of the first plan.

NATIONAL AGRICULTURAL STATISTICS SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The Annual Performance Plan covering fiscal years 2000 and 2001 is a blueprint of the program objectives and performance goals for NASS. The performance plan is closely linked to not only the Agency's mission statement, but to the NASS and the Research, Education, and Economics (REE) Strategic Plans as well, and is framed by the REE general outcomes outlined in those strategic plans. The NASS Annual Performance Plan links the budget and performance goals by showing the Agency's funding and Full Time Equivalents (FTE's) allocated by the REE mission area general goals. The last page of the NASS Annual Performance Plan includes Resource Tables showing the three NASS program activities divided according to the REE goals.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. Budget activities and initiatives, since they are mission and strategic goal oriented, align well with overall NASS performance goals.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The only difficulty arises when budget activities relate to multiple goals and must be allocated across them.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes. The NASS Revised fiscal year 2000 and fiscal year 2001 Performance Plan links funding and FTE's with performance goals and associated measures; funding and FTE levels are shown by goal as well as by individual budget activity.

Question. Does each account have performance measures?

Answer. Each appropriations account by program activity has associated performance measures for each goal. NASS program activities are agricultural estimates, statistical research and service, and the census of agriculture.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Accounts by activity structure are cross-walked against strategic and performance goals. Program activities are designed to contribute to goals from performance planning.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No changes are planned at this time.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No, program activities will remain unchanged.

Question. How were performance measures chosen?

Answer. NASS's senior executive decision making body, the Program Planning Committee, reviews the specific performance measures in semiannual meetings and requests more information from individual units, as needed. The responsibility for reporting the needed data for the performance measures resides within the individual NASS work units. In addition to the Agency GPRA Strategic Plan, NASS developed an internal NASS Action Plan, a major tool which provides employees with a more detailed blueprint for achievement of the NASS goals and objectives. This document contains internal performance targets, strategies, and measures which were developed at the grassroots level by NASS employees. The NASS Action Plan also includes the specific performance measures reported in the Agency's Annual Performance Plan.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Most of the tabulated data and information was part of evaluation monitoring readily available within the NASS work units. NASS absorbed the resources and costs associated with these activities.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Yes. The NASS plan includes performance measures for which reliable data were not available for the fiscal year 1999 Annual Program Performance Report. However, they are footnoted or fully explained in the plan.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. NASS recommends tracking the performance goal listed under general goal 1, since this represents the largest part of NASS's agricultural statistics program. The other key performance goal for NASS is listed under goal 5, which contains the measures for the census of agriculture.

NASS Performance Goal 1: Provide timely and impartial agricultural statistics for use by all market participants which promote an economically viable and competitive agricultural production system. Performance measures listed under Goal 1 include: Percent of NASS reports that are complete, meet scheduled release dates, and contain no data errors; percent of total national agricultural production included in the NASS annual statistics program; percent of data users who rate NASS data as important or essential to the orderly marketing of agricultural products; and the NASS annual report release calendar is published and distributed prior to the start of each year.

NASS Performance Goal 5: Provide detailed data from the census of agriculture at specified intervals to facilitate locality based policy and business decisions benefitting farmers, ranchers, and rural residents, and provide necessary and sufficient economic data on prices, labor, cost of production, farm numbers, and farm income to enable informed policy decisions to benefit farmers, ranchers, and rural residents. Performance measures listed under Goal 5 include: Number of months earlier than previous agricultural censuses for release of U.S. census data, and percent completeness improvement for coverage of minority operated farms compared to the previous agricultural census.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. Performance measures for the NASS Goal 1 are outcome measures on how well the Agency performed against standards, including data user ratings of NASS data as important or essential to the orderly marketing of agricultural products. Performance measures for the NASS Goal 5 are measures of how well the census of agriculture was conducted relative to previous censuses.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The five General Goals in the NASS Strategic Plan can be viewed in both the long-term or short-term. The fiscal year 2000–2001 Annual Performance Plans contain the same organizing matrix (General Goals, Objectives, Strategies, and Performance Goals) as does the NASS Strategic Plan. The fiscal year 2001 budget request is linked by the crosswalks to the General Goals of the Strategic Plan. The Annual Performance Plans transmitted to Congress contain indicators for the fiscal year 2000–2001 that can be achieved with base funding. The fiscal year 2001 plan also identifies activities that will be initiated or expanded with the new funds requested in the President's budget.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Material was gathered from the internal and external interviews, as well as results from a NASS organizational climate survey, middle manager committee meetings, data users meetings and other NASS employee and customer feedback efforts, which contributed to the deliberations of the Agency's Program Planning Committee. Understanding the needs, goals, and concerns of both data suppliers and customers concerning NASS products and services is crucial to continued success. Similar attention is necessary for the internal constituency, the staff and management of NASS. NASS has taken the approach of formulating meaningful outcome measures which assess NASS's ability to provide accurate, unbiased, meaningful, useful data on time with no errors.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes. Program managers understand these differences. NASS program managers have participated in the Agency's strategic planning efforts including the development of measures for the annual performance plans and the annual program performance report.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. NASS is working in partnership with the Federal Consulting Group, Department of Treasury, to conduct a survey of a sample of external customers representing all data users at the national level. Internal customers are measured with NASS's Biannual Organizational Climate Survey.. The instrument to be used is the American Customer Satisfaction Index which delivers customer satisfaction information that is actionable, linked to outcomes, and is comparable across other agencies

governmentwide. The resulting measures will also establish a baseline and provide needed trend data.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. NASS evaluated the level of support for each of the REE general goals and corresponding Agency performance goals and measures in making the decisions related to the development of the fiscal year 2001 budget, particularly with regard to the new program initiatives.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes. NASS is a service agency whose customers are affected by the extent and frequency with which NASS can provide needed agricultural statistics. Significant budget changes have a direct bearing on the level of program performance such as statistical coverage, accuracy, and timeliness.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes. NASS has the ability to communicate electronically to every employee in NASS and is able to distribute program performance information throughout the year on a regular basis. Work units can disseminate information on the electronic NASS Bulletin Boards as well as the internal NASSNet Intranet system, both of which are easily accessed by all employees.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Program performance information is accessible to all employees when it is posted on the information systems in NASS.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes. While there are no reporting systems that have been specifically designed and developed for the GPRA performance measures, the NASS GPRA performance reports are readily accessible to all employees from the NASS Bulletin Boards as well as the NASSNet Intranet system. Performance-related data reported in the fiscal year 1999 Annual Program Performance Report and annual performance plans were developed by the individual work units.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Answer. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. No. NASS's present budget accounting structure aligns with core program activities to allow for the development of meaningful performance indicators and resource allocations. The only weakness in this design may be that the REE general goals which each agency in the REE mission area adhere to are quite general, sometimes making it difficult to directly link the impact of specific budget decisions on performance goals and measures.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No. Changing the NASS budget accounting structure is unlikely to help the current planning process.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. Not applicable.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Not applicable.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual perform-

ance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all Federal agencies are required to have a system of Managerial Cost Accounting.

The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. Yes, as the Department implements activity-based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Baseline budgets cross-cut through all of the goals with supporting cost data provided for the programs by goal. Overhead costs are fully allocated.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. Since NASS is not a regulatory agency, no regulatory reform measures are included in the performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. No. The NASS performance plan only provides a framework to evaluate NASS's key external factors which have important implications for the NASS program. The factors most important for the next decade are explicitly listed in the Agency's strategic plan. For example, one key external factor influencing NASS is the increasing demand among data users for new kinds of information provided in alternative forms. These pressing data user needs and requests always require an assessment of NASS resources and priorities. Rapid changes, continued concentration and more vertical integration in the agricultural industry has required NASS to modify procedures for collecting and publishing information for certain sectors of the industry. The need to sustain, and even increase, NASS's high standards for accuracy, timeliness, and relevancy in order to meet rising public expectations requires constant technological upgrades, training, and improved survey methodology. Changes in customer priorities and the addition of new program initiatives can result in shifts in resource allocations, all of which must be balanced against the reporting burden on individual producers.

Question. If so, what steps have you identified to prepare, anticipate, and plan for such influences?

Answer. NASS developed a 1998 Action Plan which is an internal document for use by employees that updates and complements the NASS Strategic Plan. The action plan presents immediate, tactical goals that must be met for NASS to realize its vision and accomplish its mission is a manner consistent with the objectives of the official strategic plan. For each tactical goal the plan lists concrete objectives and the actions to be taken to attain them. The action plan serves as a "road map" to guide NASS employees to the goals and objectives of the strategic plan.

Question. What impact might external factors have on your resource estimates?

Answer. The impact of these factors and the continued increase in information demands will most likely create a growing need for more appropriated resources for the collection of agricultural information, analysis, and publishing of NASS reports in a timely manner.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No. NASS is the primary USDA agricultural statistical agency whose agricultural statistics mission does not overlap or duplicate that of any other agency within or outside of USDA.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. Not applicable.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Yes. Each Agency has unique challenges for management depending on the culture of the organization, function, and mission. Each agency should address these organizational management challenges internally and externally with their customers, and work with the appropriate agencies regarding the specific areas of concern. Duplicative and overlapping functions should be justified and handled in the budget and appropriations processes. In addition, the annual performance plans should include a full discussion of goals and indications for these areas.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. The original strategic planning activity was initiated in NASS in 1993 and a final plan was accepted by the Administrator in 1994. The 1998 Action Plan builds upon the work embodied in earlier plans. The current GPRA strategic plan for NASS emulates the Agency's continued strategic planning efforts. For example, the NASS strategic plan and strong NASS leadership provided a solid foundation for the successful transfer of the Census of Agriculture from the Department of Commerce in fiscal year 1997. The ongoing expansion of the environmental statistics program is another growing area that is reflected in the GPRA plans.

Question. Will this use increase in the future and if so in what ways?

Answer. Senior management will continue to use strategic planning as a tool for program planning which has been very successfully integrated into the Agency's leadership and management process. The high level of NASS strategic planning efforts will continue into the future.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Established performance goals for NASS are in response to customer requests, most often expressed through the budgetary process. Most performance measures associated with each of the goals are relatively immature and would not provide a complete "picture" by themselves for make funding decisions. Responding to the data needs of those dependent upon and concerned with the Nation's agriculture is the most meaningful performance measurement.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Yes, the most significant difficulty is measuring Agency performance against the rapidly increasing demand for more and better agricultural statistics with which to make increasingly complex and critical decisions.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No waivers have been requested.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No requests have been made.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No. No major revisions were reflected in the fiscal year 2000 performance plan that required NASS to substantially revise the 1997 GPRA strategic plan.

ECONOMIC RESEARCH SERVICE (ERS)

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. ERS's annual performance goals all aim to increase understanding of a variety of economic issues. They flow directly from ERS's mission, which is to provide economic analysis on efficiency, efficacy, and equity issues related to agriculture, food, natural resources, and rural development to improve public and private decision making. The annual performance goals parallel ERS's strategic goals. ERS program activities—research planning and conduct, and dissemination of research results and economic information—directly support the strategic and annual performance plan goals.

Question. Could you describe the process used to link your performance goals to your budget activities?

What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Increasingly, since the strategic plan was developed, the strategic and performance goals have become organizing principles for the ERS program and planning for future activities. This is a fairly straightforward process since ERS has five strategic goals and five performance goals. ERS has determined the number of staff years allocated to each goal and uses that as a basis for linking the performance goals to the budget. There were no significant difficulties.

Question. Does the agency Performance Plan link performance measures to its budget?

Does each account have performance measures?

Answer. ERS's budget has one appropriation item, economic analysis and research. The Performance Plan's five goals are linked and dependent on funding levels allocated within the agency.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Do you plan to propose any changes to your account structure for fiscal year 2001?

Will you propose any changes to the program activities described under that account structure?

Answer. ERS's performance planning structure does not differ from its account and activity structure. ERS does not propose any changes to its account structure for fiscal year 2001.

Question. How were performance measures chosen?

How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. ERS has always been concerned with its performance and has maintained information on its analytical outputs, their use, and their impacts on decisions about U.S. agriculture, food, natural resources, and rural development. ERS began a review of its planning and performance measurement systems in fiscal year 1995 when it provided all managers training on the Government Performance and Results Act (GPRA) and results-oriented management approaches. At that time, a group of middle managers reviewed and redrafted ERS performance measures. Subsequent mission area-wide activities in 1996–97 provided senior and middle ERS managers additional opportunities to test and refine ERS's performance measures including exchanges with staff at other government research agencies that were engaged in pilot GPRA projects and staff at private research companies. The performance plans' external reviews included meetings convened by the National Agricultural Research, Extension, Education, and Economics Advisory Board and included individuals from agri-business, public interest groups, and universities. The measures have also been critiqued extensively within USDA. Lessons reinforced were: do not make performance measurement so difficult that no one has time to work on achieving goals; good planning is an ongoing process and assessments will lead to further refinements; staff will perform to indicators—make sure measures lead to correct outcomes; and research agencies face special difficulties in tying research results to broader outcomes. Good measures for a research program are difficult to develop, and ERS is process of re-thinking the measures currently in place.

ERS will be able to produce and verify the data needed to underpin measures specified in its performance plan with very little additional cost. ERS would like to get more feedback from users outside the Federal Government, but is carefully con-

sidering the costs of doing so. The agency is in the process of developing a customer management program for its research monographs and periodicals that is expected to provide for a feedback loop.

ERS had reliable data for completing its fiscal year 1999 Performance Report.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The ERS Annual Performance Plan has one performance goal for each strategic goal. Each goal has two measures—one a quality measure and the other a timeliness measure. Each measure provides useful information on ERS's success in enhancing understanding by policy makers of key economic issues. The measures, though useful, do not fully describe ERS's success in meeting its goals. It is extremely difficult to measure the effectiveness and impact of research. Quantitatively and definitively establishing a link between economic analysis provided to decision makers and the outcome of the decision making process is rarely, if ever, possible. As a result, ERS used narratives in its fiscal year 1999 Performance Report to demonstrate that the agency ensured that high quality, objective, relevant, timely, and accessible analyses were made available to policy makers regulators, program managers, and organizations shaping public debate.

All of ERS's performance goals and objectives are outcome oriented. The measures are closer to being output oriented, which is why the agency felt it necessary to supplement the performance report with narratives in its fiscal year 1999 Performance Report. Future plans and reports are expected to be in an alternative format.

The long-term goals and objectives from the strategic plan are linked to the annual performance goals as follows (taken directly from the fiscal year 2000–01 Annual Performance Plan):

Goal 1: The agricultural production system is highly competitive in the global economy.

Objective 1.1: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues involved in ensuring that the U.S. food and agriculture sector effectively adapts to changing market structure, domestic policy reforms, and post-GATT and post-NAFTA trade conditions.

Performance Goal 1: Provide policy makers, regulators, program managers, and organizations shaping public debate with timely and high quality analyses of the economic issues affecting the U.S. food and agriculture sector's competitiveness including factors related to performance, structure, risk and uncertainty, marketing, and market and non-market trade barriers.

Goal 2: The food production system is safe and secure.

Objective 2.1: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues involved in improving the efficiency, efficacy, and equity of public policies and programs designed to protect consumers from unsafe food.

Performance Goal: Provide policy makers, regulators, program managers, and organizations shaping public debate with timely and high quality analyses of economic issues affecting the safety of the U.S. food supply including the efficacy, efficiency, and equity of alternative policies and programs designed to protect consumers from unsafe food.

Goal 3: The nation's population is healthy and well-nourished.

Objective: Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of the factors affecting food prices and of the efficiency and effectiveness of alternative public policies and programs aimed at ensuring consumers equitable access to wide varieties of high quality food at affordable prices.

Performance Goal: Provide policy makers, regulators, program managers, and organizations shaping public debate with timely and high quality analyses of economic issues affecting the nutrition and health of the U.S. population including factors related to food choices, consumption patterns at and away from home, food prices, food assistance programs, nutrition education, and food industry structure.

Goal 4: Agriculture and the environment are in harmony.

Objective: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of the economic issues involved in balancing long term sustainability goals with improved agricultural competitiveness and eco-

nomic growth and of the effects of Federal farm, natural resource, and rural policies and programs on that balance.

Performance Goal: Provide policy makers, regulators, program managers, and organizations shaping public debate with analyses of economic issues affecting agriculture's interface with the environment including those related to integrated pest management, sustainability, biodiversity, global change, and environmental accounting.

Goal 5: Enhanced economic opportunity and quality of life for rural Americans.

Objective: Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues affecting rural development and performance of all sizes of American farms.

Performance Goal: Provide policy makers, regulators, program managers, and those shaping public debate with timely and high quality economic analyses that identify (1) how investments in rural people, businesses, and communities affect rural economies' capacity to survive and prosper in the global marketplace and (2) what policies and programs keep American farms of all sizes viable.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Interpreting outcome measurements is not a straightforward process for research organizations. The cause and effect relationship between research outputs and eventual outcomes is complex. The challenges facing those interpreting performance measures for a public information and analytical organization such as ERS are even greater. Public information can be freely used without attribution. Its widespread use and effects may be difficult to fully measure. Delays between when research results are presented and when their effects are fully assimilated are variable and can be long. Specific outcomes are influenced by factors besides quality research results. If ERS analysis is objective, analysis on the efficacy, efficiency, and equity impacts of specific policies, programs, and regulations will at any one time support some customers' proposals but not others. Rigorous adherence to standards of disciplinary excellence contributes greatly to the quality and objectivity of ERS analyses and their defensibility. The narratives included in ERS performance reports are key to showing how ERS analysis enhanced understanding of key economic issues by policy makers, regulators, program managers, and others.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, and they are particularly aware of the difficulty in measuring outcomes of research and analysis. ERS has a head start in making sure that program managers understand the difference between workload and effectiveness measures. Most ERS employees are economists with substantial interest, training, and experience in understanding efficacy, efficiency, and equity concepts. In addition, ERS augmented program managers' training specific to GPRA requirements beginning in fiscal year 1995, providing managers with training on GPRA and results oriented management approaches.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. ERS is looking at a variety of qualitative indicators to help measure customer satisfaction and to understand how ERS research results are used by decision makers and thus affect outcomes. Some of these indicators are likely to become part of ERS's alternative measurements. ERS internal customers include the Office of the Secretary, the Chief Economist and other USDA agencies. External customers include Congress, other Federal agencies, industry groups, and other researchers, both in universities and in private organizations. Possible indicators are: (1) call backs for follow up information/analysis from policy makers; (2) requests for ERS staff as primary speakers at important meetings/conferences; (3) articles in major public media that correctly and effectively use ERS analysis and data; and (4) relevance of ERS output to stated Administration or congressional priorities. To ensure that the outputs present data and analyses that are high quality, comprehensive, objective, relevant and accessible, ERS routinely provides its customers many opportunities for feedback, conducts rigorous peer reviews before analysis is released, and uses a wide variety of proven and innovative dissemination systems.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. The fiscal year 2001 budget reflects the ERS fiscal year 2000 Performance Plan and performance goals. Changes in the level of funding affect ERS ability to produce and disseminate its research and analysis. ERS would be able to provide information on the impact of funding changes on performance goals.

Question. Do you have technological capability of measuring and reporting program performance throughout the year on a regular basis, so the agency can be properly managed to achieve the desired results?

If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. ERS could prepare program performance reports at any time during the year. However, the nature of research outcomes including the often long evolution between provision of economic analysis and any particular public and private decisions, means that frequent detailed measurement and reporting may not be cost effective or meaningful for understanding overall progress on meeting goals and objectives. ERS is in the process of developing a system that brings together performance information from a variety of current tracking systems. That will make it simpler for managers and supervisors at all levels to track progress on certain specific activities over the course of the year.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear meaningful way.

Have you faced that difficulty? Would the linkages be clearer if your budget account structure were modified?

If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Because ERS's budget has one appropriation item—economic analysis and research—ERS does not face difficulties in linking performance across various accounting and reporting structures and presenting its budget by performance goals.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions.

Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plans. With additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issue by OMB, this year for the first time, all Federal agencies are required to have a system of Managerial Cost Accounting.

The clearly preferred methodology for such a system, as stated in that standard, is the one know as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

Question. What is the status of your agency's implementation of the managerial cost accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals, and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, the Department strongly believes that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity-based costing, it will be able to provide unit costs for activities and results.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. None. ERS does not perform regulatory functions.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate and plan for such influences? What impacts might external factors have on resource estimates?

Answer. Implicit in ERS's fiscal year 2000 performance plan and explicit in the strategic plan are external factors that could affect achievement of ERS goals. Changes in the larger policy context in which ERS operates will influence the content and orientation of ERS research and analysis. These changes can be in Government policy, changes in markets, or new technology; all influence the direction of the ERS program. In addition, the changing needs of users of ERS information influence ERS's program.

Steps taken to prepare for changing demands include continuous communication with major customers and constant monitoring of trends in markets and policy development. Anticipation of changes is a critical part of ERS's research planning. Readiness to respond to unforeseen changes is also built into the ERS decision making and budgeting process. One means of providing flexibility is the quarterly allocation of funds by the Administrator. Another is the agency's commitment to seek reimbursements for research or analysis requested by customers.

ERS is committed to anticipating changes in external demands because such demands can make it difficult to sustain core research, which is the essential base on which the agency operates. Also, over the longer run, those changes may need to become part of the core research.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so does the Performance Plan identify the overlap or duplication?

Answer. Development of the performance plan did not reveal significant overlaps or duplication within the agency. Externally, because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies are extensive and complicated. However, even before GPRA was implemented, ERS was cognizant that its unique contribution is provision of external economic analysis and ensured that it did not duplicate or overlap with program functions in other agencies.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Significant management challenges, including efforts to deal with overlapping functions can and should be addressed through management initiatives.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Will this use increase in the future and, if so, in what ways?

Answer. GPRA is and will continue to be a significant factor in agency decision making. The five strategic goals and the five performance goals are central to research planning in ERS. Division and branch annual plans are organized around the goals. A major overhaul of the ERS website is underway, also organized around the goals. A new agency information system currently under development will assist in tracking activities, accomplishments, and, if possible, outcomes for the purposes of GPRA and for other management needs.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. ERS performance measures, supplemented by narrative information provided in the Annual Performance Report are sufficiently mature to allow funding decisions to consider actual performance compared to targets. However, the caveats raised in earlier responses about the complexity of measuring performance for a public research organization remain. ERS is in the process of seeking an alternative approach that better serves to measure performance. Quantitative measures alone are not likely to completely fulfill this purpose. Increasingly, agency management sees evaluation of agency programs and program impacts as a central function.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. ERS will review and consider revisions to its strategic plan during fiscal year 2000. Major revisions are not expected.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. There is a direct correlation between the Agency's mission, strategic goals, performance goals, and budget activities. Each of the Agency's budget activities—the Packers and Stockyards Program and the Grain Inspection Program—is directly linked to a strategic goal and supporting performance measures. The Packers and Stockyards Program is represented in Goal 1 of the Agency's strategic plan, and the Grain Inspection Program is represented in Goal 2. Both goals support the Agency's mission and have supporting performance measures.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. In the drafting process, we ultimately designed the Agency's strategic plan with the Agency's budget activities in mind. The end result is that there is a one-to-one correlation between budget activities and strategic goals and supporting performance goals.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, each budget account is aligned with a strategic goal and supporting performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. There are no differences.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. The Agency does not plan to propose any changes at this time.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. The Agency does not currently plan to propose any changes to the program activities described under our account structure.

Question. How were performance measures chosen?

Answer. GIPSA focuses on what customers have indicated they want measured—cost efficiency, timeliness of service, and accuracy of results. To date, the Agency has developed measures of timeliness (e.g., percentage of violations corrected within 1 year of investigation's starting date) and cost efficiency (e.g., cost of the official grain inspection and weighing service per metric ton using constant 1992 dollars indexed on the Gross Domestic Product). The Agency will be developing measurements of accuracy during fiscal year 2000.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. For some of the Agency's performance measures, such as cost per metric ton, the data was already available and resulted in no extra cost to the Agency. In other instances, the Agency is still struggling with developing meaningful outcome measures and identifying the necessary data sources.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. The Agency has performance measures for which reliable data was available in time for the first performance report.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. GIPSA's performance goals align with the Agency's budget line items and, as a result, it would be difficult to assign greater importance to any one goal. As given in the revised fiscal year 2000 and fiscal year 2001 Annual Performance Plans, the Agency's performance goals and affiliated budget line items are: (1) Ensure a fair, open, and competitive marketing environment for livestock, meat, and poultry; (2) Increase the efficiency of grain inspection and weighing processes; (3) Provide a standardized framework for the U.S. grain trade; (4) Provide cost effective and responsive official grain inspection and weighing services; (5) Protect the integrity of U.S. grain marketing for the U.S. grain trade; (6) Implementation of workforce plan action items (percent); and (7) Number of deficiencies and/or nonconformance.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. Of these performance goals, numbers 6 and 7 are output measures. Numbers 1 through 5 are outcome measures.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The current Agency Strategic Plan extends to fiscal year 2002. To date, long-term fiscal year 2003 general goals and objectives, have not been developed to which the annual goal can be linked. Of the Agency's present performance goals listed above, the first one is linked to our Strategic Goal 1. Performance Goals 2 through 5 support Strategic Goal 2; and Performance Goals 6 and 7 support both Strategic Goals 1 and 2.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The Agency is well aware of the importance and the difficulty in developing meaningful outcome measures. GIPSA anticipates refining some of its current performance goals and measures and intends to develop new measures, accordingly.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Although managers understand the difference, GIPSA continues to have some difficulty in identifying meaningful outcome goals. For example, standardization of grain quality and quantity measurement improves market efficiency. Likewise, the use of grades and standards improves market efficiency if the grades and standards communicate the quality characteristics relevant to the market. GIPSA directly controls the standardization of the official inspection system and influences the standardization of the commercial market. Measuring the use of grades and standards by the commercial market is impractical, since nearly all those buying or selling grain use the grades and standards to one degree or another. As a result, GIPSA is attempting to develop surrogate measures that track the efficiency of the official inspection system and the adequacy of grades and standards.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. GIPSA has conducted a survey of external customers of the official inspection and weighing system. Results from the survey have allowed the official system to quantitatively assess customer satisfaction in terms of the factors that have been identified by customers as being critical to the official system's success: timeliness, accuracy and consistency, cost-effectiveness, responsiveness, and professionalism. Results from the survey will also serve as benchmarks against which further progress will be measured. GIPSA has conducted surveys of employees of the grain program. The Agency's managers and employees use survey results to identify the Agency's strengths and weakness and to take actions to improve upon both. The Agency plans to conduct another customer survey in fiscal year 2000.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. We aligned the Agency's strategic goals and supporting performance goals and measures with the Agency's two budget accounts, the Packers and Stockyards Program and the Grain Program.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. If appropriated funding is increased or decreased, it would have an impact on the Agency's target levels of performance and the fiscal year 2001 Performance Plan would be revised accordingly.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes. With the exception of one measure, GIPSA will rely on internal agency procedures to track performance. In the future, this will allow GIPSA to have the capability of regularly assessing program progress. At the national level, the average cost of the inspection and weighing program per metric ton (unadjusted) is included in the monthly financial reports prepared by the Animal and Plant Health Inspection Service's Washington Financial Service Branch. GIPSA's success in tracking the cost of the program is directly dependent on the timeliness and quality of service it receives.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Currently, access to the information is available mainly to senior and mid-level management. We are, however, planning to extend future access to lower-level managers.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. While we would not consider it an easy process to gain access to various performance-related data located throughout the Agency's various information systems, we do expect access to become easier as we continue to develop our various information systems.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Since GIPSA's program activities set forth in the budget and the Agency's strategic and performance goals are aligned, the Agency has not encountered such difficulty.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No, the linkages are currently clear.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. Modification is not necessary at this time.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Modification is not necessary at this time.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions: Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. GIPSA understands the importance of identifying real costs to perform various government functions, as well as the importance of allocating valuable, and sometimes limited, resources to perform these functions. Although the Agency has limited cost accounting expertise, it plans to use all available accounting resources at its disposal to link GPRA to the budget process, and to identify real costs and allocate Agency resources.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting.

The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities in the agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. We are just in the early stages of the Activity-Based Costing process. The Agency has had meetings on the subject of "Activity-Based Costing" and is exploring possible training opportunities to develop the necessary skills to carry out this process.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. It is the Agency's intent to be able to show the Committee the full and accurate cost of each activity for each program, including costs for such items as administration, employee benefits, and depreciation.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. The Committee will be able to receive a much more accurate accounting of the dollars spent on a program, the true costs of the activities conducted by the program, and the subsequent results of these activities.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. It is our intent to identify and track costs down to the lowest practical levels within each activity, and thus be able to report per-unit costs and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. As near as possible, we hope to be able to identify the full cost of all associated activities performed in support of a particular performance goal, including associated overhead costs.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. The Agency has not identified, nor put in place, any significant regulatory reform measures in conjunction with the development of the Agency's performance plan.

Question. Does your fiscal year 2000 Performance Plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Yes, the fiscal year 2000 Performance Plan does identify external factors.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. GIPSA must effectively respond to the fluid and dynamic business environments in which the grain and livestock industries operate. Like many segments of American agriculture, these industries are experiencing rapid changes such as mergers, acquisitions, vertical integration, and increasingly automated operations. The changes are shaping how GIPSA operates. For example, GIPSA has developed a field office consolidation plan, which will allow more resources to be located in regions where beef, pork, and poultry production and processing are concentrated. Furthermore, the field offices will be strengthened with additional expertise in economic, statistical, and legal issues to more effectively conduct investigations of alleged anticompetitive practices and financial and trade practice violations. In the grain program, GIPSA has been working closely with official agencies to enhance customer service. The end result has been ground breaking. With the guidance of GIPSA, three official agencies have formed a limited liability partnership that will enable them to better serve a common customer, a large Midwestern grain cooperative. Even more important, the cooperative will now be able to load unit trains more quickly, with fewer problems, and for much less cost.

Question. What impact might external factors have on your resource estimates?

Answer. Changing external factors may require the Agency's Packers and Stockyards program to shift from one area of focus to another. In the grain arena, increases or decreases in U.S. grain exports will affect the cost per metric ton of the grain inspection and weighing service provided.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. GIPSA has not identified any overlapping functions or program duplication. GIPSA does, however, coordinate its program activities with a number of gov-

ernment entities. Within USDA, GIPSA works with the Animal and Plant Health Inspection Service and the Agricultural Marketing Service on marketing issues; the Foreign Agricultural Service on international trade issues and programs; the Agricultural Research Service and the Economic Research Service for research support; and the Office of the Inspector General on investigative matters. Further, GIPSA cooperates with various non-USDA entities, including the Food and Drug Administration on food safety issues; the Environmental Protection Agency on pesticide residue programs; and the Department of Justice and the Commodity Futures Trading Commission on investigative matters. GIPSA's strategic plan, rather than its performance plan, addresses the coordination of efforts.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. GIPSA sees no need for agencies to address management challenges and potential duplication and overlapping functions in their GPRA plans. Hopefully, in developing their plans, agencies have already identified and eliminated overlapping functions or program duplication.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. GIPSA has developed an investigation and case tracking system, which will allow the Agency to track regional and industry-wide investigations, thus increasing efficiencies for the Agency and customers alike.

GIPSA has implemented an enhanced quality assurance and quality control program to ensure the quality and accuracy of inspection results nationwide. The new program includes a balance of national and localized monitoring. A greater emphasis is being placed on proactive actions to prevent problems from occurring rather than reacting to problems once they have occurred.

Question. Will this use increase in the future and if so, in what ways.

Answer. Yes, GPRA will increasingly be used to make decisions, particularly with efforts to decrease costs and increase productivity. Managers will continue to be reminded of the importance of GPRA and its increasing impact on budgetary decisions.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Given that the Agency's current performance goals and measures are relatively immature, the Agency is in the process of reviewing and refining its current goals and measures and developing some new measures in time for the beginning of the fiscal year 2002 budgeting cycle.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. GIPSA is not currently requesting any waivers of non-statutory administrative requirements, nor is the Agency requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issues on September 30, 1997?

Answer. GIPSA does not foresee any need for any substantive revisions in the Agency's strategic plan at this time.

NATIONAL APPEALS DIVISION

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. NAD has a single performance goal to conduct hearings and issue determinations within applicable time frames and the entire appropriation is used to support the achievement of that goal.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. NAD has a single performance goal that is linked to its single budget activity.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. No difficulties were encountered.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes, NAD's performance plan links its performance measures to its budget.

Question. Does each account have performance measures?

Answer. NAD has one account and four corresponding performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. NAD's performance planning structure does not differ from the activity structure.

Question. Do you plan to propose any changes to your account structure for 2001?

Answer. NAD does not plan to propose any changes to the account structure for 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No changes to the program activity described under that account structure are proposed for 2001.

Question. How were performance measures chosen?

Answer. NAD based its performance measures on statutory and regulatory requirements.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. NAD considered the cost of data collection and verification with respect to its existing information systems and additional programs, and examined its quality and sufficiency with respect to the need for reliable and valid performance data.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No, our plan does not include performance measures for which reliable data are not likely to be available in time for our first performance report in March 2000.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. NAD has one performance goal to conduct hearings and issue determinations within applicable time frames.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. NAD has four indicators for its one performance goal. The indicators are based on outcome measures.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. NAD's long-term general goal and objective is to conduct hearings and issue determinations within applicable time frames.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. NAD undertook efforts to ensure that not only would compiled data indicate compliance within time frames, but that both the quality of customer service and the quality of the determinations would be measured.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, we are confident that our program managers understand the difference between goals that measure workload—output—and goals that measure effectiveness—outcome.

Question. What are some examples of customer satisfaction measures that you intend to use? Please use examples of both internal and external customers.

Answer. NAD uses the same customer satisfaction measures for internal and external customers. These measures include identifying levels of satisfaction with: treatment—courtesy and respect; The customers' rights to present their case and tell their side of the story; the level of fairness and impartiality; the degree of responsiveness in answering questions; and the level of comprehension in reading and understanding NAD information.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The fiscal year 2001 budget was based upon a review of the performance goal and measures.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, we would be able to indicate the likely impact.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. NAD maintains a management information system (NADTrack) that tracks cases and provides data which enables NAD to properly manage program performance.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. NADTrack information is provided and maintained by mid- and lower-level program managers. The information is used by senior management to consider in making decisions and to compile statistical reports. Both managers and program managers, at all levels, have access to the information.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. The information system was designed for easy accessibility.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget? Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. NAD has not faced any difficulties in linking dollars in a clear and meaningful way to results.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Modification to NAD's budget account structure is not necessary.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. NAD does not propose to modify the budget account structure.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. No such modification is necessary.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as Activity-Based Costing, whereby the full cost is calculated for each of the set activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. All costs, direct and indirect, are allocated to support the achievement of NAD's single performance goal.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. NAD has not put any regulatory reform measures in place.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. NAD's fiscal year 2000 performance plan does not identify any external factors that could influence goal achievement.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. NAD's fiscal year 2000 performance plan does not identify any significant external factors that could influence goal achievement, therefore, no steps have been identified to prepare, anticipate and plan for such influences.

Question. What impact might external factors have on your resource estimates?

Answer. NAD does not have any significant external factors.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. NAD has not identified any overlapping functions or program duplication.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. NAD has not identified any overlapping functions or program duplication.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. NAD has not identified any overlapping functions or program duplication.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. GPRA requirements have had a growing impact on agency leaders' decision making. Customer service consideration and budget/goal correlation are two areas considered in NAD's decision making.

Question. Will this use increase in the future and if so in what ways?

Answer. NAD is moving from attribute data to continuous data in measuring customer service. NAD is also finding better methods of tailoring training programs based on quantitative data gathered at all levels of the organization.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Our performance measures are sufficiently mature.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. No, there are no such factors.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. NAD is not requesting any waivers of non-statutory administrative requirements at this time.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. NAD is not requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. When the strategic plan was prepared, NAD had been in existence less than four years and did not have the breadth of experience needed to establish mature management-related goals and indicators. NAD now has sufficient experience with which to establish more realistic and meaningful management goals. NAD's 2000 Strategic Plan will be modified to reflect more realistic and meaningful goals. NAD's mission-related performance goal is expected to continue without revision.

AGRICULTURAL MARKETING SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. AMS' annual performance goals are directly linked to its mission and strategic goals. The agency's program activities are grouped according to the agency's two strategic goals; the performance goals are listed by program activity. The table below shows the linkage between each activity and strategic goal.

[The information follows:]

SUMMARY OF AMS STRATEGIC GOAL LINKAGES—FISCAL YEAR 2000

[Dollars in thousands]

	Goal 1	Goal 2
Marketing Services, Appropriated:		
Market News	X	
Standardization	X	
Shell Egg Surveillance		X
Federal Seed Act Program		X
Pesticide Recordkeeping Program		X
Pesticide Data Program	X	
Wholesale Market Development	X	
Transportation Services	X	
Section 32, Appropriated:		
Commodity Purchase Services	X	
Marketing Agreements and Orders		X
User Funded:		
Grading & Certification	X	
Plant Variety Protection Act Program		X
Commodity Research and Promotion Acts	X	
Perishable Agricultural Commodities Act Program		X

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. We used the budget activities as the framework for our performance goals and did not encounter any difficulties.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, the agency's performance plan links performance measures to budget activities. AMS budget accounts include multiple activities; each ongoing AMS activity has a performance measure.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification? Do you plan to propose any changes to your account structure for fiscal year 2001? Will you propose any changes to the program activities described under that account structure?

Answer. AMS' performance planning structure does not differ from the budget structure. The activities in the annual performance plan are the same as the activities in the budget justification. The budget justification lists AMS activities by account, whereas the performance planning structure lists the activities by goal. We do not plan to propose any change to our account structure or program activities in fiscal year 2001.

Question. How were performance measures chosen? How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data? Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Performance measures were developed through a consensus of program personnel and agency managers. As part of its strategic plan development, AMS established committees of agency program personnel for each activity. These committees were responsible for developing performance measures for their activities based on the strategic plan. AMS also formed a Strategic Planning Action Team at the Associate Deputy Administrator level. This team monitors the performance goals in the annual plan, gathers actual performance data semiannually, and prepares a report to the Administrator. Data collection and verification is an integral part of the programs that we carry out and the collection of data was not a material obstacle. In the few cases where performance data was found to be unavailable, AMS has revised the performance goal.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well"). State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. Since the AMS performance goals track the budget activities, we believe that the Subcommittee would be interested in all of them. Most of AMS' performance goals are outcome measures; wherever data is available. Output measures closely aligned with the goals were used where outcome measures were not available.

Question. In developing you Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. We attempted, where possible, to provide outcome measures for each program area. AMS formed a committee of program managers who worked together to determine what measures best met the requirements of GPRA and the needs of the managers for program operation.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, we believe AMS program managers understand the differences. The problem, in some instances, was that measuring outcome was not possible and we had to use output measures instead. For example, our transportation services program helps to ensure that the transportation system serves the needs of U.S. agriculture by providing technical assistance to shippers and carriers, providing economic analyses and recommending improvements to domestic and international agricultural transportation. The best measure of program performance currently available is the number of projects completed—an output measure.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Some examples of customer satisfaction measures for external customers include the performance goal for market news services that is based on timeliness and the percentage of formal and informal rulemaking completed within time frame goals.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget? If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. We developed the budget based on the agency's mission and strategic plan then adjusted the performance goals as needed. We changed the goal estimates based on the budget proposals. If the proposed budget number is changed, AMS program personnel can estimate the likely impact of the change on program performance. The performance goals and indicators reflect the requested budget levels.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results? If so, who has access to the information—senior management only, or mid- and lower-level program managers, too? Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. AMS has systems in place to measure and report program performance throughout the year on a regular basis for management use. Senior management has access to performance-related data on a semiannual basis.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Have you faced such difficulty?

Would the linkages be clearer if your budget account structure were modified?

If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We have not faced any difficulty in linking dollars and results since we are using the samples under both the annual performance plan and the budget structure. Therefore, there is no need to change the budget account structure for AMS to improve the linkages.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. The AMS operated its own GAO approved cost accounting system prior to merging the accounting function with NFC's accounting system. This experience plus the voluntary user fee nature of nearly three-quarters of the agency's funding provides us with a good understanding of the costs to carry out our programs. Currently, we are linking budget program activities to the goals in our annual performance plan.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency.

What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Will you be able to show us the per-unit cost of each activity and result?

To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. The NFC's central accounting system does not currently have a full cost accounting option, however, when AMS begins utilizing the new Financial Foundation Information System in fiscal year 2002, this function will be available. Despite the current data limitation, AMS has structured its central accounting system general ledger so that we can obtain account information by individual programs. Due to the voluntary user fee nature of AMS' programs, we have allocated the administrative and supervisory costs enabling us to determine the true cost of activities carried out by the agency. All administrative and overhead costs are fully allocated to the various budget activities.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. No regulatory reform measures have been put in place in AMS in conjunction with the development of our performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

If so, what steps have you identified to prepare, anticipate, and plan for such influences?

What impact might external factors have on your resource estimates?

Answer. We included a discussion of external factors in the strategic plan. The discussion of performance goals in the performance plan briefly mentions external factors that could influence goal achievement for some of the agency's activities. AMS programs try to anticipate and prepare for uncontrollable external factors such as weather, economics, production levels, and consumer preference by closely monitoring the agricultural industry and its environment.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. No, rather the plan process has helped us to understand the complementary nature of our activities with others within and outside the Department.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. These issues are addressed in the "Means and Strategies" and "Management Initiative" sections of the performance plan.

Question. To what extent has GPRA been used by agency leadership to guide decision making? Will this use increase in the future and if so, in what ways?

Answer. Since most of AMS' programs are user fee based, management has traditionally used the "bottom line" to determine if fees covered costs and if customer requirements are being met. The performance measure data has helped to increase the managers' understanding of performance issues and the impact of agency activities on our customers.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Are there any factors, such as inexperience in making estimates for certain activities or lack of data that might affect the accuracy of resource estimates?

Answer. As in the past, future funding decisions will be based on both program performance and changing marketing structure. We believe our performance measures are the best that are currently available to reflect the accomplishment of our mission. We plan to periodically reassess our performance measures to assure that they effectively measure AMS performance and revise them when necessary.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No we are not requesting any waivers of non-statutory administrative requirements.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The agency's strategic plan is currently being reviewed for possible revision.

OFFICE OF THE CHIEF ECONOMIST

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The annual performance goals of the Office of the Chief Economist (OCE) are directly linked to the agency's mission, strategic goals, and program activities. OCE goals are compatible with the program activity structure contained in the President's Budget. These three strategic goals correspond to the three components of OCE's mission which is to advise the Secretary of Agriculture on the economic prospects in agricultural markets and the economic implications of policies, programs and economic events affecting U.S. agriculture and rural communities; to ensure the public has consistent, objective and reliable agricultural forecasts; and to promote effective and efficient rules governing Departmental programs. These goals are funded through a single budget account.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The process of linking OCE performance goals to its budget activities was accomplished by establishing performance goals that were developed to ensure

OCE's ability to accomplish its delegated responsibilities under the authority of the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994, Public Law 103–354. Funding levels were established to achieve these performance goals, considering existing, as well as, new responsibilities assigned to OCE by the Secretary, such as assuming management and operation of the Office of Energy Policy and New Uses—OEPNU—in fiscal year 1999.

Question. What difficulties, if any did you encounter, and what lessons did you learn?

Answer. OCE is largely affected by events and external factors beyond its control, such as the degree of analytical support provided by other agencies and special, unforeseen projects as requested by the Secretary and other policy officials within the Department and the Executive Branch. The primary lesson learned is that OCE must develop performance goals and targets that reflect these external factors and develop strategies to ensure that OCE achieves its goals despite this uncertainty.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes, OCE's Performance Plan links performance measures to its budget. OCE's Performance Plan estimates funding and FTE levels for each goal.

Question. Does each account have performance measures?

Answer. Yes, OCE has a single budget account that funds all of its goals and performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. OCE's performance planning structure does not differ from the account and activity structure in its budget justification.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No, OCE does not plan to propose any changes to the account structure for fiscal year 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. Yes, the program activities described under the current account structure are increased in three general areas: biomass and bioenergy research, risk analysis, and data management.

Question. How were performance measures chosen?

Answer. Performance measures were chosen to enable OCE managers and outside observers to track progress in accomplishing OCE's mission and strategic goals, including new goals associated with expanded biomass and bioenergy activities.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. OCE balanced the cost of data collections and verification with the need for reliable and valid performance data by using low cost data collection methods. Recorded performance data largely reflects feedback from the Secretary, Deputy Secretary, and other OCE clients and customers, including surveys taken at the annual USDA Agricultural Outlook Forum and public feedback at data users' meetings operated jointly with the National Agricultural Statistics Service and the Economic Research Service—ERS.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No, our plan does not include performance measures for which reliable data are not likely to be available in time for our first performance report in March 2000.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. We have three key strategic goals that the subcommittee should use to track results through the annual performance goals and measures provided for each.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. All three of OCE's strategic goals are supported by outcome measures. However, goals 2 and 3, which relate to products of the World Agricultural Outlook Board—WAOB—and Office of Risk Assessment and Cost Benefit Analysis—ORACBA—respectively, are measured by a mix of output measures and outcome measures.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The long-term general goals that appear in the Strategic Plan are identical to the goals that appear in the annual performance plans.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. OCE undertook efforts to develop outcome measures that provided a description of the intended result, effect, or consequence that would occur from accomplishing the activity. Indicators were developed to measure output and outcome in order to provide a comprehensive view to managers and outside observers.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The Chief Economist has addressed the distinction between the concept of workload—output—from that of goals which measure effectiveness—outcome—when providing direction to managers during the development of the annual performance plans. Managers were aware of this distinction when goals and indicators were developed for each element of OCE. Even so, because OCE delivers information to decision makers, it is very difficult and often impossible to link the outcome of a policy or program decision or a private sector decision back to information delivered to OCE.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Among the measures developed for determining satisfaction, OCE developed measures of the Secretary's satisfaction with economic information produced by OCE for incorporation into the Secretary's decisions, communications, and interactions with other government officials and the public because of its relevance, accuracy, objectivity, and timeliness. OCE measures external customer satisfaction by surveying attendees at USDA's outlook forum.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. Planned activities, funding requests, and performance goals for the fiscal year 2001 budget were based on OCE's best estimate of progress in the remainder of fiscal year 1999 and the goals for fiscal year 2000.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, OCE would be able to estimate the impact of changes in levels of funding for its performance goals. Because OCE's budget was frozen in fiscal year 2000, little flexibility remains in resource reallocation. Further freezes or cuts will directly affect OCE's ability to attain its goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Feedback regarding OCE performance is a continuous activity. OCE has the capability of measuring and reporting performance throughout the year on a regular basis so that the agency can be properly managed to achieve desired results. The Chief Economist meets weekly with key managers and quarterly with the Senior Executive Service staff to review program operation and performance.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. OCE managers share their observations regarding OCE performance among themselves and with staff on a continuous basis.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. In most cases, OCE managers can gain access easily to various performance-related data. Feedback comes from frequent contact with its principal customers: the Secretary, Deputy Secretary, and other senior officials, and from public users of OCE information.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Budget structure has not caused OCE difficulty in linking dollars in a clear and meaningful way.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No, we think linkages are clear enough to assess funding changes and results.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. OCE does not propose to modify the budget account structure.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. OCE does not propose any modification at this time.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as Activity-Based Costing, whereby the full cost is calculated for each of the set activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spend on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. All OCE costs, including overhead, are associated with the performance goals.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. OCE has not put any regulatory reform measures in place.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Achievement of annual performance goals is contingent on a number of external factors and our performance plan reflects this. First, achievement is based on anticipated budget. If appropriations differ substantially from these projections, achievement of the plan would be affected. Second, OCE activity involves coordinating information and analyses from a variety of other agencies. OCE staff chair many interagency committees to achieve goals. To the extent that other agencies alter their resource commitments to these activities, plan achievement would be affected. Third, OCE workload depends partially on legislative and government-wide regulatory activity over which OCE has no control. Fluctuations in activity in these areas would alter the distribution of resources across plan objectives. For example, during fiscal year 2000, OCE has expended unexpected resources on rule making activities related to organic agriculture and animal product imports. Fourth, allocation of OCE resources and achievement of the plan will also depend on developments in agricultural markets.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. To prepare, anticipate, and plan for such influences, OCE has acquired and maintained a highly experienced staff to manage activities, plan and initiate response actions, and work closely with the other agencies on which OCE is dependent for support so that OCE has early warning of possible cutbacks in their support. However, if the support provided by other agencies changed, OCE would have to reallocate resources to continue to provide essential services. OCE has no control over that portion of its responsibilities that are required by legislative and government-wide regulatory activity. OCE's capability to anticipate some market developments enables managers to exercise some internal flexibility in shifting organizational resources and in making the Secretary aware of the likelihood of these developments.

Question. What impact might external factors have on your resource estimates?

Answer. As indicated above, the impact on resource estimates depends on which external factor is affected.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. OCE has not identified any overlapping functions or program duplication.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. OCE's has not identified any overlapping functions or program duplication.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Duplication and overlapping functions, if they exist, should be addressed in GPRA plans by eliminating them or clarifying their purposes.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. The Chief Economist and managers developed an agency strategic plan that facilitated setting long-term goals, prioritizing accomplishments, and scheduling goal implementation. To facilitate decision making, general goals and objectives were developed in the strategic and performance plans which allowed assessment to be made throughout the year on whether the goals were being achieved.

Question. Will this use increase in the future and if so in what ways?

Answer. GPRA is increasingly being used as a planning tool by all OCE managers. Strategic and performance plans have reinforced the importance of paying particular attention to the service provided to all customers and the need to correlate budget, goals, and results. As managers' skills improve in refining strategic and performance plans to reflect their priorities, goals, and progress, they will likely utilize these planning tools.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Current OCE performance measures are sufficiently mature to serve as a means for checking accountability on how efficiently funding has been used and outcomes achieved. With the development of each annual performance plan, OCE managers have added to their skills in developing new measures and refining current indicators. OCE believes that established measures are highly reliable given the process through which they have been developed. This process has been highly iterative in that performance goals and indicators have been examined and re-examined through a series of reviews by OCE staff, managers, USDA's Office of the Chief Financial Officer, other Department organizations, OMB, and the Congress.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. As OCE is assigned new responsibilities, some degree of inexperience is a factor that must be considered. For example, OCE faced an unexpected level of responsibility for coordinating three activities in fiscal year 1999. OCE assumed management of the OEPNU previously located in ERS. OCE has major outreach and internal responsibilities in operating the Global Change Program Office. OCE had responsibility for advancing USDA's policies and principles relating to small farms. This latter assignment followed from the Secretary's decision to combine the tasks of OCE's Director of Sustainable Development with small farms activities. Nonetheless, OCE managers met the performance goals that were set for all three of these expanded OCE areas of responsibility.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. OCE is not requesting any waivers of non-statutory administrative requirements at this time.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. OCE is not requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The primary revision OCE is making in its strategic plan issued on September 30, 1997 is to incorporate OEPNU.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Question. How are the Agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. They are directly linked. The five functional components of the Agency's budget structure (Pest and Disease Exclusion, Plant and Animal Health Monitoring, Pest and Disease Management, Animal Care, and Scientific and Technical Services) correspond to the five general goals of the APHIS Strategic Plan. In its annual performance plan, APHIS has developed a set of annual performance targets for each goal of its strategic plan. The objectives listed under each goal in the annual performance plan correspond directly to funded pest and disease programs under each functional component of the budget.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. APHIS organized its strategic plan using the structure of our budget as a pattern. The five functional components of the Agency's budget structure (Pest and Disease Exclusion, Plant and Animal Health Monitoring, Pest and Disease Management, Animal Care, and Scientific and Technical Services) correspond to the five general goals of the APHIS Strategic Plan. In its annual performance plan, APHIS has developed a set of annual performance targets for each goal of its strategic plan.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The design of our strategic plan along budget lines eliminated any difficulties in linking performance goals to budget activities.

Question. Does the Agency's Performance Plan link performance measures to its budget?

Answer. Yes. The performance measures are organized by objectives which correspond directly to funded pest and disease programs under each functional component of the budget.

Question. Does each account have performance measures?

Answer. Yes, each account has performance measures. Treasury accounts such as those associated with hazardous waste or buildings and facilities are represented with performance measures for the pest and disease programs, as the funds from those accounts are used to support those programs.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Our performance planning structure was patterned after the structure of the budget. It does not differ from the account and activity structure.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001? Answer. APHIS does not plan to propose any changes to its account structure for fiscal year 2001. We do not believe that changes to the account struc-

ture would significantly improve linkage between resource amounts and performance goals.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. APHIS does not plan to propose any changes to the program activities under its current account structure.

Question. How were performance measures chosen?

Answer. Criteria used to choose useful performance measures included how effectively the measure represented APHIS' degree of success in achieving our goals and accomplishing our mission, the level of reliability of the data reported for the measure, how completely we could document the accuracy of the data, and whether the benefits of the data collected outweighed the cost of collection.

Question. How did the Agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. For each proposed performance measure, APHIS determined the cost of collecting the data required. We then compared this cost with the benefits the measure offered towards illustrating our degree of success in achieving our goals and data reliability and validity. In some cases, the most valid and reliable method to measure program performance was too costly, given the level of funding for the program. In those cases, APHIS developed reasonable alternatives that were more acceptable given the amount of resources available.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Data was not available in time for a few of the measures included in our fiscal year 1999 Annual Performance Report. When data was not available, it was noted in the report.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well"). State the long term (fiscal year 2003) general goal and objective from the Agency Strategic Plan to which the annual goal is linked.

Answer. APHIS managers included, in their Annual Performance Plans and in their first Annual Performance Report, all of the key performance goals that could prove useful to the subcommittee in tracking the program results of our diverse agency. However, if it is useful to narrow down our priorities further, we could make reference to those key measures which APHIS selected for inclusion in USDA's Annual Financial Statement, a document which summarizes the mission of USDA and provides those key measures that the Secretary intends to use to demonstrate effective and efficient program delivery in support of USDA's strategic goals.

The performance goals from the USDA fiscal year 1999 Annual Financial Statements are: (1) under APHIS' Strategic Goal to: "Safeguard U.S. plant and animal resources against introductions of foreign pests and diseases, while meeting international trade obligations:" (a) to minimize the number of fruit fly outbreaks in the U.S. (outcome oriented) and (b) to increase the number and value of agriculture products exported from the U.S. (a measure which is a combination of output, since "Number of sanitary/phytosanitary (SPS) issues resolved" is a target, and outcome, since the significance and value to the U.S. of SPS issues resolved will also be discussed in an accompanying report issued by APHIS; (2) Under APHIS' Strategic Goal to "Effectively manage plant and animal pests and diseases and wildlife damage which pose risks to agriculture, natural resources, or public health:" (a) to increase passenger safety by reducing the risk of aircraft striking wildlife (an outcome oriented goal that will report on the risk reduced at our nation's airports), (b) to eradicate brucellosis (outcome oriented goal), and (c) to minimize the introduction and establishment of foreign weeds in the U.S. (an outcome oriented goal); and (3) under APHIS' Strategic Goal to "Facilitate the development of safe and effective veterinary biologics, biotechnology-derived products, and other scientific methods for the benefit of agricultural producers and consumers and to protect the health of American agriculture," to "Develop useful, appropriate methods" (an output oriented goal).

In addition to those measures in the Financial Statements, a few others from the APHIS Revised fiscal year 2000 and fiscal year 2001 Annual Performance Plans will prove useful in tracking APHIS' progress in achieving its strategic goals 1 and 4, including: (1) under APHIS' Strategic Goal to "Safeguard U.S. Plant and animal resources against introductions of foreign pests and diseases, while meeting international trade obligations," "To minimize the risk of exotic pests and diseases intro-

duced to the U.S." (an outcome oriented goal); (2) under APHIS' Strategic Goal to "Effectively manage plant and animal pests and diseases and wildlife damage which pose risks to agriculture, natural resources, or public health:" (a) to eradicate tuberculosis (outcome oriented) and (b) to eradicate pseudorabies (outcome oriented); and (3) under APHIS' Strategic Goal to "Ensure the humane care and treatment of animals covered under the Animal Welfare Act and the Horse Protection Act," "To increase the percentage of facilities in compliance" (outcome oriented).

Question. In developing your Annual Performance Plan, what efforts did your Agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. APHIS' planning and evaluation specialists, and APHIS' budget analysts worked together to provide developmental and consultative assistance to managers of all APHIS programs to assist them in defining outcome oriented goals and measures.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. APHIS' budget and policy offices have worked hard to provide guidance to program managers that describes the differences and to develop formats for budget submissions and measurement development that reinforce and encourage both types of measures. APHIS believes that the traditional focus on "outputs" can continue to be relevant and useful in decision making only insofar as various levels of outputs are tracked and communicated in the context of the eventual outcomes and results which are being achieved.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. The Plant Protection and Quarantine Program tracks customer satisfaction within the Agricultural Quarantine Inspection program. The program measures the satisfaction level of international air travelers and international travelers on land borders. APHIS' National Animal Health Monitoring System, (NAHMS), includes a reporting process on the health status of U.S. Livestock and poultry. Producers who participate in these studies and/or receive the results of these studies have traditionally been asked to evaluate whether the information being provided is helpful to them in managing their operations, and this practice will continue, since APHIS has a performance goal to report on the "percentage of surveyed producers using information from NAHMS." APHIS' Animal Care program plans to survey animal welfare organizations this year to assess customer satisfaction with the program. APHIS' Wildlife Services program commissioned the National Agricultural Statistical Service, (NASS), to conduct a survey which could give them a very complete picture of the satisfaction levels of livestock producers who receive direct assistance from the program.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. Program performance as measured by the goals in APHIS' Annual Performance Plan was a key factor in the development of the fiscal year 2001 budget. For example, the success of the Brucellosis Program as measured by the reduction in the number of infected herds resulted in the decision to request a reduction in funding for that line item in fiscal year 2001.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. APHIS will be able to report the effect of funding level changes on program performance and our ability to achieve our goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the Agency can be properly managed to achieve the desired results?

Answer. Being able to measure and report program performance on a regular basis is a goal for all APHIS programs, but there are varying degrees to which each program has been able to accomplish this goal thus far. Two good examples for the rest of the agency reside in APHIS' Plant Protection and Quarantine, (PPQ), and in APHIS' Animal Care programs.

APHIS' PPQ program measures and reports program performance for their AQI program throughout the year. The AQI Monitoring System measures the amount of pest threat to U.S. agriculture by collecting information on the efforts to monitor various pathways and the commodities entering through them into the U.S. The information is then used to explain and explore the characteristics of the various pathways to assist in managing the risk they present to U.S. agriculture. These data allow a more accurate estimation of approach rates for prohibited agricultural

items and cargo pests arriving at U.S. ports of entry and compliance rates of international travelers, transportation companies, and cargo customers. Approach rate refers to the ratio of quarantine material approaching U.S. borders to the number of international travelers or vehicles approaching U.S. borders.

Animal Care field employees have been creating inspection reports at the conclusion of each inspection of a facility, and data from the reports has been entered into the automated Licensing and Registration Information System, (LARIS). LARIS has recently undergone a complete redesign and upgrade, and now data for fiscal year 2000 will be entered by field employees directly into the electronic database via laptops and modems. Reports are being designed to enable program managers to run summary reports quickly and easily. Reports will even be provided to inspected facilities so that inspectors and regulated entities can catch errors and correct them.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. APHIS seeks to provide access to performance information to all levels of management. There are varying degrees to which each program has been able to accomplish this goal thus far. APHIS' PPQ and Animal Care programs illustrate the progress APHIS has made.

All levels of the agency have access to and use the data and information generated from the AQI monitoring system. Local work locations use the results to verify the risk of various entry pathways and to shift resources to activities that are most effective in managing risks. State and regional offices use the results to assess the relative risks of various entry pathways and locations. At a national level, the information is used to assess risk, redesign regulations and operations, and justify budget requests. In the near future, Animal Care's LARIS information will be available to lower, mid, and upper level managers.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. APHIS is in the process of improving access to the various sources of performance information used throughout the Agency. APHIS' PPQ and Animal Care programs illustrate the progress the Agency has made. Program personnel gain access easily to the data housed in the AQI system. Soon, information from Animal Care's LARIS system will also be easily accessible.

Question. The Government Performance and Results Act requires that your Agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. APHIS has not faced any difficulties in linking dollars to results in a clear and meaningful way. Our goals and objectives are structured to mirror the organization of our budget.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. We do not believe that changes to the budget account and activity structure would significantly improve the linkage between resource amounts and the results of our performance.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your Agency and to this committee than the present structure?

Answer. We do not believe that it is necessary to modify the budget account structure.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We do not believe that it is necessary to modify the budget account structure.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate Agency resources to perform these functions. Could you comment on your Agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better

trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting methods standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all Federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing", whereby the full cost is calculated for each of the activities of an Agency. What is the status of your Agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. The dollars associated with specific Agency performance goals are limited by total available funding which consists of appropriated funds and projected funding from other sources. In the current budget era, APHIS has had to turn more frequently to its partners either at other levels of government, in other agencies, or in private industry to help support its goals. Increases in cooperative agreements, user fees, and other "fee for service" opportunities have helped narrow the gap between diminishing federal funds and true costs to run agency programs, but there are times when the gap still exists.

Opportunity costs are often incurred by the agricultural community as well, and they are not necessarily captured in the dollar amounts reported by APHIS for each performance goal.

APHIS does not have a separate line item for overhead costs. The dollars associated with specific performance goals include overhead costs.

Question. Please identify any significant regulatory reform measures that have been put in place by your Agency in conjunction with the development of the Agency's performance plan.

Answer. There have been no significant regulatory reform measures put in place by APHIS in conjunction with the development of the Agency's performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Based on GAO feedback that it was important to identify external factors that might influence program results, APHIS identified relevant external factors in many of its performance goal discussions in the Annual Performance Plan, particularly under the "Means and Strategies" sections of the plan.

Question. If so, what steps have you identified to prepare, anticipate, and plan for such influences?

Answer. Where additional resources could potentially be necessary to mitigate particular external factors, this was also mentioned in the plan.

Question. What impact might external factors have on your resource estimates?

Answer. External factors can have a large influence on resource estimates. For example, in many areas APHIS works toward achieving its goals cooperatively with local, State, and foreign governments. The extent to which these entities participate and contribute funding towards successfully reaching our joint goals has a great deal of influence on APHIS' resource estimates.

Question. Through the development of the Performance Plan, has the Agency identified overlapping functions or program duplication?

Answer. APHIS has not identified overlapping functions or program duplication through the development of the Annual Performance Plan.

Question. If so, does the plan identify the overlap or duplication?

Answer. APHIS has not identified overlapping functions or program duplication through the development of the Annual Performance Plan.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Management challenges are addressed in the Management Initiatives section of APHIS' Annual Performance Plan. We do not address potential duplication and overlapping functions as none were identified in the process of developing the plan.

Question. To what extent has GPRA been used by Agency leadership to guide decision making?

Answer. In meeting the requirements of the GPRA to conduct strategic planning, performance planning, and to report on results, APHIS managers throughout the Agency have been devoting an unprecedented amount of attention and effort toward defining goals and determining the best ways to measure and report on true program outcomes. Agency leaders find themselves with a greater platform of measurement information that they can use for decisionmaking purposes. The Administrator has been able to better support decisions to invest in one area over another based on program results that are desired or program needs to enhance information systems and other infrastructure support that is essential to achieve important goals.

Question. Will this use increase in the future and, if so, in what ways?

Answer. In the near future, the revision of APHIS' strategic plan will give all agency leaders the opportunity to update agency-level priorities and to engage agency employees in helping to identify information needs that will assist them in making more informed program decisions.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. For the past few years, APHIS' performance measures have steadily improved as we travel along the learning curve for the GPRA process. We believe that our measures are useful for decision making. As time passes and we gain experience, we look forward to improving their utility.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Several factors affect the accuracy of resource estimates. They include the level of funding available for developing and improving data measurement systems and the fact that GPRA is relatively new and we are still on the learning curve. For new initiatives and activities within our programs there is always a period of analysis to determine the best way to measure performance and the most effective and cost efficient data gathering method. It also takes time to set realistic baselines. In the early stages of performance measure development for a new initiative, resource estimates may be less accurate.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. APHIS is not requesting any waivers of non-statutory administrative requirements.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability requirements?

Answer. APHIS is not requesting any relaxation of transfer or reprogramming controls in return for specific accountability requirements.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. APHIS intends to revise its strategic plan. The need for revisions is based partly on new issues which are reflected in APHIS' fiscal year 2000/2001 performance plan, and partly on the need to allow newly appointed leaders of various APHIS programs to contribute their thoughts and expertise to the revision of the

strategic direction of the agency. Given that the performance plan is organized by objective and program line items, the strategic plan can re-articulate trends and issues in a more macro/global sense, tying together the past, present, and future in a different format that discusses current cross cutting themes and describes progress the Agency has made since the last strategic plan.

AGRICULTURAL RESEARCH SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The ARS Annual Performance Plan parallels the structure of the ARS Strategic Plan, which was developed to meet the requirements of the Government Performance and Results Act of 1993. In the Annual Performance Plan, the Goals, Objectives, Strategies, and Performance Goals are linked to specific accomplishments that the Agency expects to achieve in fiscal year 2001 with the funds requested. All the activities identified in the Strategic and Performance Plans link directly to the Mission Statement which, in turn, directly reflects the statutory authorities that underpin the Agency's work. A crosswalk is shown for each of the five Goals and for Initiative 2 linking program activities to the budget request. The Annual Performance Report has a parallel structure and highlights significant accomplishments for fiscal year 1999.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. ARS carries out its research through over 1,100 Current Research Information System (CRIS) research projects which are aligned with the 6 Budget objectives, 23 National Programs and the 5 Goals of the Strategic and Performance Plans. The CRIS research projects are the primary level of funding and accountability and provide the linkage essential to crosswalk this information.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. GPRA requires us to anticipate the longer-term outcomes and impacts of our work, which is more difficult in a research environment than it is in many other areas. Several years ago we developed a performance plan based on numerical metrics. We counted the number of scientific papers published in journals, licenses granted, CRADAs, and patent applications. This approach, while fully complying with the letter of GPRA, did not begin to meet the spirit of the law. In fact, providing this numerical data conveyed little meaningful information to Congress or our customers and stakeholders on the significant work of the Agency. In January 1998, ARS requested a waiver from OMB to allow us to use the narrative alternative approach provided for in GPRA. In the last several years, we have structured the Annual Performance Plan around narrative indicators that describe anticipated accomplishments which will, if achieved, demonstrate progress towards the Strategic Plan's goals and objectives.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes, the funding resources are identified at the level of the 5 Agency Goals and Initiative 2, which relates to the work of the National Agricultural Library.

Question. Does each account have performance measures?

Answer. No. The budget is presented to Congress in the traditional accounting structure that has been used for many years. The ARS Strategic Plan 1997–2003, the Annual Performance Plan, and the Annual Performance Report are all structured around the five REE-wide General Goals. The Performance Goals are contained in the Strategic Plan and progress is reported in the Annual Performance Report. There is a crosswalk at the General Goal level which is the only linkage between the budget accounts and the performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. There are substantial differences between the ARS Strategic and Performance planning structure, our National Programs and the Program Activity structure contained in the Budget. The budget activity structure is presented on the following areas: Soil, Water, and Air Sciences; Plant Sciences; Animal Sciences; Commodity Conversion and Delivery; Human Nutrition; the Integration of Agricultural Systems, and Agricultural Information and Library Services. The Strategic Plan is outcome oriented and includes the following 5 broad societal Outcomes: An agricultural production system that is highly competitive in the global economy; A safe and secure food and fiber system; A healthy, well nourished population; An ag-

ricultural system which protects natural resources and the environment; Enhanced economic opportunity and quality of life for Americans. In addition, three management initiatives, which includes the National Agricultural Library, are identified in the Strategic Annual Performance Plans.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No, the Agency will continue to present its budget through the Program Activity Structure. This accounting system tracks each project to ensure compliance with appropriations measures and Congressional reports. The CRIS project system provides a linkage to the major planning and financial systems utilized by the Agency.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No, we have no current plans to change the accounting structure.

Question. How were performance measures chosen?

Answer. The Performance Goals used in the Annual Performance Plans and Report are taken directly from the ARS Strategic Plan. The Indicators of Progress for each Performance Goal in the Annual Performance Plans and Report, that accompany the fiscal year 2001 budget, were developed by the National Program Staff. Input was obtained from each of the National Program Leaders who, in consultation with the key Research Leaders and Lead Scientists, identified the performance indicators.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. ARS has various mechanisms in place to retrieve financial and programmatic data on all aspects of its research program. Two years ago we substantially revised the annual CRIS project reporting requirements in part to better support the data needs of GPRA and the National Programs. At the present time, a committee is reviewing the revised format and process to see if it needs further refinement. We do not anticipate that the cost of data collection needed to validate future performance will be much greater than current costs.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Across the five programmatic goals we have identified scores of indicators, that can be tracked and reported by the National Program Staff. Accomplishing these performance indicators will clearly demonstrate progress towards achieving the Goals and Objectives identified in the ARS Strategic Plan. In fact, ARS submitted an Annual Performance Report for fiscal year 1998 in March of 1999, a full year ahead of the statutory requirement. We are still developing some of the performance measures under Initiative 3, Creative Leadership, but we expect to have most of these indicators in place to meet the March 2000 reporting date.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. Measuring performance in research provides some unique challenges that may not exist in other programs. The approach used in the fiscal year 2000 ARS Annual Performance Plans is to identify, under each Performance Goal, intermediate outcomes (indicators) that are tangible and measurable. If ARS achieves all or most of these indicators, it will be a clear demonstration of progress towards meeting the longer-term Strategies, Objectives, and Goals in the Strategic Plan 1997–2002. We would recommend that the subcommittee track the performance goals under the 5 programmatic Goals: Goal I: Through Research and Education, Empower the Agricultural System with Knowledge that Will Improve Competitiveness in Domestic Production, Processing, and Marketing. Goal II: To Ensure an Adequate Food Supply and Improved Detection, Surveillance, Prevention, and Educational Programs for the American Public's Health, Safety and Well-Being. Goal III: A Healthy and Well-Nourished Population Who Have Knowledge, Desire, and Means to Make Health Promoting Choices. Goal IV: To Enhance the Quality of the Environment through Better Understanding of and Building on Agriculture's and Forestry's Complex Links with Soil, Water, Air, and Biotic Resources. Goal V: Empower People and Communities, Through Research-based Information and Education, to Address the Economic and Social Challenges of Our Youth, Families, and Communities.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. Several years ago ARS developed its Annual Performance Plan around "output" measures such as the number of scientific papers published in peer review

journals, the number of patent applications pending, and so forth. Based in large part on the consensus that this use of numeric metrics told the reader very little about the substance of the Agency's research accomplishments, OMB granted a waiver and allowed ARS to use the alternative narrative approach provided in the statute. Except for a few Performance Goals in the areas of technology transfer and creative management, all of the other General Goals, Objectives, Strategies, and Performance Goals measure outcomes. These outcomes are tangible accomplishments that demonstrate progress to achieving the General Goals and Objectives.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The five General Goals in the ARS Strategic Plan can be viewed in both the long-term or short-term. In addition, ARS incorporated the "Purposes of Agricultural Research, Extension, and Education" from section 801 of the Federal Agriculture Improvement and Reform Act of 1996 into its Strategic Plan as Objectives. Below the Objectives are a number of Strategies and Performance Goals. The fiscal year 2000–2001 Annual Performance Plans contain the same organizing matrix (General Goals, Objectives, Strategies, and Performance Goals) as does the ARS Strategic Plan. The fiscal year 2001 budget request is linked by crosswalks to the General Goals of the Strategic Plan. The Annual Performance Plans, that will soon be transmitted to Congress, contain indicators (anticipated accomplishments) for fiscal year 2000–2001 that can be achieved with base funding. The fiscal year 2001 plan also identifies activities that will be initiated or expanded with the new funds requested in the President's budget.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Because of the unique nature of research, ARS uses the narrative approach provided under a waiver in GPRA to measure and report the outcomes of its work. One or more narrative indicators of progress is developed for each performance goal. Successfully achieving these indicators demonstrates progress towards achieving each goal. Specifically, ARS identified approximately 240 performance indicators for fiscal year 2000 and 275 performance indicators for fiscal year 2001 in the Annual Performance Plans. In the fiscal year 1999 Annual Performance Report, ARS reported progress against approximately 200 performance indicators under 75 performance goals. As we have gained experience in implementing the GPRA performance and reporting processes, we have become better able to identify meaningful performance goals and indicators that reflect the special needs of a research agency.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, the Agency's senior managers are fully aware of the difference in output and outcome. This information has been delivered through a number of meetings, briefings, and written instructions. The message that the Agency's focus is on tangible outcomes and accomplishments that have a real benefit to our customers and stakeholders is repeated at all appropriate forums.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. ARS has a long history of positive interaction with its customers and stakeholders but a formal process of more systematically measuring customer satisfaction is still evolving. Some components, such as the National Agricultural Library and the National Arboretum, periodically survey their users and visitors to measure and improve the quality of their services and general satisfaction. The Administrative and Financial Management units regularly measure customer satisfaction from the agencies and components they support. The National Programs Staff surveys the participants of National Program planning workshops in order to measure the effectiveness of that process in gaining input from our customers and stakeholders.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The fiscal year 2000–2001 Annual Performance Plans and the fiscal year 2001 budget were developed on parallel tracks with crosswalks showing the linkages.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes. The version of the fiscal year 2000–2001 Annual Performance Plans currently before the subcommittee reflects the President's budget proposal for fiscal year 2001. Once the appropriations process is completed, ARS will revise the Annual

Performance Plans to show the level of program performance that can be expected with the actual level of resources that are appropriated.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. ARS, in part in response to GPRA, revised the type and amount of data which it requests from each research unit. This enhanced data collection has helped the National Program Staff and the Area Offices to better monitor and manage the research program. We are currently reviewing the reporting process. To avoid an undue burden on the research leaders, we plan to collect most of the data on an annual basis, rather than at multiple times during the year.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Almost all of the reporting information from the ARS research programs is collected electronically on an annual basis by the Agency's Research Management Information System. That information is widely available at all levels in ARS. The material is reviewed and summarized by the National Program Staff for inclusion in the Annual Performance Plans and Reports, the National Program Annual Reports, the Explanatory Notes, and for other purposes as needed. Much of this information is also available to the general public on the ARS homepage (www.ars.usda.gov).

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes, but data collection for GPRA reporting using the alternative narrative approach is more difficult than it would be if we were using numerical metrics. As we have gained experience with GPRA and revised the CRIS project reporting format and process we have made the task easier.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. This Agency will not have any difficulty linking dollars to results. As stated, ARS CRIS research projects underpin budget and program activities and the goals/outcomes as established under GPRA. The over 1,100 research projects are the bases for allocating and accounting for the Agency's research funds. This is the principal level of fiscal accountability in this Agency and this information can be crosswalked or translated into the other systems of programmatic management and accountability.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No. The existing budget account structure does not need to be modified.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. The Agency's CRIS projects are the accountability unit and aggregate and crosswalk to the major program, budget, management and review systems.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. There is no need to modify the existing accountability systems for budget activities.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, with additional fiscal year 2001 resources and a better trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial

Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation.

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the programs, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. A basic tenet of ARS' financial management and budget execution process is that the specific research project or activity capture both direct and indirect costs attributable to the research. Indirect costs, such as utilities, security, facility maintenance, administrative, etc., are allocated to the various projects based on approved cost accounting standards. The summary costs for ARS' goals and objectives therefore include a share of the distributed indirect costs.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. ARS research may be used as the basis for regulations issued by other agencies but the Agency does not issue regulations.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The Annual Performance Plan does not refer to external factors but the working version of the ARS Strategic Plan 1997–2002, which is available as a publication and on the ARS Homepage (ars.usda.gov), contains the following discussion of the external factors that impact on ARS:

Consumer, Socio-Economic, and Policy Trends.—The abundance and affordability of the American food supply is greatly due to U.S. agricultural research. The Nation's ability to sustain this plentiful and inexpensive food supply continues to be paramount. But in recent years, consumer and producer attention has expanded somewhat to other areas of concern such as food safety and quality, the relationship of agriculture and the environment, the profitability of the agricultural enterprise, and the impact of government regulations, land use restrictions, and economic options that diminish the supply of farm and grazing land. The long-term sustainability of the Nation's food and fiber production systems will be determined not only by the continued profitability of farming and ranching, but also by how these production systems affect the environment. The capacity of U.S. agriculture to adapt to environmental changes is also a concern, as are the availability and quality of natural resources. Another key environmental issue is how human activities affect weather patterns, atmospheric composition, and soil and water quality and produc-

tivity. Global population increases, demographic changes, and economic growth will substantially increase the demand for agricultural products and lead to the development of new markets. At the same time, increased agricultural efficiency in other countries will force U.S. agriculture to be more competitive.

Funding.—The ability of ARS to respond to the many and diverse needs of producers and consumers is determined by annual appropriations.

1996 Farm Bill and the Pending Revision of the Research Title.—The 1996 Farm Bill, the Federal Agriculture Improvement and Reform Act, set a new direction for American agriculture by beginning the process of phasing out farm subsidy payments based on production levels and introducing free market disciplines. The effect of this legislation will be to heighten the importance of agricultural research as one form of a safety net beneath producers. Research to maintain and improve productivity; to detect, control, and eradicate diseases and pests (insects, weeds, etc.); and to promptly address nontariff trade barriers, especially sanitary and phytosanitary conditions will take on even greater importance in a global market. The 1996 Farm Bill also updated and expanded the "Purposes of Agricultural Research" which were first enacted in 1990. As described elsewhere in these responses, ARS incorporated the Purposes into this strategic plan adopting them as the agency's objectives. Congressional reauthorization of the Research Title will have an impact on ARS, but we are still too early in the legislative process to anticipate what that impact will be.

Competition.—The Department of Labor projects an increase of 19 percent in the size of the general workforce in the next decade, which is slightly lower than the rate of growth for the preceding decade. The labor market during this period is also expected to be highly competitive for many occupations that require an advanced education, including scientists, engineers, economists, and computer specialists. The high earning potential of professions, such as law and medicine, will continue to make a career in science less attractive to many young men and women who have the creative intelligence needed for professional success in agricultural research. Consequently, a major emphasis on recruitment, student employment, upward mobility, and training programs will be needed to attract and retain a quality workforce. The trend toward increasing workforce diversity is also expected to continue, and opportunities for encouraging women and minorities into careers in science, engineering, and economics will need to be given a high priority.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. External factors were not explicitly addressed in the fiscal year 2000–2001 ARS Annual Performance Plans. However, an in-depth examination of the major external factors affecting American agriculture was part of the Agency's strategic planning process and the process for developing the new National Programs. The five Vision Conferences are a specific example of how ARS identified and considered external factors in its strategic and programmatic planning processes. The visioning process consisted of a pilot conference in January 1995, followed by five regional conferences held in June and July of 1995. The conferences brought together over 400 participants, representing a broad cross section of the Agency's customers, stakeholders, and partners, who worked in more than 30 breakout groups to provide input that was used to develop the ARS Strategic Plan 1997–2002. ARS is continuing to actively engage a wide-range of customers, stakeholders, and partners in developing its new National Programs. All 1,100+ CRIS projects have been aggregated into 23 National Programs. One or more National Program workshops, involving customers, stakeholders and partners has been or will be held for each program to ensure the relevancy of the research agenda in each National Program.

Question. What impact might external factors have on your resource estimates?

Answer. The most important and direct external factor identified in the ARS Strategic Plan is the level of Congressional support for the Agency's research activities. Other key external factors include the heightened concern about the impact of agriculture on the environment, concerns about food safety, and the impact of global population growth and economic changes on American agriculture and the research priorities needed to sustain it. All of these concerns have been taken into consideration in developing the research agendas for the National Programs. In addition, changes in the American workforce may also impact ARS' ability to attract and retain the wide range of skilled individuals needed to meet the agricultural research needs of the next century.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No. In managing the ARS research program, the National Program Staff seeks to avoid unnecessary duplication while ensuring coordination between research units and locations. Agricultural research must be conducted at different lo-

cations to account for climatic, regional, and geographic variations as well as different combinations of pests, diseases, and agricultural products, each with specialized problems calling for unique research approaches and solutions. The development and implementation of the new National Program structure have further strengthened the multi-disciplinary, multi-location focus of ARS research.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. In developing the Annual Performance Plan we did not find any areas of program duplication.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. When the Research, Education, and Economics (REE) Agencies met with key Congressional Staff members during the consultation process we came away with the strong impression that our strategic plans should focus primarily on programmatic issues. In the REE mission area, ARS' Administrative and Financial Management (AFM) component provides support to all four REE Agencies and to the Offices of the Under Secretary. AFM has developed its own internal strategic plan, established performance measures, and it regularly measures customer satisfaction. We are not aware of specific issues of duplication that would need to be addressed in the ARS Strategic Plan.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. In response to GPRA, the ARS senior leadership decided to make a number of major changes in the way we manage the Agency's research program. The over 1,100 CRIS research projects were aggregated into 23 National Programs which are focused on solving high priority national problems confronting American agriculture. Reflecting the influence of GPRA, the National Programs are designed to have a strong and on-going interaction with their customers and stakeholders. In addition, the National Program structure focuses the research units on the ultimate outcomes or impacts of their work. Through the mechanism of the Annual Performance Plans and Reports ARS projects future accomplishments for the purpose of establishing programmatic accountability.

Question. Will this use increase in the future and if so in what ways?

Answer. Yes, as the implementation of the National Programs continues, the GPRA principles will become more firmly established within the Agency's culture.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. In our working version of our Strategic Plan we discuss the difficulty of predicting the ultimate outcome of research and the near impossibility of applying numerical measures to research, especially basic research. Having said that, we are confident that the use of a large number of tangible intermediate outcomes (indicators) will enable the subcommittee to determine whether ARS is making reasonable progress towards reaching the goals and objectives identified in the Strategic and Performance Plans.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The great unpredictability of research, particularly its unanticipated benefits, makes it extremely difficult for scientists to formally offer predictions for fear they will engender unrealistic expectations. Predicting what problems will need to be addressed, how to reasonably measure on-going research, how best to express "future" research accomplishments, and how to accurately align resources to produce out year research results are all areas where we lack experience. As we work our way through several planning and reporting cycles, we will gain the experience we need to more meaningfully adapt GPRA to the ARS research environment.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No, we have no plans to ask for such waivers at this time.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No, we have no current plans to do so.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. We did not identify issues in developing the Annual Performance Plans for fiscal year 2000–2001 that would require substantive revisions in the Agency's Strategic Plan. GPRA, however, requires a review and revision of the Strategic Plan this year. Since the Strategic Plan 1997–2002 was developed, ARS has substantially revised the way we manage our research program. ARS, in reviewing its Strategic

Plan, is planning to reflect its new National Program structure in the revised plan and will also consider any revisions in the REE mission area 5-year strategic plan.

DEPARTMENTAL ADMINISTRATION

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The Departmental Administration (DA) performance goals directly reflect the agency mission and strategic goals and objectives. Budget requests are developed and reviewed in the same structure as the goals and objectives and each activity justified in the Budget is identified with a specific performance goal.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. During the budget formulation process, DA managers are asked to identify how their budget proposals would contribute to the accomplishment of performance objectives in each area. The budget justifications published for the Congress identify specifically what goal and objective is supported by each budget request. Because the organization, performance goals and the budget material are aligned, we did not encounter any difficulty in tying our budget request to our performance goals.

We have tried to identify key performance indicators in each of the major functional areas and link them to the resources used. Although "outcomes" such as percent yearly increase in contract set-asides for small and disadvantaged business can easily be seen as related to the level of program effort in the small business program, other measures such as the reduction in utility use is harder to relate to specific program activities.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. DA Staff Offices carry out many varied activities, therefore the appropriations each have several performance measures. The Performance Plan shows resources being applied to achieve goals and measures related to each account.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification? Do you plan to propose any changes to your account structure for fiscal year 2001? Will you propose any changes to the program activities described under that account structure?

Answer. The DA performance planning structure is the same as the organizational and budget justification structure. For fiscal year 2001, we have proposed no major changes either to the performance planning or major activity structure. We have made some minor organizational changes to enhance operational performance in a few areas.

Question. How were performance measures chosen? How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data? Does your plan include performance measures for which reliable data are not likely to be available in time for your first Performance Report in March 2000?

Answer. Our performance measures were chosen as the best quantifiable measures of the "outcomes" in each of our major functional areas. Where "outcome" data was unavailable or not quantifiable, reliable output data was used. We found that reliable data were available in time for the first Performance Report. In all cases, the collection of accomplishment data was achieved well within the normal cost of managing the programs.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well"). State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. Because DA is composed of so many varied responsibilities, it would be difficult to select a few performance measures to track the overall program result. In the most basic terms, our success depends upon our being able to provide the USDA headquarters and the program agencies with adequate work space and services for them to carry out their program responsibilities.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Measures of "outcome" were used in our performance indicators wherever possible. However, one of the most important goals, that all USDA employees and customers are treated fairly and equitably with dignity and respect, cannot be measured empirically. In cases where outcome measures are not possible, the measures of output such as "backlog of complaints" and "employees trained" are still very valuable. We have used the best measures we can to ensure that the goals and objectives are vigorously pursued and that the managers are held accountable.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. During the strategic planning process, the nature of "outcome" and "output" measures was rigorously examined. I believe it is well understood by managers and key personnel at all levels of the organization.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers?

Answer. At the present time, the only measure related to customer satisfaction used in our performance planning process is the number of buildings and facility complaints. Customer surveys, for both internal and external customers, are being considered in certain areas as a program management tool.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget? If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Consideration of the performance goals was an important part of the budget formulation process. Budget proposals such as Alternative Dispute Resolution were a direct result of our seeking ways to meet our objectives in the civil rights program to reduce formal complaints and decrease the time to settle complaints. Many of the performance goals respond directly to changes in the Budget. For example, objectives like reducing customer building customer complaints, reduced use of utilities and rental office space depend solely on our ability to obtain funding for the Agricultural South Building Renovation. However, making specific quantifiable projections of performance indicators would be a challenge.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results? If so, who has access to the information—senior management only, or mid- and lower-level program managers, too? Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Data on most DA performance indicators is available on an on-going basis with little technical difficulty in capturing the data. Managers at all levels have access to the information. The data is valuable for program management except in cases where the data does not present a regular trend. For example, where the performance measure is the number of personnel trained, the schedule of training classes may not be scheduled evenly throughout the period.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Have you faced such difficulty? Would the linkages be clearer if your budget account structure were modified? If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure? How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. The performance objectives and indicators fit well within the organizational and budget structure of DA. No major changes are needed at this time.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Because DA includes so many varied activities, cost comparisons between programs may not be very meaningful. For example, reducing the average time for the resolution of a civil rights case by one month might cost $1,000. It is difficult to compare the value of this accomplishment with the installation of a communication capability to provide security information which might cost the same amount.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all Federal agencies are required to have a system of Managerial

Cost Accounting. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfunded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-based Costing, that permit us to determine the cost of our strategic goals and selected output activities.

Question. Will you be able in the future to show to this Committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improved data for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing including overhead costs.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. DA expenses would be more accurately associated with the overhead costs of the program agencies.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. Yes, subject to the limitations explained above.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Under the current system, the cost of office space is not distributed to each performance goal in the Annual Performance Plan. Similarly, There are certain accrued leave costs which are not identified to each organization separately. The Chief Financial Officer conducts an analysis each year to address some of these costs.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's Performance Plan.

Answer. The means and strategies for accomplishment of DA's performance goals did not involve any major regulatory reforms.

Question. Does your fiscal year 2000 Performance Plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Virtually all the performance goals in DA require adequate resources for achievement. This is particularly true of the objectives in space utilization, safety and renovation of the headquarters work space. The 10-year Agriculture South Building renovation project was approved by Congress in 1995. Yet, funding for the project has been inconsistent and the work may be suspended later this year.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. We have taken every opportunity to explain the relationship between the continued renovation of the Agriculture and our goals and objectives for safety and economy and the relationship to a productive USDA workforce. Funds to get the project back on track are included in the President's budget. We are hopeful that the project will be continued to completion.

Question. What impact might external factors have on your resource estimates?

Answer. As the renovation project is delayed, inflation in the construction industry can be expected to increase the eventual cost. Also, the requirement to absorb the mandatory pay cost increases erodes the organization's capability to fully complete the performance objectives.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. We have not identified any overlapping functions, but many of our Staff Offices have responsibilities under the same Strategic Goals. For example, the Office of Civil Rights and the Conflict Prevention and Resolution Center have joint responsibility for the Alternative Dispute Resolution Program.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. This has not been a problem in DA.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Duplication and overlap should be addressed before an Annual Performance Plan is put into effect. In DA, we have made some minor organizational changes and transferred personnel to avoid such situations. The GPRA plans should help overcome management challenges by clearly delineating responsibilities and identifying resources available to achieve goals and objectives in each area.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. To be valuable in managing agency responsibilities, the key elements of the organizations Strategic Plan and the Annual Performance Plan must be a factor in operating decisions made every day. Shortly after being appointed to this post, I held a workshop with my senior managers and key personnel and addressed this operating philosophy. To ensure that the performance objectives are meaningful in terms of the decisions managers face every day, I am reviewing the DA Strategic Plan. I expect to establish goals and objectives which will clearly guide my managers in making their operational decisions.

Question. Will this use increase in the future and if so in what ways?

Answer. Based on my philosophy concerning the role of performance goals and objectives in day to day management of operations, I feel certain that the use GPRA will increase in the future.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. A blanket statement is very hard to make in this case. My experience has been that low performance against a program goal sometimes means more resources are needed in that area and in other cases it means that the activity needs to be de-emphasized.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. We are seeking no such changes at this time.

Question. Based on your fiscal year 2000 Performance Plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. As discussed above, I am in the process of examining the DA Strategic Plan. I am factoring in the experience my managers have had in operating under GPRA for a few years. I am looking at the goals, objectives, and performance factors which are measurable and will be useful and in guiding day-to-day operations.

OFFICE OF THE CHIEF INFORMATION OFFICER

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The performance goals for the Office of the Chief Information Officer (OCIO) measures the progress of activities that directly support the mission, strategic goals and program activities as described in the Agency budget request.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The Program Managers developed their budget requests as well as the performance measures to support the performance goals. Program Managers utilize the following procedure to link performance goals to budget activities: prepare action plan, identify major milestones, determine strategy to meet milestones, identify performance measures, determine budget requirements necessary to meet milestones and performance measure, compare planned versus actual performance to validate budget request and adjust action plan and budget based on outcome of previous step.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The difficulty arises when funds have not been appropriated for programs that are identified in the agency Strategic Plan. In addition, acquiring and maintaining staff expertise in the areas needed to perform program activities is become an ongoing issue.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. During the fiscal year 2001 budget development process, OCIO staff made certain that all increases were aligned with the Strategic Plan and the Annual Performance Plan.

Question. Does each account have performance measures?

Answer. OCIO has only one account and the performance measures support this account.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The OCIO planning structure does not differ from the account and activity structure.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. There are no plans to propose any changes to this structure.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. There are no plans to propose any changes to the program activities under the account structure.

Question. How were performance measures chosen?

Answer. The performance measures were developed to identify the key component for determining if the program was successfully meeting the goal. For example, the need for validating and verifying data for the Y2K effort and measuring the progress of Service Center Initiatives (SCI) and implementation of the capital planning and investment control process were all deemed essential to USDA mission areas.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The agency determined that the mission critical nature of both the Y2K initiative and SCI justified any costs associated with performing reliable and meaningful independent validation and verifications for these programs.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. The performance data was verified through the independent validation and verification of the SCI and Y2K programs. Several of the performance measures from the fiscal year 1999 Annual Performance Report were modified for fiscal year 2000 in order to more accurately describe the activity. The performance measures for the new cyber-security initiative were modified and will be updated again as the Cyber-Security Program grows.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. OCIO has established several performance goals based on three strategic goals. The key performance goals OCIO recommends this subcommittee track based on the fiscal year 2000 Annual Performance plan are: Establish USDA policy on IT management using the Capital Planning and Investment Control Methodology; Develop and Implement USDA architecture; Infuse government and electronic data interchange technologies into business processes where applicable; Ensure that the Service Center technology improvements are driven by business needs and support re-engineered business processes; Establish a Central Cyber Security Office; Establish a department-level Risk Management Program and develop a USDA Enterprise Network. Each of these goals will be measured to track program results and will be available to the committee for review.

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. OCIO has identified three goals: Ensure decisions regarding the selection and deployment of information technology are based on USDA needs (outcome measure); Develop Department-wide information and technical infrastructures that will improve service delivery through more effective information systems and data management (outcome measure) and; Be a leading innovative information technology services organization, experienced in providing quality and cost-effective services for centralized and distributed computing, and applications support (output measure).

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. The following describes the key performance goals and their linkage to the agency general goals. (1) Establish USDA policy on IT management using the Capital Planning and Investment Control Methodology; Develop and Implement USDA architecture—Goal 1; (2) Infuse government and electronic data interchange technologies into business processes where applicable—Goal 1; (3) Ensure that the

Service Center technology improvements are driven by business needs and support re-engineered business processes—Goal 1; (4) Establish a Central Cyber Security Office—Goal 2; (5) Establish a department-level Risk Management Program—Goal 2 and: (6) Develop a USDA Enterprise Network—Goal 2.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. OCIO made a conscious effort to develop a minimum number of solid performance measures that effectively measure program outcomes. This minimized data collection costs when verifying the results. OCIO senior management reviewed these goals to ensure the plan includes a significant number of outcome measures.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. OCIO program managers do have an understanding of the differences between goals that measure output and those that measure outcome.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Customer satisfaction is measured differently for the Working Capital Fund OCIO cost centers the National Information Technology Center (NITC) and the Telecommunications Services Office (TSO) and the OCIO appropriated programs. Both NITC and TSO meet regularly with the customers to review performance. There are also service level agreements between these Working Capital Fund (WCF) activities and customers to define an acceptable level of service. The appropriated activities also meet regularly with their customers to discuss how the programs should be implemented. As far as internal customers, OCIO does measure the satisfaction of its employees directly in its plans and reports by gauging their level of morale and monitoring complaints.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. OCIO goals and performance measures were used as part of the basis for planning the fiscal year 2001 budget. The performance measures were reviewed to make sure that we are applying the most effective measure for monitoring performance. The cost of these measures was also reviewed. As the fiscal year 2001 budget was developed, program managers were required to verify that their performance measures aligned with the Strategic Plan.

Question. If a proposed budget number is changed. up or down. by this committee will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, we would be able to inform you of the impact of such changes on program performance in meeting our goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis so that the agency can be properly managed to achieve the desired results?

Answer. OCIO does have the technological capability to measure and report program performance throughout the year.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. Information concerning performance is available to all managers.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. The USDA information technology capital planning and investment control(CPIC) process continues to expand utilization of the Information Technology Investment Portfolio System (ITIPS) a web-based tool that facilities the data collection and analysis necessary track USDA IT projects throughout the selection, control, and evaluation phases of the CPIC process. Information from this application is readily available.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. No, we have not faced any such difficulty. OCIO maintains only one account for appropriated activity. The WCF accounts are closely monitored by the Working Capital Fund Executive Board to assure performance meets the expected outcome.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. There is currently no need to modify the budget account structure for either the appropriated or WCF accounts.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. There is currently no need to modify the budget account structure for either the appropriated or WCF accounts.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. There is currently no need to modify the budget account structure for either the appropriated or WCF accounts.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. Although the Department has some personnel with cost accounting expertise, the Department's Chief Financial Officer has recognized the need for a Department-wide effort to enhance cost accounting expertise and $240,000 is included in the fiscal year 2001 President's Budget request to provide such leadership. Currently, we are linking budget program activities to the goals in our annual performance plan. Ultimately, the additional fiscal year 2001 resources and a better-trained workforce, the Department will continue to implement improvements in this area.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as " Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. USDA is in compliance with FASAB's cost accounting standards. The Department has identified responsibility segments, for which financial statement reporting is provided, employing full cost techniques that include unfounded pension and accrued annual leave, Federal Employment Compensation Act accrued expenses, GSA rent, depreciation, and other expense items that are appropriate. Currently, the Department uses several costing techniques, including Activity-Based Costing, that permit us to determine the cost of our strategic goals and selected out activities. OCIO is scheduled to start using the USDA Foundation Financial Information System (FFIS) on October 1, 2001. At that time, OCIO should meet all requirements for Managerial Cost Accounting.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. The Department's current goal is to implement the Foundation Financial Information System throughout all USDA agencies in order to provide standardized accounting methodologies and improve data integrity for management and reporting purposes for salaries and expenses and administrative operations. As the Department improves its basic accounting and reporting processes, it will be able to better identify activities and outputs for unit costing and will evaluate the various accounting methodologies available and incorporate the appropriate methodology for the activity being costed. OCIO is scheduled to start using the USDA Foundation Financial Information System (FFIS) on October 1, 2001. At that time, OCIO should meet all requirements for Managerial Cost Accounting. Our WCF accounts already show depreciation. Appropriated accounts do not generally depreciate capital equipment.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes, we strongly believe that effective implementation of costing systems will vastly improve Federal planning, evaluation, and reporting at all levels of the organization. OCIO is scheduled to start using the USDA Foundation Financial Information System (FFIS) on October 1, 2001. At that time, OCIO should meet all requirements for Managerial Cost Accounting.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. As the Department implements activity based costing, it will be able to provide unit costs for activities and results.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. OCIO already allocates overhead costs to its goals in its Annual Performance Plans.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. There are no regulatory reform measures that have been put in place in conjunction with the development of the OCIO performance plan.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. External factors were not identified in either the OCIO Annual Performance Plan or the Strategic Plan as having an impact on achieving the goals.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. External factors were not identified in either the OCIO Annual Performance Plan or the Strategic Plan as having an impact on achieving the goals.

Question. What impact might external factors have on your resource estimates?

Answer. External factors were not identified in either the OCIO Annual Performance Plan or the Strategic Plan as having an impact on achieving the goals.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No overlapping or duplicated functions have been identified as a result of the development of the OCIO Annual Performance Plan.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. No overlapping or duplicated functions have been identified as a result of the development of the OCIO Annual Performance Plan.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Agencies can indeed use GPRA plans to identify such issues, particularly through management initiatives. OCIO has two management initiatives related to professional development of its employees. However, currently OCIO deals with issues of duplication and overlapping functions through other channels.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. OCIO leadership is committed to the principles of GPRA. OCIO has sponsored several workshops to discuss strategic planning. These sessions have also been used to review the status of our goals and if necessary, revise our strategy for accomplishing these goals.

Question. Will this use increase in the future and if so in what ways?

Answer. OCIO managers have been full participants in the development of our goals and performance measures, and they will carry their understanding of these principles forward as we begin the process of developing the 2002 appropriated budget.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Our performance measure are in their adolescence, as we gain more experience with each planning and reporting cycle they will mature and become more reliable.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The highest priorities in OCIO are based on a rapidly changing technology. Therefore, OCIO must maintain a position of flexibility in order to meet these highly technical challenges. The difficulty in transferring this flexibility to performance measures is demonstrated in the OCIO Annual Performance Plan for the past few years. As cyber security vulnerabilities have increased with the growth of the Internet, performance measures must be continuously revised to accurately identify outcomes for this program.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. OCIO will not be requesting any waivers of non-statutory administrative requirements.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. OCIO will not be requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. Yes, the OCIO Strategic Plan needs to be revised to reflect changes in technology and changes in the priorities within the organization. OCIO is now in the process of making these adjustments.

HAZARDOUS MATERIALS MANAGEMENT PROGRAM

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. Annual performance goals and program activities are linked to the Hazardous Materials Management Program (HMMP) mission and strategic goals by assigning targets to measure the progress of activities conducted pursuant to the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). It is the statutory requirements within these and other acts that form the basis for the HMMP mission.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The Hazardous Waste Management Appropriation (HWMA) was established in 1988 to provide targeted funding for priority hazardous materials cleanup projects. In the fiscal year 2001 appropriations language, the account name will change to the Hazardous Materials Management Appropriation to more accurately reflect its purpose and scope. The Hazardous Materials Management Group (HMMG) recommends policies regarding management and cleanup, provides technical assistance and oversight, and prepares consolidated HMMA budget requests, annual performance plans, accomplishments reports, and annual program performance reports, using data submitted by USDA agencies.

Annually, USDA agencies prepare prioritized funding requests for planning-year HMMP activities, revise their proposed programs of work at the start of the current fiscal year based on factors that include the availability of appropriated funds, and report HMMP accomplishments using a spreadsheet-based system developed by HMMG. Key reporting parameters include specific project activities requiring funding, performance targets for work to be undertaken, project priority, status, and cost data. All activities must be identified as supporting one of the allowable program activities shown in the table of codes for project activities provided.

[The information follows:]

CODES FOR PROJECT ACTIVITIES, BY INDICATOR TYPE AND GROUP

Indicator	Indicator Group	Activity Code	Program	OBPA Crosscut Category	GPRA Goal	P, M, or I [1]	Activity Description/Summary
Site Identification, Investigation, and Cleanup Planning.	1	.....	.....	.....	.....	.....	
	1	3016	RCRC ...	Compliance	1	P	RCRA section 3016 inventory.
	1	STID	SFND ...	Other	1	P	CERCLA site identification—40 CFR 300.405.
	1	PA	SFND ...	Compliance	1	P	CERCLA Preliminary Assessment (by NCP—40 CFR 300.410(b) for removal PA or 40 CFR 300.420.420(b) for remedial PA, and EPA guidance).
	1	SI	SFND ...	Compliance	1	P	CERCLA Site Inspection (all types, by NCP—40 CFR 300.410(d) for removal SI or 40 CFR 300.420.420(c) for remedial SI and EPA guidance).
	1	PASI	SFND ...	Compliance	1	P	Combined category that includes both PA and SI.
	1	EECA ...	SFND ...	Cleanup	1	P	Engineering evaluation/cost analysis (i.e., for non-time-critical removal)—40 CFR 300.415(b)(4)—may include National Argonne Lab's Expedited Site Characterization when done IAW NCP.
	1	RIFS	SFND ...	Cleanup	1	P	Remedial investigation/feasibility study—40 CFR 300.430.
	1	RMVD ..	SFND ...	Cleanup	1	P	Removal design—40 CFR 300.415.
	1	REMD ..	SFND ...	Cleanup	1	P	Remedial design—40 CFR 300.435.
	1	CESA ...	SFND ...	Other	1	P	CERCLA Section 120(h) Property Assessment, ''due diligence''.
	1	BRWP ..	SFND ...	Other	1	P	Brownfields redevelopment investigation/planning.
	1	RPLN ...	RCRD ...	Cleanup	1	P	RCRA subtitle C or D planning (e.g., closure plan, corrective action plan).
	1	RISK	PGMT ...	Compliance	1	P	Risk assessment (ecological or human health) for CERCLA or RCRA compliance.
	1	UPLN ...	RCRI	Cleanup	1	P	RCRA subtitle I planning (e.g., plans for UST removal, UST cleanups).
	1	CHAR ...	SFND ...	Other	1	P	Other site characterization/investigation (i.e., not PA, SI, ESA, or by NCP)—may include Argonne National Lab's Expedited Site Characterization.
Cleanup (Including UST)	2	.....	.....	.....	.....	.....	

CODES FOR PROJECT ACTIVITIES, BY INDICATOR TYPE AND GROUP—Continued

Indicator	Indicator Group	Activity Code	Program	OBPA Crosscut Category	GPRA Goal	P, M, or I [1]	Activity Description/Summary
	2	USTC	RCRI	Cleanup	1	I	UST removals and cleanup of contamination from releases—40 CFR 280.
	2	RMVA	SFND	Cleanup	1	I	CERCLA removal action—40 CFR 300.415, 300.820.
	2	REMA	SFND	Cleanup	1	I	CERCLA remedial action—40 CFR 300.435, 300.815.
	2	O&M	SFND	Cleanup	1	I	Operations and maintenance after CERCLA response action—40 CFR 300.435(f).
	2	PCLN	SFND	Cleanup	1	I	CERCLA 120(h) Property Cleanup.
	2	OPLM	SFND	Compliance	1	I	CERCLA environmental monitoring (after CERCLA response action).
	2	BRWN	SFND	Cleanup	1	I	Brownfields cleanup/redevelopment.
	2	CORA	RCRC	Compliance	1	I	RCRA corrective action—40 CFR 264.100–101.
	2	CLOS	RCRC	Compliance	1	I	RCRA (clean) closure—40 CFR 264, Subpart G.
	2	DISP	RCRC	Compliance	2	I	RCRA subtitle C hazardous waste disposal (may not qualify for HMMP funds).
	2	SWCL	RCRD	Cleanup	1	I	RCRA subtitle D—cleanup/close solid waste management units—40 CFR 257 or 258.
	2	RCRD	RCRD	Cleanup	1	I	Other RCRA subtitle D compliance (may not qualify for HMMP funds).
	2	GWMI	RCRC	Compliance	1	I	RCRA environmental monitoring (after closure or corrective action).
	2	MXDW	RCRC	Cleanup	1	I	Radioactive mixed wastes only (if other codes do not apply).
	2	ORPH	SFND	Cleanup	1	I	Orphan share of CERCLA cleanups not included elsewhere.
Natural resource damage	3						
	3	PAS	SFND	Other	1	P	Preassessment screening.
	3	NRDA	SFND	Other	1	P	Natural resource damage assessment.
	3	NRRP	SFND	Other	1	P	Natural resource restoration planning.
	3	NRRE	SFND	Cleanup	1	I	Natural resource damage restoration.
Enforcement support and cost recovery	4						

	4	ENFS	SFND	Other	1	P	Enforcement support (e.g., PRP search, viability det., case development).
	4	PRPW	SFND	Cleanup	1	I	Value of response and restoration work performed/funded by PRP's.
	4	RCVY	SFND	Other	1	I	Response and/or restoration costs recovered.
Pollution prevention and environmental audit.	7						
	7	PPEO	PRVN	Other	2	P	Pollution prevention (P2) planning.
	7	POLP	PRVN	Other	2	I	P2 implementation.
	7	AUDT	PGMT	Other	2	M	Management system audit supporting CEMP, P2/SR implementation.
Case assistance (OGC only)	8	CASE	SFND	Cleanup	1	M	
Management	9						
	9	PGMT	PGMT	Other	1	M	General program management.
	9	OVRS	SFND	Cleanup	1	I	Oversight of work by PRP's or other non-agency entity.
	9	PJMT	PGMT	Other	1	I	Individual project management not covered elsewhere.
	9	FUND	PGMT	Other	2	M	Transfer, deobligation, and other administrative actions with funds.
	9	TRNG	PGMT	Other	2	M	All allowable training.
	9	OTHR	PGMT	Other	2	M	All allowable other.

[1] P—Planning, I—Implementation, M—Management.

ACRONYMS

APHIS—Animal and Plant Health Inspection Service ARS—Agricultural Research Service CMPA—Compliance agreement (FEDPLAN code) ESDF—Established standard, compliance date in future (FEDPLAN code) ESDL—Established standard, demonstrate leadership (FEDPLAN code) ESDP—Established standard, compliance date passed (FEDPLAN code) ESRE—Established standard, replacement due to expansion (FEDPLAN code) ESRO—Established standard, replacement due to obsolescence (FEDPLAN code) F—Finished, or projected to be finished, in indicated fiscal year FF—Finished in the previous fiscal year (enter code only once) FS—Forest Service FSA/CCC—Farm Service Agency, Commodity Credit Corporation FSA/FLP—Farm Service Agency, Farmer Loan Programs FSIS—Food Safety and Inspection Service H—High (FEDPLAN priority) HMMG—Hazardous Materials Management Group I—Implementation, action (Sub-Program) INOV—Notice of violation (FEDPLAN code) L—Low (FEDPLAN priority) M—Medium (FEDPLAN priority), or management (Sub-Program) N—New project/activity this fiscal year O—Ongoing project/activity from previous fiscal year OGC—Office of General Counsel OTHR—Other reasons/needs (FEDPLAN code) OVRS—Oversight of work by others P—Planning (Sub-Program) PDEF—Program definition (FEDPLAN code) PGMT—Program management (FEDPLAN code) PPAC—Pollution prevention to achieve compliance (FEDPLAN code) PRVN—Pollution prevention PSDF—Pending standard, compliance date in future (FEDPLAN code) RCRC—RCRA Subtitle C, Hazardous Waste RCRD—RCRA Subtitle D, Solid Waste RCRI—RCRA Subtitle I, UST RD—Rural Development SFND—Superfund, CERCLA.

Each allowable activity is explicitly linked to a specific performance goal. Regulatory references are provided to further ensure that budget requests support HMM's performance goals. By requiring that all reported data be linked to a standard list of program activities defined in applicable regulations (e.g., the National Contingency Plan for CERCLA preliminary assessments, site inspections, and response actions), correlation is high between budget activities and performance goals.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The current spreadsheet-based system used to monitor program activities was implemented at the end of fiscal year 1997 to improve data consistency and accessibility to management. It has also made it easier to link budget activities to performance targets. Difficulties encountered in implementing the new system were largely the result of affected agencies using different information system platforms and software and the variability in system users' proficiency. Use of commercially available software has helped ease the problem of quality data acquisition and processing. An unresolved difficulty is that of linking specific project activities to budget object data on a project-by-project basis. A work group was recently formed to address this issue.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes, the HMMP budget is built up from prioritized activities that are explicitly linked to specific performance goals and measures.

Question. Does each account have performance measures?

Answer. Yes, HMMP appropriated funds are allocated and distributed to several USDA agencies who draw from the same list of performance measures in requesting funds and reporting accomplishments.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The performance planning structure is based upon compliance with two statutes, CERCLA and RCRA, whereas the account and activity structure in the budget justification is a single line item. Two performance goals are associated with the single line item for the HMMA. About 90–95 percent of the HMMP budget supports investigation and cleanup under CERCLA of past contamination on lands and facilities under USDA jurisdiction, custody, and control, plus leaking underground storage tank cleanup under RCRA. The remaining 5–10 percent of the budget is for other RCRA compliance.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. HMMG does not plan to propose any changes to the account structure for fiscal year 2001.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No changes are proposed.

Question. How were performance measures chosen?

Answer. Performance measures were selected to provide the accomplishment information the House Agriculture Appropriations Committee requested in relation to compliance with CERCLA and RCRA.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The spreadsheet-based reporting system was developed to meet data needs at minimal cost. It has been designed to improve data reliability as well as program management. The performance data needed is a measure of progress toward meeting the goals of USDA's cleanup program, namely completing 150 cleanups by 2002 and the entire cleanup program by 2045.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. The plan does not include performance measures for which reliable data will not be available in time for the first performance report in March 2000.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The performance measures recommended for tracking program results are those appearing under Goal 1 in HMMP's Annual Performance Plan for fiscal year 2001. Specifically, these are:

—number of sites assessed/characterized on need for cleanup,

—number of cleanup plans completed,

—number of cleanups completed,

—number of inactive and abandoned mine cleanups completed,

—number of agreements reached with potentially responsible parties (PRPs), and

—estimated value of cleanup/restoration work performed by PRPs ($millions).

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. All are output measures in support of the larger desired outcome of restored facilities, lands, and watersheds. Cleaning up contamination is necessary for attaining the larger outcome, which is best addressed in the performance measures of the individual agencies receiving HMMP funds. For example, the cleanup of inactive and abandoned mines in the HMMP is an integral part of Forest Service activities under USDA Goal 3 and the Clean Water Action Plan.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. Goal #1: Improve the quality of the work environment for all employees, improve regulatory compliance and environmental awareness, and improve and restore facilities and lands under USDA stewardship, seeking compensation from those responsible for the contamination. Objective #1–1: Restoration of lands and facilities contaminated by hazardous substances, seeking compensation from those who caused the contamination.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. HMMP performance measures are intentionally established as output measures which contribute to the desired outcome. The desired outcome of the HMMP is completing the entire cleanup program. In 1995, USDA set the goal of achieving this outcome by 2045.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The HMMP program managers fully understand the difference.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. While HMMP does not have specific measures for customer satisfaction in its GPRA plans, a primary measure of customer satisfaction is the minimal number of environmental enforcement actions and lawsuits by private parties brought to date against USDA agencies. Such activity is closely monitored by USDA through both the HMMP and the Office of the General Counsel.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. Planned HMMP activities, the prioritized funding request, and performance goals for the fiscal year 2001 budget were based on the agencies' best estimate of progress in the remainder of fiscal year 1999 and the goals in the program of work for fiscal year 2000. Each year's specific goals are somewhat independent, because there is considerable variability in the costs and course of environmental investigations and cleanups. Each year's goals build upon the actual and planned work of all preceding years.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of the various goals?

Answer. The likely impact of a change in a proposed budget number can be indicated. Detailed project lists are provided with each budget request, and the agency's priority for each project is shown. To determine the program impact, the lower priority projects would be deferred to reach the proposed budget number, with the understanding that regulatory and other requirements may not allow some activities to be deferred.

If the budget number is changed upward, work planned for a later year would be advanced into the earlier year. Priorities are not currently assigned to outyear projects, but the effect on program goals could be generally estimated.

In practice, environmental cleanups require flexibility in project implementation and funding. Within USDA, plans for some unfunded priority projects are typically prepared along with the funded projects to allow for adjustment in the program if a funded project is delayed or additional funding becomes available. This proactive approach provides maximum efficiency and cost effectiveness in conducting investigations and cleanups.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes, the spreadsheet reporting system and other records provide this capability. Currently, program performance is assessed at the Department level at the beginning of the fourth quarter and at the close of the fiscal year. Aggregated program performance, in the form of National Finance Center reports, is monitored monthly. Agencies submit reports and are encouraged to monitor their HMMP activities on a regular basis.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. All levels of management have access to program status reports.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Yes, a single spreadsheet-based system is used to maintain HMMP data at the USDA level.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. HMMP has not faced difficulties as a result of the budget account structure.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Linkages would not necessarily be clearer if the budget account structure was modified.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. This question is not applicable.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. This question is not applicable.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. The HMMP relies on systems and expertise of the National Finance Center and the individual financial offices of the affected agencies for accounting services.

There is already a linkage, even before planned improvements are implemented. The prioritized project list submitted with the HMMP budget package includes information on the funding needed for each activity, the relationship of the planned activities to the GPRA performance goals and indicators, the specific desired output, and the governing statutory or regulatory authorities. Information is also presented on the location of each proposed activity, its current status, the goal for the end of the year, and other planning information.

At the end of each fiscal year, agencies report on their activity-specific obligations and carryover, which activities were completed that year, and other financial and performance data. The data is in spreadsheet format, so it can be readily summarized and analyzed by management. Attainment of performance goals is evaluated, as are such indicators of program performance as obligation rates, the balance of "old" versus "new" work being undertaken, and the balance of investigative versus cleanup work.

Work is ongoing to improve the linkage of budgets and results. Training of system users is ongoing to increase efficiency and improve data quality. Agency management will be asked to attest to the quality of HMMP data they submit throughout the budget cycle as well as their contribution to the GPRA performance goals of the HMMP. Development, testing, and implementation of a network-based system that could be used for real-time project management as well as reporting is being considered. The feasibility of tracking obligations and expenditures by budget object as well as by activity is being evaluated.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agen-

cy's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. Currently, we rely on the individual agencies and the National Finance Center for cost accounting of HMMP expenditures.

As noted in an earlier response, a USDA work group will try to identify feasible alternatives for improving HMMP accounting and accountability systems, but the solution is expected to be dependent on USDA-wide changes in current systems.

Question. Will you be able in the future to show this committee the full and accurate cost of each activity in the program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. After a USDA-wide system is implemented, we will be able to show the committee the full and accurate cost of each activity in the HMMP.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. The goals and activities of the HMMP are confined to CERCLA and RCRA compliance activities. Current systems already provide a substantially complete picture of the funds spent on the HMMP and the results obtained.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. The spreadsheet activity-based budgeting and reporting system used by the HMMP is already able to provide substantially complete unit costs, although a small portion of total actual costs may not be reflected in all cases, because the individual agencies may or may not be using full-cost accounting methods.

To illustrate, a table summarizing fiscal year 1999 HMMP accomplishments by project status and performance indicator is provided.

The fact that the average cost of the 21 federally funded cleanups that were finished was about $13,500 suggests that these were relatively small and simple cleanups. The average obligation on ongoing cleanups was nearly ten times as much, and work greater than the entire HMMA budget was performed by potentially responsible parties or cost recovered on two larger cleanups.

[The information follows:]

SUMMARY OF FISCAL YEAR 1999 ACCOMPLISHMENTS, USDA HAZARDOUS MATERIALS MANAGEMENT PROGRAM, BY STATUS AND PRIORITY

[Dollars in thousands]

Project status when fiscal year 1999 ended	Year-end fiscal year 1999 data type	Indicator group								
		Investigations	Cleanups	Natural resource damage	Enforcement support	UST cleanups	Pollution prevention and environmental auditing	Legal support	Program management, including PRP oversight	Grand total
Finished	Sum of HMMA Obligated Amount	$1,385.7	$148.1	.....	$10.2	$104.9	.....	.....	.....	$1,648.8
	Count of HMMA Obligated Amount	9	12	.....	1	3	.....	.....	.....	25
	Sum of Non-HMMA Obligated Amount	$68.4	$135.5	.....	.....	$221.0	$476.0	.....	.....	$900.9
	Count of Non-HMMA Obligated Amount	5	9	.....	.....	1	4	.....	.....	19
	Sum of Cost Recovery	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Count of Cost Recovery	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sum of Estimated Value of PRP Work	.....	$500.0	.....	.....	.....	.....	.....	$250.0	$750.0
	Count of Estimated Value of PRP Work	.....	1	.....	.....	.....	.....	.....	1	2
Finished in Earlier Fiscal Year	Sum of HMMA Obligated Amount	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Count of HMMA Obligated Amount	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sum of Non-HMMA Obligated Amount	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Count of Non-HMMA Obligated Amount	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sum of Cost Recovery	.....	$12.0	.....	.....	.....	.....	.....	.....	$12.0
	Count of Cost Recovery	.....	1	.....	.....	.....	.....	.....	.....	1
	Sum of Estimated Value of PRP Work	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Count of Estimated Value of PRP Work	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ongoing	Sum of HMMA Obligated Amount	$6,456.4	$3,028.0	$66.7	$276.4	$554.4	$207.0	$1,060.0	$2,834.3	$14,483.2
	Count of HMMA Obligated Amount	58	37	3	14	16	2	1	34	165
	Sum of Non-HMMA Obligated Amount	$1,824.0	$5,878.7	$16.0	$179.6	$397.0	$103.5	.....	$3,046.6	$11,445.5
	Count of Non-HMMA Obligated Amount	25	33	1	3	7	2	.....	13	84
	Sum of Cost Recovery	$4,710.5	$18,842.4	.....	.....	.....	$4.8	.....	$378.0	$23,935.7
	Count of Cost Recovery	1	2	.....	.....	.....	1	.....	1	5
	Sum of Estimated Value of PRP Work	$2,550.0	.....	.....	.....	.....	.....	.....	$6,783.8	$9,333.8
	Count of Estimated Value of PRP Work	6	.....	.....	.....	.....	.....	.....	11	17
	Total Sum of HMMA Obligated Amount	$7,842.0	$3,176.1	$66.7	$286.6	$659.3	$207.0	$1,060.0	$2,834.3	$16,132.0
	Total Count of HMMA Obligated Amount	67	49	3	15	19	2	1	34	190
	Total Sum of Non-HMMA Obligated Amount	$1,892.4	$6,014.3	$16.0	$179.6	$618.0	$579.5	.....	$3,046.6	$12,346.4
	Total Count of Non-HMMA Obligated Amount	30	42	1	3	8	6	.....	13	103
	Total Sum of Cost Recovery	$4,710.5	$18,854.4	.....	.....	.....	$4.8	.....	$378.0	$23,947.7

Total Count of Cost Recovery	1	3	.....	.....	.....	1	.....	1	6
Total Sum of Estimated Value of PRP Work	$2,550.0	$500.0	.....	.....	.....	.....	.....	$7,033.8	$10,083.8
Total Count of Estimated Value of PRP Work	6	1	.....	.....	.....	.....	.....	12	19

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. The HMMP is funded with HMMA and agency funds. HMMA funds are allocated and distributed to a number of agencies. Some do full cost accounting, and others do not. In general, the dollars associated with an activity approach the full costs. This issue may also be addressed by the recently created working group.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. The HMMP is governed by CERCLA, RCRA, and their implementing regulations. No regulatory reform measures related to the cleanup program were implemented by USDA.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The primary external factors that affect goal achievement are availability of sufficient funds, the time it takes to negotiate complex agreements with regulatory agencies and responsible parties, and the many unexpected developments in environmental investigations and cleanups.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. The steps found to be most effective in minimizing the impact of external influences is to maintain a highly experienced staff to manage HMMP activities; to closely coordinate and plan response actions; and to work closely with other Federal agencies, state agencies, and stakeholders.

Question. What impact might external factors have on your resource estimates?

Answer. If viable responsible parties cannot be identified at sites where environmental problems are the result of non-USDA activities, the costs of cleanup must be borne by USDA, even if USDA activities did not cause or contribute to the problem. Most of the biggest and most expensive contaminated sites on lands and facilities under USDA jurisdiction, custody, and control resulted from the activities of others.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No overlapping functions or program duplication were identified.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. This does not apply, because no overlapping functions or program duplication were identified.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Annual performance plans should focus on defining and pursuing desired outputs and outcomes; other mechanisms should be employed to assess and report the extent to which management systems are supporting, facilitating, or impeding the work of the organization and to redesign organizational structure and processes to improve effectiveness and efficiency in producing results.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. GPRA considerations are increasingly a factor in HMMP decision making. Taken together with the potential liabilities associated with environmental contamination, GPRA has helped focus management attention on the short- and long-term goals and resource needs of the HMMP.

Question. Will this use increase in the future and if so in what ways?

Answer. To some degree, but regulatory requirements and public interest are expected to continue to be the primary program drivers. To the extent possible, changes in these forces will be addressed through GPRA planning.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. There is a one-to-one correlation between the HMMP performance measures and the statutory or regulatory requirements they address. Completed investigations and cleanups are the mission of the HMMP, but these activities only contribute to the larger desired outcomes of restored lands and watersheds on lands under USDA jurisdiction, custody, and control. Recognizing this limited role of the HMMP in USDA's management of lands and facilities, the performance measures are important, but we are still early in the implementation of this new approach.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The difficulties of accurately estimating the cost and course of projects involving environmental contamination are well known. There may be more or less contamination than expected from the limited investigative work that was done at the start of the project. What appeared to be a routine project may become complicated in other ways as well. Regulatory agencies, potentially responsible parties, and stakeholders all play a vital role in cleanup decisions on lands under USDA jurisdiction, custody, and control, and this role will only increase as the larger cleanups are taken up. Environmental cleanups will always require substantial flexibility in project implementation and funding.

At current HMMP funding levels, it is difficult to maintain the experienced staff needed to improve program efficiency and effectiveness. This is particularly evident in the Forest Service, where retirements and staffing cuts have been greatest. The inventory of cleanups that are ready to go is being depleted as we struggle to maintain the pace of actual cleanups in the face of these staffing reductions and "flat-lined" HMMA funding for the past six years.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No waivers of non-statutory administrative requirements are being requested.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No relaxation of transfer or reprogramming controls are being requested.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. Modifications to performance measures will reflect our experience under GPRA, but at this point there have not been substantial revisions to the strategic plan.

FOOD SAFETY AND INSPECTION SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The mission of FSIS is to ensure that meat, poultry, and egg products moving in interstate commerce, imported from other countries, or exported to other countries are safe, wholesome, and accurately labeled. In 1996, FSIS issued the HACCP final rule, which serves as a blueprint for changes in meat, poultry, and egg products' inspection for the future.

All FSIS programs and priorities lead to one goal: enhancing the public health by minimizing foodborne illness from meat, poultry, and egg products. The Strategic Plan reflects this one goal and the strategies FSIS is currently using to reach this goal. Unlike agencies with many, perhaps conflicting, priorities, FSIS can concentrate on developing the best strategies to reach this one overriding goal. The Agency created its Strategic Plan with a mission statement, goal, objectives, and measures. In order to link the Strategic Plan with the Annual Performance Plan (APP), FSIS converted its strategic objectives into annual performance goals for the APP. The Agency's program activities and corresponding budget requests support the Agency's mission and the performance goals.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The Agency recognizes the importance of linking performance goals and budget activities through the Agency mission. The goals represent our mission objectives, while the budget activities represent our mission activities. To accomplish this, FSIS management guides the budget and planning staffs as they work together in the preparation of budget initiatives and the APP to ensure that budget requests reflect the performance goals contained in the Agency's APP and support program activities derived from the Agency's mission.

Question. What difficulties, if any, did you encounter and what lessons did you learn?

Answer. FSIS has faced the challenge of developing performance measures for which reliable data is available. Agency staffs researched data availability and compared options for performance measures, choosing performance measures for which data which could be more readily obtained, verified, and validated.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. FSIS uses both its Strategic Plan and budget plan to design the APP. The performance goals are specific to achieving a reduction in foodborne illness, and the measures in the APP indicate progress in achieving these goals. FSIS provides

a new performance measure for each requested budget increase. For example, in the 2001 budget, FSIS requests additional funding for visiting more establishments during foreign reviews to ensure that equivalency standards are being met. To link performance measures to the budget, the 2001 APP includes a performance measure to illustrate that reviews are projected to increase in 2001 if the Agency receives its budgetary request.

Question. Does each account have performance measures?

Answer. Most of FSIS' budget is in one appropriated salaries and expenses account for which the Agency designed performance measures. Many of the performance measures do not apply to the Agency's small Trust Fund account because the HACCP final rule does not cover voluntary inspection. The Agency has not designed separate performance measures for the Trust Fund account.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The FSIS performance planning structure is built around specific steps that must be carried out to achieve the strategic goal of minimizing foodborne illness associated with meat, poultry, and egg products. The account and activity structure used in the budget submission is organized along program activity lines that capture the range of infrastructure and support activities necessary to carry out a total food safety program.

Question. Do you plan to propose any changes to your account and/or program activity structure for fiscal year 2001?

Answer. FSIS has added an activity for Codex Alimentarius in the 2001 budget. Codex Alimentarius was formerly included under the Import/Export Inspection activity.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. The addition of Codex Alimentarius as a budget activity is the only change identified to date. FSIS does not anticipate proposing any further changes to our program activities described under this account structure.

Question. How were performance measures chosen?

Answer. The FSIS Strategic Plan contains one goal and six objectives with associated performance measurements. The same objectives and measures detailed in the Strategic Plan are used in the APP. The six objectives, written as performance goals in the APP, have been slightly modified to help Agency managers focus on the need to collect and track data for the fiscal years listed in the APP. The annual goals are written in measurable, performance-oriented terms so that annual program evaluations can more easily gauge progress for each performance goal. Maintaining a common set of objectives and performance goals provides a strong linkage between the long-range Strategic Plan objectives and the more output-oriented performance goals in the Annual Performance Plan. Performance measures are derived from performance goals based on measurable activities directed toward achieving goals. In addition to measures of ongoing program activity, FSIS also provides performance measures for each requested budget initiative. This is done to illustrate how additional funding would be used if the Agency receives its budget request.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. In designing performance indicators, FSIS has relied on information that is readily available within the Agency. Therefore, the data collected for activities contained in the Strategic Plan will be consistent and comparable with other activity data collected over time, ensuring a stream of reliable and valid performance data for the Plan's goals and objectives. Data quality should continue to be high since the Agency will rely on the same data sources it has used in the past, e.g., in-plant records.

There should be little increased cost specifically related to the collection of data for meeting GPRA requirements. FSIS will continue to improve the Agency's information management systems, which will primarily benefit the food safety program, but also improve the quality of GPRA data.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. FSIS has submitted its first performance report and believes that all data incorporated are reliable. Consistent with the 2000 report, performance measures for 2001 are based on both available and reliable information sources.

Question. What are the key performance goals from your fiscal year 2000 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. FSIS uses a mix of outcome and output measures to assess progress made in achieving its goal, and recommends that the subcommittee use performance goals one, two, three, and four to track FSIS program results. They are as follows:

—Reduce pathogens on raw products by continuing the implementation of the Pathogen Reduction/HACCP rule.

—Establish effective working relationships with other public health agencies and stakeholders to support the President's National Food Safety Initiative.

—Promote food safety from farm-to-table.

—Complete the necessary cultural change to support HACCP and food safety.

The Agency believes that HACCP, along with microbiological testing, will improve the safety of inspected products and reduce foodborne illness. Measurable declines in pathogen contamination of federally inspected product, which correlate with HACCP implementation, validate HACCP as a model system for production and inspection. This has increased the Agency's effectiveness in completing its own HACCP-related cultural change and working with other public health agencies and stakeholders to promote food safety and support the President's Food Safety Initiative.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency strategic plan to which the annual goal is linked.

Answer. The current FSIS strategic goal is to enhance the public health by minimizing foodborne illness from meat, poultry, and egg products. The outcome of achieving this goal is a 25 percent reduction in the number of foodborne illnesses associated with meat, poultry, and egg products by the year 2000. The 2000/2001 APP is the last to be submitted under the current 1997–2001 Strategic Plan. FSIS is currently working with the President's Council on Food Safety to design a new Strategic Plan for the Agency, which will set a new long term general goal and performance objectives for fiscal year 2002 through 2006.

Question. In developing your APP, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. FSIS managers provided guidance on developing performance indicators that would provide significant measures of progress toward achieving performance goals and the overall strategic goal based on sources of available data. For example, reducing pathogens on raw products through the HACCP-based inspection system is a major focus of FSIS initiatives, which could be measured and has produced impressive results. The APP has incorporated outcome measures for this and other performance goals by using data available through FSIS information sources.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The Agency has provided training for its managers over the last several years to meet the requirements of GPRA. Agency managers are actively involved in the formulation of the APP and in budgetary discussions. While substantial progress has been made, continued training is needed as GPRA concepts and requirements are integrated into ongoing program operations.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Customer satisfaction measures are based, in part, on feedback from stakeholders, including our own employee groups, representatives from the regulated industry, consumer groups, academia, State and local governments, and foreign governments. A primary vehicle for obtaining this feedback was the FSIS Customer Satisfaction Initiative conducted last year as part of the National Performance Review's customer survey initiative. Stakeholders participated in the development of the HACCP rule and implementation of the HACCP final rule through numerous public meetings that FSIS has conducted over the past several years. Achievement of a 25 percent reduction in foodborne illnesses associated with meat, poultry, and egg products in 2000, the outcome for the Agency's strategic goal, is a powerful measure that relates to customer satisfaction with the federal food safety program.

Question. How were the measurable goals of your fiscal year 2000 APP used to develop your fiscal year 2001 budget?

Answer. FSIS is currently in the process of transitioning into a post Pathogen Reduction/HACCP phase and is working to develop a new Strategic Plan in coordination with the President's Council on Food Safety. The Council is looking at the classic risk analysis model which includes risk assessment, risk management, and risk communication as the basis for developing a Strategic Plan vision statement, and drafting food safety goals that create the framework for its food safety Strategic Plan. The Agency used the concepts from these draft goals and vision statement as

major tools in developing the FSIS fiscal year 2001 program initiatives, APP, and corresponding budget proposals.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and achievement of various goals?

Answer. FSIS would be able to indicate a likely general impact from a budget change on the level of program performance and achievement of various goals. The degree of precision would depend on the proposed budgetary change.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. As previously stated, Agency management data is used in designing performance measures. FSIS reports program performance internally throughout the year in managing to achieve desired results. However, FSIS does need to improve its corporate databases to improve the quality of data gathered and disseminated, including its accessibility, accuracy, timeliness, type, and complexity. These data improvements would also improve program measurements.

Question. If so, who has access to the information-senior management only, or mid- and lower-level program managers, too?

Answer. Relevant program performance data is shared throughout FSIS among senior, mid-level and lower-level managers to achieve desired results. Performance data guides the Agency's work at all levels of food safety program management.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. As indicated previously, improvements in Agency data systems are needed. Data and information management needs will be addressed in the new FSIS draft Strategic Plan.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. FSIS has one strategic goal, which encompasses all activities in the present budget account structure. The Means and Strategies sections in the APP highlight budget proposals in the same manner as the Explanatory Notes justifications, and enable the Agency to link the budget activities with the performance goals and measures in a clear and meaningful way. The activities included in the budget account structure are sufficiently broad to cover the use of budgetary resources and are also specific enough to account for the Agency's use of particular resources, such as Grants-to-States, the Field Automation and Information Management (FAIM) initiative, and Codex Alimentarius.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. FSIS has not found the need to modify the account structure significantly. As indicated previously, Codex Alimentarius is proposed as a new budget activity in the 2001 budget, and will provide a stronger linkage with the results of that activity.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. No modification is needed at this time.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. No modification is needed at this time.

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. FSIS' cost accounting structure reflects both direct and indirect costs of the budget activities under which funding is appropriated to the Agency. The current FSIS strategic plan has a single goal: "Enhance public health by minimizing foodborne illness from meat, poultry, and egg products." All Agency costs are directed toward achievement of this single goal.

fiscal year 2001 will be a transition year for FSIS after completing the third and final phase of HACCP implementation. FSIS will proceed to the next steps of its plans for HACCP through a new strategic plan that involves coordination with the

President's Council on Food Safety. Under a new strategic plan, FSIS expects to maintain the capability to link the costs by budget activity with the costs of achieving one or more GPRA goals. FSIS will allocate the costs associated with GPRA goals either manually, or on an automated basis through new purchases of software to complement the accounting system. New software packages for a "Managerial Cost Accounting" system and an "Activity-Based Costing" system will also meet GPRA requirements for reporting costs by both performance measure and activity. However, implementation of new software will require an increase over the Agency's baseline funding level for software and staffing.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all Federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. FSIS implemented the new USDA Foundation Financial Information System (FFIS) accounting system October 1, 1999. FFIS is configured to report costs by budget activity, which can accommodate the "full cost" requirement to report on the Agency's mission activities. FFIS does not use an "Activity-Based Costing" system and would require additional resources to incorporate it into its overall financial management system.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. FSIS is currently able to report the "full and accurate cost" of each Agency budget activity, including administration, employee benefits, and depreciation using the automated FFIS accounting system.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. FSIS currently reports the true costs of the budget activities conducted by the food safety program. The Agency is also making an ongoing effort to link the information contained in both the Explanatory Notes budget activity presentation and the performance information in the Annual Performance Plan. The President's Council on Food Safety is in the process of developing a 5-year comprehensive strategic plan and a coordinated food safety budget for the Federal food safety agencies. The 5-year strategic plan, its derivative annual performance plans and reports, and coordinated food safety budget will present the costs and results of food safety activities government-wide.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. In most instances, data that is not resident in the accounting system must be combined manually with cost information to obtain activity unit costs. An example is the numbers and locations of enforcement actions, data that is not part of the accounting system. Assuming the future addition of new software packages for a "Managerial Cost Accounting" system and an "Activity-Based Costing" system, these systems will be designed to show the per-unit cost of each activity and result.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. FSIS currently calculates the full cost of its performance measures manually in relation to the current automated "Activity" reporting method. These cost figures include the applicable overhead costs. Additional software to automate this process would incorporate the same methodology used in manual calculations.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. The major FSIS strategy for reaching the goal of reducing foodborne illness is requiring plants to develop and implement HACCP-based production systems. HACCP has proven to be an effective system for preventing microbiological and other hazards from getting into meat, poultry, and egg products. FSIS believes that it is far better, and much more effective, to prevent hazards than to try to remove hazards after they occur. Publication of the HACCP final rule in 1996 and the resulting regulatory reform efforts have guided the development of the Strategic Plan and the succeeding Annual Performance Plans and Reports. FSIS has undergone a major cultural change in moving the inspection program from a command-and-control orientation to a system of performance standards. FSIS has begun a

major training and education effort to prepare the workforce to monitor plants for prevention of hazards rather than dealing with the negative results of hazardous conditions in plant operations. At the same time, FSIS is reemphasizing that plants are responsible for producing safe products by using HACCP systems to prevent hazards.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Where appropriate, a brief explanation of external factors that could influence goal achievement is included by performance goal at the end of the section titled "Discussion of Performance Goal."

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. As an example of external factors, international trade issues have increased the importance of U.S. participation in the Codex Alimentarius Commission to ensure that Codex standards are based on science-based factors to promote U.S. food safety standards and trade interests in the international arena. In many arenas, increasing awareness of external influences and strengthening working relationships with stakeholders has enabled FSIS to prepare, anticipate, and plan for such influences in a proactive manner with positive outcomes for food safety efforts.

Question. What impact might external factors have on your resource estimates?

Answer. Several external factors have had an impact on FSIS resource requirements, including the following examples. Regarding international trade issues, FSIS became convinced that a significant increase in resources for U.S. Codex Alimentarius is required to persuade international Codex delegates of the need for science-based standards and to promote U.S. interests at home and abroad. Legislation introduced in the Senate to permit the interstate shipment of State inspected product requires a comprehensive review of all State meat and poultry programs by October 1, 2001. To prepare for passage of this legislation, the 2001 budget requests an increase for State program reviews. As these examples illustrate, external factors often highlight the need for additional resources.

Question. Through the development of the Performance Plan, has the agency identified overlapping function or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. The Agency has not identified internal nor external overlapping functions or program duplication through the APP. There are areas where there are mutual responsibilities. As a result, FSIS has identified areas where enhanced cooperation among agencies would be beneficial to improved food safety. For the past couple of years, the Agency has been working closely with the Food and Drug Administration (FDA) and State government agencies to address food safety gaps in the transportation and retail areas. Through the President's Council on Food Safety, FSIS is working with other food safety agencies to identify common goals, objectives, and cross cutting issues. The President's Council on Food Safety is currently developing a food safety Strategic Plan, which will further enhance the future collaboration among food safety agencies.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Yes, within the strategic planning framework of the President's Council on Food Safety, plans developed by FSIS are being coordinated with those of other Federal food safety and public health agencies, namely FDA and the Centers for Disease Control and Prevention.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. During the development of the current Strategic Plan, FSIS leadership recognized the importance of linking human health outcomes to HACCP implementation, which was a revolutionary change in the manner in which the Agency conducted meat, poultry and egg product inspection. Consequently, the Agency Strategic Plan and corresponding APPs reflected Agency senior management decisions to establish performance measures that were related to human health outcomes. In the past, the Agency measured its progress in terms of outputs, such as number of plants inspected or number of pounds of inspected product, rather than the true societal outcomes of reduced foodborne illnesses. The Agency is now working more closely with CDC and others to utilize measures with a public health focus. FSIS budget submissions and APPs reflect top management decisions based on GPRA-related performance goals. This process is being continued and enhanced in the current development of a new Agency Strategic Plan.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. FSIS has established performance measures that demonstrate progress toward the achievement of each performance goal. That is, the measures used correlate directly to the targeted performance. The targets reflect both trend data and baseline data. For instance, FSIS and CDC use trend data on foodborne illness. FSIS also uses baseline data on the occurrence of microbiological hazards in meat, poultry, and egg products. Performance targets have been developed using baseline data and assumptions about the extent to which HACCP systems can reduce microbiological and other hazards that result in foodborne illness. These measures are based on the best available sources of data and should be viewed as indicators of the impact of the overall food safety program, which covers a broad range of activities.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. While recent data indicate, for example, that plants are overwhelmingly meeting targets, attention to the interpretation of performance data is needed regarding funding decisions to cover the full range of food safety activities. Resource estimates are based on more than current performance data, especially for proposed initiatives that are still in the concept stage. The Agency's experience with related activities often serves as a guide for resource estimates. Recent budget history indicates that resource estimates are sufficient to support proposed activities.

Question. Are you requesting any waivers of non-statutory administrative requirements? Specially, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No, the Agency is not requesting any such waivers.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in the strategic plan you issued on September 30, 1997? If so, what revisions are needed and when do you plan to make them?

Answer. The Agency is currently drafting a new Strategic Plan for fiscal year 2002 through 2007, which will be completed by September 30, 2000 and which will tie to the Food Safety Strategic Plan being developed by the President's Council on Food Safety.

FOREIGN AGRICULTURAL SERVICE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. FAS' program activities are restated as unique strategic objectives with key operating strategies and performance goals. Each FAS objective, in turn, is directly associated with FAS' strategic goals and mission. FAS' strategic goals are directly linked to the Department's objectives and goals.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Prior to the 1998 budget, FAS had developed its long-term Agricultural Trade Strategy (LATS) report which identified five (5) key drivers of long-term success. In the 1998 budget submission, FAS revised its program activities to correspond to these key drivers. As FAS began developing and refining its Strategic and Annual Performance plans, and following consultations with Senate Agriculture Committee staff on its initial draft strategic plan, FAS identified that it had two goals: (1) expand export opportunities for U.S. agricultural, fish, and forest products; and (2) promote world food security. FAS recognized that with a few modifications, its five program activities were actually objectives that support the achievement of FAS' two goals. The first four program activities (market access, market development etc., market intelligence, and financial assistance) all support FAS' goal to expand export opportunities. The last program activity (long term market and infrastructure development) supports FAS' goal to promote world food security. With the fiscal year 1999 and fiscal year 2000 performance planning process FAS further understood that the five objectives are actually a set of market expansion tools that support one another within markets. As a result of this progression towards better operational focus, the next strategic plan and annual performance plans will have objectives reflecting U.S. export goals for five regional markets and the program activities will have focused performance goals for each region. This will support the management of program activities as a set of tools to affect an outcome within a region.

Like other agencies across the Federal Government, FAS learned that in order to implement GPRA, planning needs to drive the budget. The five program activities in the fiscal year 1999 budget submission reflected slight modifications in the five program activities in the fiscal year 1998 budget. These modifications are a result of FAS' realization that it needed to realign its budget activities to its goals and objectives. As FAS learns more about institutionalizing performance-based management processes, it anticipates that there will be further changes to the budget structure to accommodate changes in legislation, the annual performance plan, international trade, and technology. For the fiscal year 2002 plan, the regional objectives approach will require the budget to be further subdivided by program activity along regional lines.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Performance measures contained in the agency's Performance Plan are linked to budgeted program activities. Additionally, each account has performance measures which are displayed in FAS' Annual Performance Plan.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. FAS' performance planning structure is an adaptation of the performance-based management structure commonly used in the private sector. The account and activity structure is just beginning to change from the traditional approach of associating costs to either: (1) a broad category of personnel, travel, training, and operating costs at the budget's identified activity categories; or (2) funding tied specifically to legislated programs, such as the GSM program, Market Access Program, and the Dairy Export Incentive Program. Following pending guidance from the department, a cost-accounting system that provides direct one-to-one linkages of specific performance measures for each budgeted account will have to be adopted to align the two structures.

Question. Do you plan to propose any changes to your account structure for fiscal year 2001?

Answer. No changes are planned at the present time. However, as FAS institutionalizes its performance-based management processes and as Federal Government agencies transition to a cost accounting system, FAS may propose changes in its account structure to facilitate aligning performance goals with all operating costs and appropriated/non-appropriated program activities.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No, however, the fiscal year 2002 Performance Plan currently under development will approach the performance goals, and hence the current budget accounts, subdivided by five geographic, regional markets (Africa, Asia, Europe, NIS, and Western Hemisphere). This is intended to provide focus and better management to agency goals and expenditures.

Question. How were performance measures chosen?

Answer. FAS believes that leadership starts at the top but performance comes from the front line. Following this principle, FAS' senior management created a draft strategic plan with objectives and the Strategic Operations Staff of the Office of the Administrator facilitated a series of one-day workshops for nearly every division in the agency. The purpose of these workshops was threefold: (1) to begin the education process of all employees and supervisors on GPRA and performance management; (2) to validate and improve the draft strategic plan prepared by senior management; and (3) to assist the divisions in preparing division-level performance plans which identified performance measures that are aligned to the agency's strategic goals and objectives. Following these workshops, FAS senior management participated in the validation of the revised draft strategic plan and the performance measures identified by the divisions prior to their submission to OMB and Congress.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The process of making GPRA a reality in FAS is more than two years in the making and still ongoing. Current performance measures were selected and balanced on the basis of (1) how the measures reflected the program activity's performance as an output or outcome; (2) as a management tool for operations and budgeting, or an illustration of end product (outcome) for a higher audience—not the same at all in real life operations; and (3) whether the data can be collected and verified at a reasonable cost. Since FAS's budget has been falling in real terms for several years, easy data availability took precedence over ideal performance measures in many cases. The struggle over an annual performance plan that is inward looking (a management tool) versus an outward looking tool (for high-level overview), is still in the balancing stages.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Some performance measures will not have reliable data be available in time for your first performance report in March 2000. More than 90 percent of FAS' performance measures will have reliable data on performance results. Those few exceptions are due to the character of data and we are in the process of defining data collection procedures, such as the customer surveys and obtaining OMB approval. FAS conducted GPRA workshops from April through June 1999 with every division (approximately 23) that has direct responsibility for developing and tracking the performance data necessary to meet the March 2000 performance reporting requirement. The primary purpose of these workshops was to ensure that FAS has meaningful performance measures and procedures in place to verify and validate that it is capturing the right performance data.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results? For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome ("how well"). State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. FAS suggests that the subcommittee focus on FAS' two agency general goals for which we have identified measurable outcomes. These are (1) Expanding export market opportunities for U.S. agricultural products (FAS has set a goal of U.S. exports returning to 22 percent of total foreign imports by the year 2010); and (2) Promoting world food security (FAS' goal is a reduction in the number of undernourished people by one-half of the 1998 FAO population estimate). Each of these two general goals have important annual performance measures (with annual goal) for our major program activities. These include legislated and agency-funded activities to enhance market access, market development, market finance, intelligence gathering, and long-term market enhancing and food aid programs. If these are successful, our overall goals may be successful as well.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Using independent analysis from the Economic Research Service, FAS was able to calculate the impact (i.e., outcome) of the exports supported by its program on rural communities and the national economy as a whole. Calculating impact of market development relies on procedures established and approved by the Trade Promotion Coordinating Committee (TPCC) and used in preparation of the annual National Export Strategy submitted to the Congress. This includes calculating the impact of FAS market development programs on exports. Estimating national and rural economic impacts involves combining the export impacts with trade multipliers associated with direct and indirect effects of agricultural exports.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. They are beginning to develop a greater understanding of the difference. In order to institutionalize strategic planning at every level of the organization, strategic planning workshops were held over the spring and summer of 1997 for every division in the agency. FAS conducted workshops again in 1998 and 1999. These workshops continued the process of teaching managers and their staffs that all activities support the organization-wide goals, and that data collection, verification, and validation, is a vital part of GPRA. This process of education is an ongoing requirement for FAS due to the high proportion of rotating foreign service officers (FSO) into Washington headquarters management positions. Typical FSOs have been overseas for 5 to 8 years and are unfamiliar with GPRA management concepts. FAS has instituted a critical performance standard for all FAS managers for GPRA and EEO planning and reporting. GPRA and EEO progress is monitored through quarterly reports, using computer technology. FAS' overseas personnel will be fully incorporated into this GPRA reporting technology by fiscal year 2002.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. For internal customers, FAS will perform two separate types of surveys. The first is the Peer Evaluations of FAS' headquarters and overseas offices' performance and customer satisfaction. The second survey will be a Work-life survey in which the employees and managers will be asked to identify trends in the work place which inhibit or promote productivity and employee development.

For external customers, FAS has numerous listening sessions with various customer groups to identify areas of improvement. For instance, FAS works in partnership with the Private Voluntary Organization (PVO) community in implementing the Food for Progress program. FAS has a yearly listening session where ideas are shared and new initiatives announced. These listening sessions have helped both groups (FAS and the PVOs) to focus on reducing red tape and improving the focus of specific projects. Also, FAS has listening sessions with U.S. banks participating in the GSM Export Credit Guarantee program. Again, these sessions have identified areas of improvement and cooperation. Finally, as a measure of customer satisfaction with FAS' market intelligence activities and publically distributed materials, two separate surveys for internal government users and private sector users are planned for fiscal year 2000. FAS managers are currently working with NASS/USDA professional statisticians to develop a survey tool.

Question. How were the measurable goals of your fiscal year 2000 Annual Performance Plan used to develop your fiscal year 2001 budget?

Answer. The budget is a major factor in reaching our goal of regaining a 22 percent market share of foreign imports by the year 2010 (the measurable target for General Goal 1: Expand market access for U.S. agriculture . . .). Without competitive resources, it will be very difficult to compete with our foreign competitors. U.S. market promotion and development assistance is a pale second to support provided by our major foreign competitors. At a minimum, the U.S. must assure that trade agreements are fulfilled through U.S. monitoring and enforcement. While FAS may fulfill it's annual performance goals, our foreign competitors continue to take a larger proportion of new, expanding market opportunities than the U.S. does, thereby eroding the U.S.'s market share. We're winning our battles but losing the war. The fiscal year 2001 FAS budget request asked for a marginal addition for trade agreement monitoring and enforcement and market promotion and development monies. However, since foreign government competitors continue to out spend the U.S. by 3-to-1 in export promotion funding, the U.S. share of total foreign imports, even through long-term foreign imports are climbing, will likely decline even further.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, for the most part, depending upon the size of the increase/decrease, FAS would be able to estimate changes in the associated performance goals and indicators. However, given current systems and the lack of a cost-accounting system in USDA, most responses will be estimates based upon knowledge of the business instead of a detailed one-to-one relationship between the funding and the specific output and/or outcome indicators.

Question. Do you have the technical capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes, FAS has built a GPRA tracking, evaluation, and reporting system that has proven to be an acceptable reporting tool, but for stateside operations only. Every supervisor's critical job performance standard requires GPRA planning, goal setting, and activity evaluation for improvement, guided by the Strategic Operations staff. The Administrator receives a quarterly agency-level GPRA report and summary from the Strategic Operations staff, which is then followed by a senior-level managers meeting to review progress.

Question. Who has access to the information—senior management only, or mid- and lower-level program managers, too?

Answer. All managers, information and correspondence personnel, the legislative affairs staff, and the EEO staff have access passwords. In addition, while only managers have the ability to "write" reports, by the end of fiscal year 2000, all FAS employees will have access to searching, viewing and printing GPRA reports by topic.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Some, high-level outcome results are derived from public data resources, such as the resulting U.S. agricultural exports or the reduction in the number of undernourished people, through Economic Research Service annual studies. However, data on most performance results are collected by the contributing divisions within the agency and reported by them in the GPRA reporting system as a cumulative success towards the agency-level annual targets. Each GPRA report identifies the division manager to contact for data details.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many

agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Question. Have you faced such difficulty?

Answer. Because of the lack of a cost-accounting system to track expenditures against the budget, it is difficult to show a direct one-to-one relationship between expenditures and specific performance measure results.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Yes it would and some changes can be made now, before a cost-accounting system is in place, that would provide a better match.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. Currently FAS' general program activities and budget relate directly to our mission and legislated mandates. However, if additional resources were available our current budget account structure could be modified so that most expenditures are related to an appropriate GPRA performance objective, and to performance goals for major program activities within objectives. This would include expenses such as travel and training, in addition to salaries and appropriated/non-appropriated program expenditures. Such a modification would improve managerial accountability by assessing the relative costs and benefits of various program activities and performance goals,. This would provide FAS better information to make future resource allocation decisions.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. The adoption of a true cost accounting structure that allows for the establishment of direct links between operating expenses and program dollars in the budget and performance measures in the performance plan would permit both the agency and the committee to account for the actual costs and benefits of the various program activities, and assist in setting spending priorities in future years.

Question. Spending significant resources on performance systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. All financial accounting and reporting support is provided to FAS by the Farm Service Agency (FSA) on a reimbursable basis. As such, FAS has no internal cost accounting expertise. With respect to the linkage of GPRA and the budget process, FAS budget formulation has been following the underlying GPRA tenets of strategic planning and performance measurement/reporting since fiscal year 1998.

Question. What is the status of your agency's implementation of the Managerial Cost Accounting Requirement, and are you using Activity-Based Costing.

Answer. The Farm Service Agency has been exploring Activity-Based-Costing for certain administrative services proved to FAS. However, departmental standards for uniform development of Managerial Cost Accounting systems have yet to be issued. Further work in this area is dependent on issuance of unified departmental standards and the significant budgetary resources that will be needed to develop and implement these systems.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. In the absence of uniform standards, it is difficult to say what the reporting capabilities may be.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true cost of the activities conducted by the program, and the results of these activities?

Answer. Again, in the absence of uniform standards, it is difficult to say what the reporting capabilities may be.

Question. To what extent do the dollars associated with any particular goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. Total, true cost accounting and specific performance goal alignment are not in place.

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan?

Answer. FAS' Market Access Program (MAP) and Foreign Market Development (FMD) program application process has changed significantly over the last 3 years

to align with the concepts and legislative directions within the Results Act. These changes were made to improve the operation of the program and coordinate program administration. This effort, and the MAP/FMD programs, will be more fully integrated with GPRA with the release of the fiscal year 2002 performance plan that will have regional U.S. export share goals as its objectives—and focused performance goals within regions for FAS programs, such as MAP/FMD, that support the objective.

Question. Does your fiscal year 2000 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Yes, both FAS' strategic plan and annual performance plan cite several external factors. These include overcoming foreign competitors' continued use of export subsidies, direct credits and credit guarantee programs, non-price export promotion, monopolistic marketing boards, and various technical assistance programs. Additional external factors outside FAS' span of control include variability in crop production due to weather conditions, both at home and abroad; effect of foreign exchange fluctuations on the price of U.S. products abroad; political instability that may undermine demand in key importing countries; and reductions in resources of other USDA and Federal agencies with whom FAS works in partnership to fulfill its mission and goals.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. FAS, in its GPRA fiscal year 1999 Report and in Congressional testimony, took the unusual step of placing our performance goals and successes in perspective with our overall mission of expanding U.S. agricultural export opportunities. While our annual program activity goals were, in fact, successfully accomplished—and will be in the future, the U.S. share of total foreign imports has been falling since 1981. The current funding levels of U.S. agricultural export promotion activities will cushion the continued decline in U.S. market share. These efforts will be supported by FAS continuing to effectively use the GSM program to inject liquidity into developing country markets suffering short-term liquidity crunches similar to the successful program activities in Asian countries during the fiscal year 1998 financial crisis. Additionally, FAS will use the Dairy Export Incentive Program, Foreign Market Development and Market Access Programs, and other activities.

Question. What impact might external factors have on your resource estimates?

Answer. The impact will vary based on FAS' span of control over the external factors.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance plan identify the overlap or duplication?

Answer. Yes, in conjunction with other USDA agencies within the Department dealing with SPS issues, FAS has, as a result of a General Accounting Office review of USDA's approach to resolving SPS issues, recently been tasked with the responsibility to support the Special Assistant to the Secretary on International Affairs. The objective is to coordinate USDA wide goals and objectives and facilitate the integration of USDA-wide processes to improve USDA's efficiency and effectiveness in prioritizing SPS issues and bringing them to resolution. Since this initiative is currently ongoing, FAS/USDA is actively determining how all of the USDA agencies will jointly plan and coordinate this effort.

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how.

Answer. A mixed approach is necessary. Goals to address management challenges are appropriate within agency plans to address their unique issues and improvement plans. Overlapping issues and goals are impossible for a single agency to resolve unilaterally and ought to be lead and addressed at a level of authority over both or all the particular agencies involved. Only department level authority can effectively address and direct the distribution of work and program breath by individual agencies or seek legislative changes as needed to reduce overlap.

Question. To what extent has GPRA been used by agency leadership to guide decision making?

Answer. For FAS the performance plan has been particularly useful in addressing reductions in budget levels over the past 3 years, especially for fiscal year 2000. Annual performance goals were reviewed and activity areas were listed for possible resource reductions in order to maintain sufficient staff levels to operate critical activities. Operating resources for travel, training, and FAS's foreign market store promotion activities, which had an fiscal year 1999 "in-store" performance success rate of $22.5 of U.S. export sales per $1 of promotion activity, had to be cut by 50 percent. In addition, the fiscal year 2001 budget testimony was enhanced with informa-

tion provided by the fiscal year 1999 strategic plan report. The report brought into focus a number of agency general goal comparisons, including the declining U.S. world market share of foreign imports and highly funded, and very successful, export promotion support by other governments that take "first advantage" of newly opened market opportunities. The current strategic plan also exposed the current lack of focus on horizontal (across-agency) planning and performance results. The new fiscal year 2001 annual performance plan will be a significant improvement over fiscal year 2000, focusing on market access, development, and financial planning according to markets and opportunities. It will illustrate how all FAS programs work in concert to fulfill market share objectives for four geographic regions, by helping U.S. firms take greater advantage of market access opportunities.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The initial performance measures identified in FAS' fiscal year 1999 Annual Performance Plan were focused primarily on outputs, and were not sufficiently mature to allow use in measuring program effectiveness. As the intent of GPRA is to learn and change behavior, FAS leaders continued to work with all FAS managers to address the immaturity of the fiscal year 1999 plan. By the second quarter, managers had reviewed the fiscal year 1999 plan and combined overlapping and duplicate measures, dropped measures that had little management use, or identified a number of new, and better, outcome goals—all in time to collect and report data on successes for fiscal year 1999. Managers actually reduced the number of measures by 40 percent while focusing on real and important outcomes for programs and activities. At the same time, managers were learning to use the newly developed computer-based GPRA performance reporting system. The current GPRA annual performance plan, as intended in the Results Act, is maturing and changing and will be of greater use in the future.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Yes, a major factor is the lack of a true cost-accounting system which would provide accurate data on costs related to each budgeted program activity.

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. No, we are not.

Question. Based on your fiscal year 2000 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No, however, the new fiscal year 2001–2006 strategic plan will be significantly improved.

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

NONDEPARTMENTAL WITNESSES

[The following testimonies were received by the Subcommittee on Agriculture, Rural Development, and Related Agencies for inclusion in the record. The submitted materials relate to the fiscal year 2001 budget request for programs within the subcommittee's jurisdiction.]

PREPARED STATEMENT OF THE AD HOC COALITION

Mr. Chairman, Members of the Subcommittee, this statement is respectfully submitted for the hearing record on behalf of the ad hoc coalition[1] supporting sustained funding for title I of Public Law 480 at a baseline level which will preserve the program as a long-term market development initiative for American agriculture.

In addition to its request for sustained title I funding, the coalition strongly supports the administration's request for $837 million for title II donations. Under the Food for Progress program, the administration estimates that $118 million in CCC funds will be used to support Food for Progress donations in fiscal year 2001, including $88 million for the purchase of commodities and $30 million for transportation and other non-commodity costs. The coalition welcomes this continued commitment of CCC funding for Food for Progress.

Unfortunately, the administration again this year recommends no funding for Public Law 480's title III program. While up to 15 percent of funds available for title I and/or title II can be used to support donations to least developed countries under title III, the coalition believes the Administrator of the Agency for International Development ("AID") should aggressively carry out his duties under title III to "negotiate and execute agreements with least developed countries to provide commodities to such countries on a grant basis" (7 U.S.C. § 1727(b)), and should have a sustained baseline level of funding for this purpose.

From fiscal year 1991 through fiscal year 1997, the commodity value of all title III grant assistance was $977.9 million, according to U.S. AID's annual reports. This represents an average of $139.7 million per year under the title III program, on a commodity value basis. In the coalition's view, Congress should establish a baseline level of funding for title III, and direct the Administrator to fulfill his statutory mandate.

The principal focus of this testimony, as noted above, is to request that title I funding for fiscal year 2001 be restored to a sustainable level for market development for American agricultural products. The direct loan level for fiscal year 2000 covered by new budget authority for title I, after a 0.38 percent adjustment, is only $145.3 million. The administration proposes to increase this amount to nearly $160

[1] The ad hoc coalition is composed of the U.S.A. Rice Federation, the National Association of Wheat Growers and the Wheat Export Trade Education Committee, the National Corn Growers Association, the National Council of Farmer Cooperatives, the American Soybean Association, the National Sunflower Association, the U.S. Canola Association, the American Maritime Congress, the Maritime Institute for Research and Industrial Development, the Transportation Institute, TECO Transport Corporation, and Liberty Maritime Corporation.

million for fiscal year 2001. At the very least, Congress should accept the administration's recommendation for increased funding, and should evaluate carefully the need to increase significantly the title I program level in each succeeding year.

LARGE SECTION 416(B) DONATIONS HAVE DEPRESSED TITLE I PROGRAM LEVELS

The actual experience under title I during fiscal years 1999 and 2000 has been distorted by events which were unanticipated when Congress appropriated funding for the program. Under the President's Food Aid Initiative, approximately $648 million was transferred from CCC to title I for humanitarian assistance to the Russian Federation. In addition to this increased title I programming, section 416(b) donations in fiscal year 1999 reached a record 5.5 million metric tons, including more than 5 million metric tons of wheat and wheat products. According to the White House press release of February 10, 2000, overall food donations reached nearly 9 million metric tons in fiscal year 1999, and food donations planned for fiscal year 2000 will total about the same tonnage.

Because of record-level donations under section 416(b) authority, the demand for title I program shipments (other than to Russia) declined significantly in fiscal year 1999. According to USDA sources, the unobligated balances carried over from fiscal year 1999 to fiscal year 2000 included more than $98.6 million for title I subsidy and $8.2 million for title I ocean freight differential. The carryover for the title II program was in excess of $71 million. These large carryover balances were the result of extraordinary events, and should not be considered indicative of a systemic decline in demand for either a long-term concessional sales program or traditional food aid funding.

For reasons which are not apparent, the administration chose to transfer $648 million from the CCC to fund the title I component of the Russian food aid initiative, rather than use unobligated balances in the title I account until such balances were exhausted. From the perspective of the Congress, title I should retain its vitality and significance, as the extraordinary Russian commitment to the program demonstrates.

THE TITLE I PROGRAM PROMOTES LONG-TERM MARKET DEVELOPMENT

Mr. Chairman, the 1996 Farm Bill directs the Secretary of Agriculture to give priority in negotiating agreements under title I to developing countries that have the demonstrated potential to become commercial markets for competitively priced U.S. agricultural commodities. With the availability of section 416(b) donations, title II donations, and Food for Progress arrangements, the primary purpose of the title I program has become market development for American farmers. The concessional sales market of today will become the commercial market of tomorrow. In an intensely competitive world agricultural marketplace, the United States must use its concessional sales program to gain access, establish a foothold and build relationships upon which future commercial trade in agricultural commodities can depend.

Under the Public Law 480 title I program, the United States has made concessional sales of commodities with a total value of about $31 billion since 1955. Along with other export enhancement programs, title I has proved to be a catalyst for strong, long-term growth in U.S. agricultural exports. Over the life of the title I program, from 1955 through 1999, the total commodity value of U.S. agricultural exports has been more than $1.1 trillion. With the benefit of sustained market-development initiatives, the value of U.S. farm exports rose to an all-time high of nearly $60 billion in 1996. Unfortunately, commodity exports have declined since then, due to economic upheavals in Asia and other factors. This year the value of U.S. agricultural exports will not exceed $49 billion, about the same as last year's level.

The United States must intensify its efforts to develop new overseas markets for U.S. farm commodities. With world food stocks at high levels, deeply depressed farm prices, and strong competition from a host of producing countries, the need for enhanced market development funding has seldom been greater. Congress should sharply increase its market development program funding, including funding for the title I program—a program that has proved its worth over decades of experience.

THE SHARP DECLINE IN TITLE I FUNDING

Mr. Chairman, the Public Law 480 title I concessional sales program has had an illustrious history of Congressional support and success in the marketplace. As shown on Chart I (attached), title I shipments reached their peak commodity value of $1.3 billion in 1965. From 1957 through 1990, in fact, the commodity value of title I shipments fell below $600 million in only a single year. The parallel between sustained title I funding and growth in agricultural exports cannot be ignored or

dismissed. The linkage between title I market development and subsequent commercial trade is apparent and unbroken over the decades.

Throughout the 1980s, Congress maintained high funding levels for the title I program. From 1980 to 1990, in every year except one, the commodity value of title I shipments exceeded $700 million. See Chart II. Unfortunately, title I program levels experienced a sharp drop at the beginning of the last decade—from $725.3 million in 1990 to $395.3 million in 1991. The value of commodities shipped dropped below $200 million for the first time in 1995, and (except for extraordinary CCC-funded Russian shipments in 1999) has remained near this historically low level since then. See Chart III.

Mr. Chairman, the title I funding requested for fiscal year 2001 represents little more than 12 percent of the 1965 program level, when the title I concessional sales record was established. In inflation-adjusted dollars, the title I program has lost about 97 percent of its value to American farmers since the record-setting year of 1965. The coalition believes that it is important now to stabilize title I funding, stop the persistent downward trend, and begin to increase resources devoted to this critical and proven program. With this in mind, we recommend an increase in funding for fiscal year 2001 as part of a long-term commitment to market development.

A RENEWED COMMITMENT TO MARKET DEVELOPMENT FOR AMERICAN AGRICULTURE

Mr. Chairman, Congress has maintained a strong bipartisan commitment to market development for U.S. agricultural commodities since World War II. Until recent years, this commitment included high funding levels for the Food for Peace title I concessional sales program. Until the mid-1960s, title I shipments accounted for about 20 percent of the annual value of all U.S. agricultural exports. As recently as fiscal year 1990, as shown on the attached Charts, title I export values regularly exceeded $700 million on an annual basis.

The title I concessional sales program was a principal catalyst for market development through the 1970s, when the total value of U.S. agricultural exports increased nearly six-fold—from about $7 billion in 1970 to $40.5 billion in 1980. The program was funded at high levels during periods of war and peace, even during periods of large Federal budget deficits. Throughout the Cold War period, America's commitment to title I never wavered, due principally to the demonstrated value of the program as a pathfinder to commercial trade relationships with a host of developing countries.

The time has come, Mr. Chairman, to reemphasize the importance of concessional sales and to revitalize the title I program. The time has come for a renewed commitment to this historic initiative, a program that has blazed a trail for billions of dollars in commercial shipments of American agricultural products. However, in making this renewed commitment, both Congress and the administration should seek to improve the program's effectiveness in the economy of the Twenty-First Century.

Under current criteria, a developing country is considered eligible for Public Law 480 title I if it has a shortage of foreign exchange earnings and has difficulty meeting all of its food needs through commercial channels. The program managers at FAS should review country eligibility standards, ensuring that all eligible countries are actively engaged. There must surely be a substantial market for title I concessional sales—during 1999 and 2000, donations of food, according to the administration's announcements, will approach 18 million metric tons. Many countries currently receiving section 416(b) donations should graduate to title I concessional sales arrangements in short order. The shift from section 416(b) donations to title I participation could be rapid, and both FAS and Congress should prepare for this eventuality.

There has been legitimate concern that many eligible countries are reluctant to sign title I agreements following allocation at the beginning of a fiscal year. Perhaps FAS should establish a reasonable deadline for participation under concessional sales terms. The allocations for countries choosing not to participate could be shifted to other countries, well in advance of the close of the fiscal year. This reform could reduce the carryover of unobligated balances, and help ensure that program benefits are extended to eligible countries that want to participate under reasonable terms and conditions.

As Congress turns to farm legislation next year, the need for more program flexibility should be addressed. The current cap of 500,000 metric tons of shipments under Food for Progress seems to make little sense. If this cap were lifted, title I funding in greater amounts could be allocated to Food for Progress, either on long-term credit or grant terms. This and other reforms could strengthen the title I concessional sales program, along with its companion program, Food for Progress.

CONCLUSION

Mr. Chairman, the United States has shipped food assistance in record amounts over the past 18 months, and large shipments are expected to continue throughout the remainder of this year. Congress and the administration deserve great credit for this humanitarian effort. But extraordinary food aid shipments will not last forever. American farmers require strong commercial markets to maintain their share of world trade in agricultural commodities.

In 1996, U.S. agricultural exports accounted for nearly 23 percent of total world agricultural trade by commodity value. As noted above, the value of U.S. agricultural exports has declined by more than 18 percent since the record was set in 1996. Farm prices are down. Overseas competitors have enjoyed record crops. Traditional markets have been destabilized by economic upheavals. The response must include a renewed commitment to proven market development strategies—particularly title I of Public Law 480.

Mr. Chairman, the coalition urges this Subcommittee to begin restoring the historical commitment to Food for Peace. Our future markets and sustained prosperity for American agriculture will depend upon this initiative, along with others designed to increase farm income over the long term.

PREPARED STATEMENT OF THE ALACHUA COUNTY BOARD OF COMMISSIONERS

Mr. Chairman: Thank you for allowing the Alachua County Board of Commissioners to submit written testimony before your Subcommittee regarding a major initiative for which the County seeks your support.

Alachua County has embarked on a local land conservation program, which the County Commission has selected as one of its highest program priorities for 2000. A separate citizen-initiated referendum called Alachua County Forever is anticipated to raise $17 million from ad valorem property taxes to match Federal and State land acquisition funds. The County's Land Conservation Advisory Committee (appointed in November, 1999) is finalizing a system to prioritize which local lands should be conserved, and is creating the tools to accomplish these goals. Eastern Alachua County has been included in the St. John's River American Heritage River designation, with three suggested projects. A number of eco-tourism and recreational opportunities are being pursued to capitalize on the County's protection of its natural areas. The County, in cooperation with the City of Gainesville, is actively seeking Federal and State partnerships to achieve its land conservation goal of an emerald necklace comprising gems of conserved natural areas throughout this part of "the Real Florida."

Land acquisition priorities.—Alachua County has five large-scale projects (5,000+ acres) on Florida's Conservation and Recreation Lands (CARL) acquisition list. These include:

—Paynes Prairie additions (a large freshwater wetland and watershed, operated as a State preserve)
—San Felasco Hammock additions (a mature hammock and sandhill forest, with ravines)
—Watermelon Pond (an upland sandhill and scrub forest with important ephemeral wetlands)
—Newnans Lake (a diverse flatwoods forest surrounding a lake with declining water quality)
—Lochloosa Forest (a flatwoods forest, largely in commercial production surrounding two large lakes)

Each of these CARL projects has outstanding land acquisition needs, with State matching money available from Florida Forever (formerly Preservation 2000). The lack of a local source of matching funds has hurt the ability of Alachua County's projects to compete favorably with other local governments which have local land conservation programs, so Federal matching funds (either grants or loans) would greatly assist in finishing the acquisition of these lands before development further fragment them. If the Alachua County Forever referendum passes in November 2000, the County will have a source of matching funds. Federal agencies could help by "challenging" the County with the promise of matching funds for projects of national significance, such as Paynes Prairie.

For this initiative, the City of Gainesville and Alachua County have identified three project areas. The first is Newnans Lake, a large lake in a semi-wild setting with mysteriously increasing eutrophication, yet spectacular recreational and scenic resources. Specific projects requiring funding assistance include: investigations into water quality issues, remedying muck build-up (possibly through a draw-down or mechanical removal), land acquisition (including less-than-fee opportunities with

large forestry companies), a multi-user trail system circling the lake and connecting two existing rail-trails, and the designation and enhancement of an informal, but exceptional canoe trail connecting Newnans and Orange Lake down Prairie Creek and the River Styx. The St. Johns River Water Management District is a willing partner, having made substantial commitments in the past and with expressed interest in continuing to conserve the lands and waters of this area, while enhancing public access.

The second project is to clean-up and mitigate Sweetwater Branch, and its impacts on Paynes Prairie (a National Natural Landmark) as well as the Floridan Aquifer. As one of the major watersheds flowing through eastern Gainesville, this creek has all the problems of urban stormwater and wastewater outfall into natural areas. While substantial funds have been received from Federal sources for the Depot Stormwater Park, the cost of cleaning up this brownfield area is considerably more than the local governments can handle.

The third project is to clean-up and mitigate impacts to Hogtown Creek, the major watershed in western Gainesville. The City and State have acquired over $3 million of property comprising the Hogtown Creek Greenway, however funds are needed for development of recreational trails, and for sedimentation control. We are seeking an $10 million in Federal support.

We hope that the Subcommittee will find this critically important project worthy of your support.

Thank you for your consideration.

PREPARED STATEMENT OF THE AMERICAN CHEMICAL SOCIETY

The American Chemical Society (ACS) would like to thank Chairman Thad Cochran and Senator Herb Kohl for the opportunity to submit testimony for the record on the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations bill for fiscal year 2001.

As you may know, ACS is a non-profit scientific and educational organization, chartered by Congress, representing 161,000 individual chemical scientists and engineers. The world's largest scientific society, ACS advances the chemical enterprise, increases public understanding of chemistry, and brings its expertise to bear on state and national matters. ACS firmly believes that no investment the government makes generates a higher rate of return for the economy than research and development (R&D). In fact, economic experts maintain that today's unprecedented economic growth would not have been realized but for the substantial research investments by the public and private sectors over the past few decades. Looking ahead, ACS is concerned that constant dollar declines in federal support for basic research over the past decade, particularly in the physical sciences, have weakened the roots of innovation in all fields and put future economic growth at risk. In order to sustain our technological leadership and living standards, increased funding for basic research should be a top priority for use of the non-Social Security budget surpluses. As a framework for increasing R&D funding, ACS supports doubling federal spending on research within a decade, as well as balanced funding among different areas of science.

U.S. DEPARTMENT OF AGRICULTURE BUDGET RECOMMENDATIONS

The United States Department of Agriculture (USDA) plays a key role in the nation's R&D enterprise. The research supported by the Department through its in-house laboratories and extramural grants is critical to the biological and physical sciences and provides the scientific foundation for a vast array of advances being made in agriculture and related industries. At a time when greater investments in agricultural research are necessary to improve environmental quality, food safety, agricultural productivity, and renewable chemical and energy resources, ACS is concerned that USDA's research budget has decreased 9 percent in constant dollars over the last 5 years. To reverse this decline, ACS recommends that research supported by USDA's Agricultural Research Service (ARS) and the Cooperative State Research, Education, and Extension Service (CSREES) increase by 7 percent or greater in fiscal year 2001.

AGRICULTURAL RESEARCH SERVICE

The Society strongly supports the request for an increase of $64 million for ARS for fiscal year 2001, a 7.7-percent increase over last year. Strengthening USDA's main in-house research is important for developing the scientific knowledge that provides the foundation for new technologies produced by the private sector. ARS

scientists conduct fundamental and advanced research to address some of the most pressing problems in food quality and safety, pest and disease resistance, and human nutrition.

Increased funding would help ARS continue solving problems for agriculture producers and consumers, while meeting the food and fiber requirements of our nation in a better, safer, and more nutritious way. ARS research can accelerate environmentally sound production practices, increase our understanding of global climate change's impacts on food production, and improve air quality. ACS also supports ARS's key role in funding research on bioenergy and biobased products. This research would benefit the environment by advancing cleaner energy sources that reduce our dependency on imported oil and lower greenhouse gas emissions. Moreover, the development of such fuels and other biobased materials and commercial products—including chemicals, adhesives, lubricants, and building materials—can potentially increase farm income and productivity growth by advancing non-food uses for agricultural technology.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE

ACS believes it is extremely important for USDA to expand its support for competitive, peer-reviewed extramural research at colleges and universities. CSREES provides leadership for and develops research and education partnerships with states, land-grant universities, and other research and education institutions. These partnerships are focused on national and regional priorities.

ACS particularly supports the administration's request for a 26-percent increase ($150 million) for the National Research Initiative (NRI), USDA's hallmark competitive research grants program. The NRI supports highly meritorious fundamental and mission-oriented research in critical areas such as genetics, biobased products, food safety, and pest and disease management. This program has enormous potential to contribute to major breakthroughs in agricultural production but has been hampered by underfunding. Expanding resources for NRI are needed to increase grant size and duration and to encourage outstanding agricultural and other researchers to submit proposals.

CONCLUSION

Overall, USDA research provides a greater understanding of the risks associated with our food sources and helps in the formation of scientifically sound policies that reduce our exposure to harmful substances while enhancing technological advances in food production and distribution. Investing in USDA R&D programs can ensure that U.S. agriculture will remain competitive in international markets, an important factor in ensuring a strong U.S. economy. Growth in USDA R&D funding will help ensure a safe food supply, improve the environmental performance of the sector, and help the food, fiber, and chemical sectors compete internationally.

PREPARED STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION

The American Farm Bureau Federation has identified three USDA program areas for which adequate fiscal year 2000 funding is essential. They are:

—programs key to the proper implementation of the Food Quality Protection Act (FQPA);

—programs to expand foreign markets for agriculture; and,

—funding for research to keep American agriculture competitive.

These priorities are highlighted in the first portion of this statement. The second portion contains a list of additional programs supported by Farm Bureau.

FOOD QUALITY PROTECTION ACT

Farm Bureau supports the administration's request for $107.3 million to fund USDA's Food Quality Protection Act (FQPA) implementation activities. Proper implementation of this law based on sound science is critical to assure the availability of vital crop protection products.

Agriculture Research Service (ARS).—A total of $27.131 million is needed for FQPA activities under the ARS as follows: $6 million for area wide Integrated Pest Management (IPM) research, $2 million for minor use clearance (IR–4), $16.5 million for alternatives to methyl bromide, and $2.58 million for Office of Pest Management Policy.

Cooperative State Research and Extension Service (CSREES).—A total of $55.3 million is needed for FQPA activities under CSREES as follows: $2.73 million for IPM research grant, $12.27 million for IPM application, $4.2 million for pest man-

agement alternatives, $260,000 for expert IPM decision support system, $10.7 million for minor crop pest management (IR–4), $3 million for crops at risk from FQPA implementation, $10 million for FQPA risk avoidance and mitigation program for major food crop systems, $5 million for methyl bromide transition program, $1 million for regional crop information and policy centers, $4.64 million for Pesticide Impact Assessment Program (PIAP), and $1.5 million for pesticide applicator training.

Economic Research Service (ERS).—A total of $2.5 million is needed for FQPA activities under ERS as follows: $500,000 for IPM research, $1.7 million for pesticide use analysis, and $300,000 for National Ag Pesticide Impact Assessment Program (NAPIAP).

Other.—Additional funding for FQPA implementation activities is needed as follows: $7.3 million for National Ag Statistics Service (NASS) pesticide use surveys, $754,000 for Food Safety Inspection Service (FSIS) increased residue sampling and analysis, $14.28 million for Agriculture Marketing Service (AMS) and the Pesticide Data Program (PDP).

EXPORT PROGRAMS

Creating new overseas markets and expanding those that we have is essential for a healthy agricultural economy. Continued funding of export development programs is fundamental to improving farm income, both in the short and long term. We recommend maximum funding of all export development programs consistent with our commitments under the World Trade Organization (WTO) trade rules.

Public Law 480.—We support increased funding for Public Law 480 programs, the primary means by which the United States provides foreign food assistance. Public Law 480 should be supported at no less than the $1.1078 billion recommended by the Administration. Enormous opportunity exists for humanitarian and public relations benefits, in addition to an opportunity to impact market prices. The Public Law 480 program should not only be used to help move product to traditional customers, but also be increased to include customers who may not currently qualify for General Sales Manager (GSM) credit.

GSM Credits.—The USDA budget includes funding for GSM credits at a program level of $3.792 billion. However, recent spending has been much less. Farm Bureau supports full use of funds available for GSM credits during fiscal year 2001.

Market Access Program (MAP) and Foreign Market Development Program (FMD).—Congress should fully fund the MAP at $90 million and provide necessary funding for FMD. These programs need the expertise of a fully supported Foreign Agricultural Service (FAS) that is expanded to cover all existing and potential market posts.

Export Enhancement Program (EEP).—The FAIR Act provided $1.5 billion over seven years for the EEP, but the administration has used little of those funds. The fiscal year 2001 budget figure for EEP is $478 million. The Administration should use EEP to its maximum to maintain foreign markets for U.S. farmers.

Dairy Export Incentive Program (DEIP).—DEIP allows U.S. dairy producers to compete with foreign nations that subsidize their commodity exports. Farm Bureau supports the $66 million for DEIP as recommended by the administration.

Inspections.—Food safety programs, including inspections of foreign commodities, should be funded at the highest levels possible. Funding should be at least the current budget level of $771 million.

Sanitary/Phytosanitary Management.—We support the Administrations request of $9.5 million for Sanitary and Phytosanitary Management within APHIS-International Services to strengthen international foreign animal disease surveillance and intelligence gathering for risk analysis for threats to the U.S. industries.

Codex Alimentarius Commission.—We support a minimum of $2 million for Food Safety and Inspection Service (FSIS) to increase U.S. leadership in the Codex Alimentarius Commission. Codex develops the international food safety standards for the World Trade Organization. Funding is needed to ensure full U.S. participation in Codex functions.

AGRICULTURAL RESEARCH

Agricultural research and the distribution of that research to producers is critical to the future of our industry. One of the areas of agreement when the 1996 farm bill was enacted was that funding for agricultural research would be increased to allow U.S. producers to maintain their competitive position in world markets.

National Research Initiative (NRI).—Farm Bureau supports the administration's request of $150 million for the National Research Initiative Competitive Grants Program to the Cooperative State Research, Education, and Extension Service (CSREES). This research provides the keys to the long-term prosperity as farmers

and ranchers strive for greater involvement in more stages of the food supply chain and effective use of new technology.

Animal Genomics.—We support the administration's request of $1.5 million for animal genomic research in the Agricultural Research Service (ARS.) This will allow ARS to focus on developing genomic approaches for improving economical traits of importance in livestock and poultry that affect animal health and reproductive efficiency.

National Antimicrobial Resistance Monitoring.—We support the administration's request of $6.3 million to the Food and Drug Administration Center for Veterinary Medicine (CVM) for the Food Safety Initiative. Within this initiative is increased funding for the National Antimicrobial Resistance Monitoring System (NARMS). NARMS is the data collection method that is being used to monitor the level of antimicrobial resistance that will be used to implement science-based standards.

Aquaculture.—The annual value of aquaculture production in 1998 was just under $1 billion. To stimulate the technology development and enhance domestic production, aquaculture research is vital. The four regional CSREES aquaculture centers should be funded at $7 million as authorized by Congress. USDA Agricultural Research Service (ARS) funding for aquaculture research should continue at $19.3 million so that projects begun last year can be completed.

National Animal Health Emergency Management System.—The National Animal Health Emergency Management System was developed in cooperation with the states, industry and the veterinary profession. We support the administration's request of $5.9 million to APHIS for this program. This will enhance APHIS's emergency preparedness and response capabilities to address emergency animal disease issues that threaten the U.S. food supply.

Emerging Diseases and Exotic Pests Research.—We support the administration's request of $3.8 million for Agricultural Research Service (ARS) funding for emerging diseases and exotic pests research. The research funding request is urgently needed to develop rapid diagnostics, vaccines, and products necessary to protect our U.S. commodities. Animal Health Monitoring and Surveillance: We support for the administration's request of $69.5 million to the Animal and Plant Health Inspection Service (APHIS) for the Animal Health Monitoring and Surveillance program line item. There should be specific disease line items for aquaculture, brucellosis, pseudorabies, scrapie and tuberculosis. We support $17.7 million for veterinary diagnostics and operation of the APHIS National Veterinary Services Laboratory in Ames, Iowa.

ARS & APHIS Laboratory Facilities.—We support the administration's request of $9 million for the Joint NADC–NVSL–CVB Modernization Plan at Ames, Iowa. This proposal for a joint APHIS and ARS research facility is important to meet national needs for research, diagnosis and product testing for animal health. Secondly, we support the Administration's request of $7 million for the general maintenance and continued modernization of the ARS foreign animal disease laboratory at Plum Island, New York, and to provide $3.2 million for the APHIS funding portion of the ARS Plum Island facility. The unique biocontainment facility at Plum Island allows scientists to work safely with foreign and emerging disease agents.

Binational Agricultural Research and Development (BARD).—BARD should be funded at the administration's recommended level of $2 million.

OTHER ISSUES

Conservation Operations.—We are concerned about adequate Natural Resources Conservation Service (NRCS) conservation operation funding. Conservation program delivery and technical assistance should be a priority for NRCS funding. No new initiatives should be funded in the conservation operations budget. Emphasis should be placed on traditional technical assistance and the development of reliable resource data for assisting producers to deal with nutrient management. We support funding for technical assistance under the Grazing Lands Conservation Initiative.

Environmental Quality Incentive Program (EQIP).—With regard to conservation programs under the Commodity Credit Corporation Program (CCC), we believe that emphasis should be placed on EQIP. EQIP is an important program for assisting producers dealing with increased water quality regulation. We support EQIP funding as proposed by the administration to bring spending to $325 million.

Forestry Incentive Program (FIP).—We oppose the Administration's zero funding for the Forestry Incentive Program and suggest funding of $5 million.

Farmland Protection Program.—We support the proposed new funding of $65 million for the farmland protection program.

Ag in the Classroom.—Most students no longer have firsthand farm experience and, therefore, lack a basic understanding of our food and fiber system. The Agri-

culture in the Classroom program provides real world examples that teach about agriculture production food safety, nutrition and healthy lifestyles, and career opportunities. CSREES funding for this program has been locked at $208,000 for more than 7 years. Farm Bureau supports an increase to $1,000,000 for Ag in the Classroom.

Mandatory Price Reporting.—Farm Bureau supports $5.9 million as proposed by the administration to continue mandatory price reporting for livestock. Increased market news reporting is needed to ensure that all participants have the same access to accurate market information.

Grain Inspection, Packers and Stockyards Administration (GIPSA).—Farm Bureau supports the administration's proposed $1.2 million increase in funding for efforts to determine anti-competitive behavior and $1.3 million increase to investigate time-sensitive financial, trade and anti-competitive behavior issues.

Wildlife Services.—Wildlife Services should be funded at $12.6 million for methods development, and $31.9 million for operations.

Aerial Application Technology Program.—Farm Bureau supports $1.3 million for the ARS Aerial Application Technology Program. This funding is needed because of the significant and necessary role aerial application provides to our nation's farmers and because of the need to increase the environmental safety of aerial applications.

Farm Labor Housing Program.—Providing housing for migrant farm workers continues to be a difficult challenge for farm employers and community groups alike. We support the administration's budget proposal to increase the Farm Labor Housing loan programs (Section 514) by $5 million to $30 million and the Farm Labor Housing grant program by $1 million to $15 million.

Nutrition Assistance Program for Puerto Rico.—Farm Bureau supports efforts to implement an electronic benefits transfer (EBT) distribution system for the Nutrition Assistance Program (NAP) in Puerto Rico, but is concerned about the potential misuse of federal funds intended for nutritional purposes that are currently being distributed in Puerto Rico. We support report language to direct a minimum of 75 percent of NAP funds to be spent on food at businesses that sell food items.

Rural Cooperative Grants.—We support an increase in funding for grants for rural cooperatives from the $7 million to $11.5 million. Cooperatives are one way that farmers and ranchers can increase income by retaining ownership of raw agricultural products and turning them into value added products.

PREPARED STATEMENT OF THE AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

Mr. Chairman and members of the Subcommittee, thank you for allowing me the opportunity to provide testimony for the record in connection with the fiscal year 2001 budget hearings. My name is Steven M. Hollis. I am the President of AFGE Local 3354 at the United States Department of Agriculture, Rural Development and Farm Service Agency (FSA). I hope my comments are helpful to your subcommittee.

RURAL AMERICA SHOULD GET ITS FAIR SHARE!

Family farmers, the ill-housed rural poor, and small rural communities must receive a share of the budget surplus because they are not sharing in the overall growth of the economy! We urge you to do whatever you can to make sure the budget allocations for agriculture and rural development are sufficient to enable the appropriations requested below.

That must be our first request to the Members of this Subcommittee. In addition, we ask Members of Congress to ensure that our tax dollars get to the majority of low-income rural Americans who need help and opportunity. Too much of the recent disaster funding has gone to wealthy landowners, and too little has gone to rural citizens who may no longer be able to farm. The Rural Development mission area—its programs and staff—is just as critical to rural economic recovery as are the Farm Service Agency programs and staff.

RURAL DEVELOPMENT SHOULD GET ITS FAIR SHARE!

Increased Salaries & Expenses funding for the Department of Agriculture's Rural Development mission area is AFGE's No. 1 priority for the Subcommittee's Appropriations for Agriculture, Rural Development, and Related Agencies! Congress should at least, appropriate the $581 million for Rural Development salaries and expenses in 2001, which was requested in the President's Budget. This is an increase of $47 million, from almost $534 million in 2000.

WE CAN'T DELIVER ANY MORE PROGRAMS WITHOUT MORE SALARIES & EXPENSE FUNDING.

Both the House fiscal year 2000 Supplemental Appropriation bill, and the President's fiscal year 2001 budget, include much-needed increases in program funding for Water and Waste Grants, Community Facility Grants, Section 515 Multi-Family Housing Loans, the Rental Assistance Program, Section 502 Single Family Housing Loans, Section 504 Very Low Income Repair Loans, Mutual and Self-Help Housing Grants, Rural Housing Assistance Grants, Migrant and Seasonal Farmworker Grants, and Rural Electrification Loans. These Rural Development (RD) loan and grant programs are just as important, even more so in terms of number of people reached, as the various programs delivered by FSA. Please don't forget—RD needs staff to deliver these programs, just like FSA needs staff to deliver its programs!

Since 1995, the Congress has increased Rural Development programs by 69 percent overall; yet, our staffing levels have been cut by 28 percent.

Our servicing areas in the Field, and our workload in the National and Finance Offices, has doubled or tripled. With decreased staffing, customer service suffers. Almost no funds have been allocated to training for the past three years!

The situation has deteriorated to the point where State Directors have had to stop all overtime work. Use of privately owned vehicles for official travel has been prohibited, and use of government-owned vehicles has been limited to 1200 miles per month. In most states, these restrictions on travel and overtime make it next to impossible for our employees to do our jobs! Timely inspections are not completed. Interviews of potential borrowers have to be conducted by phone. Night meetings of housing developers, water districts, and community development committees cannot be attended.

It is laborers and white and blue-collar workers that are the infrastructure of our rural communities, in addition to our farmers. If we can't provide housing, utilities, and jobs to enable them to be productive taxpaying citizens, how can we say the cost outweighs the benefits? Low-income rural Americans need public servants, with sufficient expense funds to support travel, overtime, training and information technology, to deliver these housing, community, and business development programs.

"If we're going to have meaningful programs supporting family farmers and rural communities, we need to maintain USDA's infrastructure of county offices, with sufficient staff, that is responsible and accountable to deliver these programs." Bill Christison, President, National Family Farm Coalition

Increases requested in the President's Budget for rural housing, community development, and farm loan and grant programs should be appropriated, with minor adjustments.

AFGE urges Members of Congress to appropriate funds to support the following program requests in the President's fiscal year 2001 Budget:

$1.3 billion in direct loans and $3.7 billion in guaranteed loans for single family housing.

For the first time since 1993, this is a much-needed increase above the previous year program levels of $1.1 billion in direct loans and $3.2 billion in guaranteed loans. It is still way below even the 1994 levels, however, as shown in the enclosed chart.

For many low income rural families the only opportunity they have to improve their housing conditions is through housing assistance offered by the USDA's rural housing programs. The average borrower income for the 502 SFH program is $15,000. In fiscal year 1997, 44 percent of the loans under this program went to female-headed households and one-third went to minority households. Under the self-help housing program, incomes are about 10–20 percent lower and two-thirds of the families participating in self-help housing are minorities and one-third are female-headed households.

Since its inception in 1950, the Section 502 direct program has produced over 1.9 million units of safe, decent, sanitary housing and supported a variety of innovative housing development opportunities such as the mutual self-help housing program. Over the past ten years, however, the program's production capacity has declined 41 percent, from 26,203 units in 1988 to only 15,561 in 1998. It is even more startling to compare the paltry 1998 production to the over 132,000 units produced in 1976.

The budget authority necessary to support the higher program levels increases from about $118 million in 2000 to about $216 million in 2001, due to an increase in interest rates and net of a proposal to raise the fee on guaranteed loans from 1 percent to 2 percent. AFGE would prefer not to see this guaranteed loan fee increased. The guaranteed rural housing loan program attempts to aid families with good jobs and decent credit but with very little to no cash to become homeowners and contributing taxpayers in their communities. Pushing a closing cost total to as

much as 6 percent ($3,000 to $4,000) could take the program out of reach for many younger families, or older families on fixed income. It is our understanding that the current 1.0 percent fee has been more than adequate to offset any loss claims we have experienced to date in this program.

$120 million for direct loans and $200 million in guaranteed loans for multifamily housing, plus $680 million for rural rental assistance payments.

The Section 515 Multifamily Housing Loan Program would be funded at $120 million in 2001, which compares to about $114 million available for 2000. This program provides direct loans to construct and maintain multifamily rental projects that serve low and very low-income families. Projects receive payment assistance to make rents affordable. The average annual income of a Section 515 tenant is $7,300. The 2001 budget provides for the construction of 1,400 new units and the rehabilitation of over 4,100 existing units.

The Section 538 Multifamily Housing Loan Guarantee Program guarantees loans that are made by private lenders. It differs from the Section 515 Direct Loan Program in that the projects it finances serve tenants with incomes up to 115 percent of the area median, rather than those below 80 percent of the area median. The 2001 request of $200 million would provide for the construction of over 6,400 units.

The 2001 budget provides $680 million for the Rental Assistance Program, an increase of $40 million over the 2000 level. Rental assistance is provided to project owners to make up the difference between the 30 percent of income the low-income tenant pays and the rent required for the project owner to meet debt servicing requirements. The 2001 budget provides funding for the renewal of over 42,000 units, support for new section 515 and farm labor housing projects, and limited funding for servicing existing projects.

It costs money to house the poorest of the poor, both construction and rental assistance. We subsidize homeownership some $98 billion per year in the form of interest deductions. Rebuilding the 515 program costs less than homelessness or nursing homes.

A total of $50 million is proposed for Farm Labor Housing Programs, with $30 million for direct loans, $15 million for grants, and $5 million for emergency assistance to migrant farmworkers.

This is an increase of almost $3 million from the $30 million in loans and $17 million in grants provided in 2000, which included $3 million in grants and $5 million in loans in emergency funding. The $50 million level will improve the availability and quality of housing for one of the most poorly housed groups in the country.

$507 million in grants, $1.03 billion in direct loans, and $75 million in guaranteed loans for water and waste disposal projects.

$5 million for the Rural Cooperative Development Grants (RCDG) program

$10 million for Outreach and Technical Assistance Program for Minority Farmers

The Outreach and Technical Assistance program is the most effective tool developed to carry out the mission of USDA as the technical provider for small farmers. For a very small investment, the program has significant multiplier effects in poor communities where there exist few other possibilities for sustainable economic development.

$700 million for direct farm operating loans and $2.5 billion for farm operating loan guarantees.

Since the loan limits have been raised to $717,000, and since the farm economy continues in depression mode, this funding level may not be sufficient.

Our major concern regarding farm operating loans is the years of eligibility restriction placed on direct operating loans in the current Farm Bill. As Congress begins to write new farm policy legislation, we urge the Agriculture Committees to remove the restrictions on years of eligibility for direct farm operating loans, at least for limited resource farmers. Many small farmers may not be able to continue in business from year to year without the option of direct operating loans.

$128 million for direct farm ownership loans

Funding for direct farm ownership loans would decrease from $178 million in 2000 to $128 million in 2001. The magnitude of this reduction reflects the fact that there was some unused carryover in 2000. We have the following concerns regarding the unused funds from 2000, and the funding level of the direct farm ownership loans:

In many states, as much as 70 percent of the farm land will change ownership over the next fifteen years. Unless the direct farm ownership loan program is significantly enhance, most of that farm land will go to the existing large farms, and the benefits and productivity of family farming will continue to be wiped out.

On the other hand, under current farm policy (which determines commodity prices as shown by USDA data on the last 25 year trends), 100-year low commodity prices make it next to impossible for socially disadvantaged or beginning farmers to purchase land. What many smaller existing farmers need, but can't get through guaranteed private sector loans, is the ability to use their real estate to refinance existing debt. The 1996 Farm Bill eliminated the option of using direct farm ownership loans to refinance existing debt. As Congress begins to write new farm policy legislation, we urge the Agriculture Committees to remove the restriction on use of direct farm ownership loans to refinance existing debt, where that makes the most sense.

AFGE supports the National Association of County Office Employees (NASCOE) request to add $77 million above the President's request to the Farm Service Agency's Salaries & Expenses, provided the Congress increases the President's budget request for Rural Development Salaries & Expenses by a similar percentage.

However,

FSA should be required to allocate more staff resources to the Farm Loan Programs.

The farm loan functions have been understaffed by about 1600 employees since they were transferred to FSA in 1995. The program management standard for excellence in our direct farm loan programs is that each responsible loan officer should never have a caseload of more than 56 borrowers. Today, our farm loan officers in many states have an average caseload of 150 to 200 borrowers. This makes it impossible to adequately perform the supervised credit functions, which ensure the success of the program. The Appropriations Subcommittees should allocate at least 30 percent (cf. USDA County-Based Agency Study) of FSA's Salaries & Expenses to support of the Farm Loan Program. The Agricultural Credit Insurance Fund could be used for this purpose by changing the legal language and increasing the appropriation for S&E from this account.

AFGE is also asking the Government Affairs/Reform Committees to reject legislation the Department intends to submit to convert County Office employees to the Federal civil service—unless the language is changed to meet our concerns.

We believe that all FSA employees should come under the Federal Civil Service employment system, so that all FSA employees will have the same rights, including the right to collective bargaining, the right to seniority protections in RIF situations, whistle blower protections and other Merit Systems rights and protections. Through the Federal Performance Management system, the Secretary will have the direct authority to hold all employees accountable to the program performance goals of the Department, including Civil Rights goals.

The conversion of the County Office Committee employees to Federal Civil Service status must be accomplished in a manner that is fair to the civil service employees of the former Farmers Home Administration (both FSA and Rural Development) who are represented by the American Federation of Government Employees (AFL–CIO). The problem with past (and current USDA) proposals is that they would allow CO employees to assume responsibilities for aspects of the Farm Loan Program regardless of the employee's experience, training, or qualifications to perform that work. Proposals to "deem" County Executive Directors qualified to supervise FLP activities, without proper training or resolution of conflict of interest concerns, will be opposed by AFGE. So will proposals which would allow former CO employees to use special civil service seniority rights based on years of service in the COC system administering commodity programs to bump current FSA or Rural Development federal employees out of their jobs in a RIF.

Let us be clear: AFGE opposes any further staffing reductions in FSA. We believe the 1996 "Freedom to Farm" bill has failed, and needs to be replaced by a new comprehensive farm and food policy. At the same time, we will continue to fight against any effort to bump any employees we represent out of their jobs in order to save jobs for former CO employees whose programs have been eliminated or cut back.

AFGE believes the No. 1 management improvement needed to achieve a Common Computing Environment, or otherwise more effectively deliver USDA programs to the people we serve, is to reduce the waste of funds for poor quality work that results from current USDA contracting out practices. Until this problem is addressed, we cannot support other Administration proposals to improve management of the Information Technology and administrative support functions!

An increasing amount of work, which could be performed more effectively by USDA employees, has been contracted out without even performing a cost comparison, in the name of "reducing government". As the Chairman and other Members of this Subcommittee have noted, the too many front-line USDA employees have been cut! We can no longer adequately deliver programs to rural America! And we're not really any closer to a Common Computing Environment than we were with InfoShare in 1990! The Service Center Implementation and Modernization Initiatives have been over-relying on private contractors. These contractors have no business interest in accomplishing a Common Computing Environment for USDA front-line employees—then they would be out of a job!

Before USDA takes any other steps to "improve management of Information Technology or administrative support," the 11,000-plus service contracts should also be put on the table for review. We hope to work with the Chairman and Members of this Subcommittee to place language in the Agriculture Appropriations bill that will require USDA to perform cost comparisons on all major service contracting decisions, and to bring the work back in-house wherever that would be more cost effective.

Appendix I documents these concerns relative to the information technology support functions for the Rural Development, NRCS, and Farm Service agencies.

Additional examples of problems with contracting out which have been provided to our Union through extensive interviews and surveys of Field Office employees include the following:

"It takes a month to receive an appraisal and it can mean a difference between us funding a loan or running out of money. Appraisals can be done quicker by the employees. . . ."

"FP year-end analysis, chattel checks, and 1951–S servicing help—very poor quality in most cases—These functions should always be performed by an in-house government employee. . . . We are supposed to be a servicing agency. How can we contract out to analyze the farmer's next year's production and expenses, and help the borrowers. If we are going to be farmer friendly, we need to do our own work."

"Loan making/loan servicing contractor—$20,000–$25,000 per year. Appraisal contracting—approx. $22,700 per year. The administrative cost of contracting was not included in above. Am sure this cost would be staggering, considering the process we go through. I have shown the District Director the savings in performing the work ourselves rather than contracting out. Over 2 million dollars a year could be saved each year in the state of Montana alone. A GS–7 Asst. Co. Supervisor could be hired for each of the 24 county offices in Montana at an annual salary of $23,000 plus benefits of approximately $5,000, and provide each assistant with a $10,000/year training budget for less cost than contracting. The end result would be better quality work performed in a timely manner at less cost to the taxpayer. To me, this satisfies the criteria desired by this administration. Better service at less cost!"

Appendix II contains the language that AFGE proposes be added to the Agriculture Appropriations bill. It is based on language from H.R. 3766, which already has over 100 co-sponsors, including Ms. Kaptur and other Members of the Agriculture Appropriations Subcommittee in the House. AFGE can only support the appropriation of the $75 million requested by the USDA Chief Information Officer if such funding will not reduce the funding available to any of our priorities, identified above, and only if USDA works with labor, instead of working against labor, to stop contracting out when Federal employees can do it better.

APPENDIX I—USDA OVER-RELIANCE ON COMMERCIAL SUPPORT CONTRACTS FOR INFORMATION TECHNOLOGY

The real point about balancing the budget should be taxpayer dollars, not Federal employee jobs. We need to ensure that Administrative Convergence (in any form) does not just lead to replacing Federal employees with more expensive contractors who can't do as good a job. AFGE is very concerned about this, because in DOD and other agencies, the Administration has consolidated administrative functions—and then tried to contract them out. The following numbers come from the Agencies' A–11 submissions to OMB, reporting on "Obligations for Information Systems".

[In thousands of dollars]

	Commercial Support Services	Personnel
Fiscal year 1993:		
ASCS	39,029	27,657
FAS	4,366	3,033
OICD	183	245
FCIC	8,572	3,627
FmHA/RDA	40,627	36,181
REA	618	1,506
SCS	17,419	38,131
Fiscal year 1998:		
FSA	90,894	44,898
FAS	7,252	.....
RMA	8,597	4,206
RD	26,148	15,048
NRCS	23,223	25,516
Percent Change (1993–1998):		
FSA/FAS/RMA [1]	+51	+30
RD	−36	−60
NRCS	+25	−33

[1] Some amount of the Rural Development decrease, and the FSA increase, from fiscal year 1993 to fiscal year 1998, consisted of the transfer of Farm Credit functions from FmHA/RD to FSA.

During 1998, an Information Technology Functional Team, consisting of labor and management from the IT organizations of Rural Development, NRCS, and FSA, developed "Information Technology Contracting Recommendations". This official agency document recommends that Federal staffing for IT support be increased, through reductions in more expensive contractor personnel, as the "least cost solution" when considering total cost to the government of contracting out. The reason for this conclusion was simple: the cost of the average Federal Information Technology staff year is $69,250 whereas the total cost per contract staff year support of "average complexity and skill" is $119,733. It costs $50,000 per FTE less, on average, to utilize Federal employees, rather than contractors, to provide Information Technology support to the USDA county-based agencies!

APPENDIX II—PROPOSED LANGUAGE ON CONTRACTING OUT FOR THE FISCAL YEAR 2001 AGRICULTURE APPROPRIATIONS BILL

SEC. ____. None of the funds appropriated or otherwise made available by this Act or any other Act shall be available to privatize, outsource, contract or contract out, including the exercise of options, extensions, and renewals of any contracts, except in accordance with the following procedures:

(a) IN GENERAL.—After the date of the enactment of this Act, any decision by the Secretary or any Agency of the Department of Agriculture to privatize, outsource, contract or contract out, including the exercise of options, extensions, and renewals of any contracting efforts, for the performance of a function shall be based on the results of a public-private competition process that—

(1) formally compares the costs of Federal employee performance of the function with the costs of the performance by a contractor;

(2) employs the most efficient organization process described in OMB Circular A–76; and

(3) is conducted in consultation or through bargaining with the exclusive representative of the Federal employees performing the function, if applicable. This subsection applies only to contracting efforts undertaken on or after the date of the enactment of this Act.

(d) DETERMINATION OF COSTS.—The Secretary or any Agency of the Department shall commence or continue the performance of a function by Federal employees if, under a cost comparison performed pursuant to a public-private competition process described in subsection (a), the Secretary or the Agency determines that at least a 10-percent cost savings would not be achieved by performance of the function by a contractor.

(e) INAPPLICABILITY OF CERTAIN LIMITATIONS.—Notwithstanding any limitation on the number of Federal employees established by law, regulation, or policy, the Sec-

retary or an Agency of the Department may continue to employ, or may hire, such Federal employees as are necessary to perform work acquired through public-private competition required by this section.

(f) WAIVER.—(1) The provisions of this section shall only apply to service contracts above the $25,000 formal contract threshold. In no case may a function be modified, reorganized, divided or in anyway changed for the purpose of exempting from the requirements of section (a) the change of all or any part of such function to performance by a private contractor.

(2) Any component of the Department may submit to the Deputy Secretary a request for a waiver of this section with regard to a particular function. Such a waiver request shall

(A) identify the facilities, units, or activities affected;

(B) specify the reason a waiver is needed;

(C) identify the duration sought; and

(D) explain the justification for the waiver.

(3) The Deputy Secretary may grant a waiver with regard to a particular function if the Deputy Secretary determines that a waiver—

(A) is necessary to obtain support services to combat natural disasters, such as forest fires, insect infestations, plant and animal diseases, which require immediate attention, exceed the capacity of in-house resources, and will last for less than one year;

(B) is critical to obtain particular expertise not available within the Department, or unbiased judgements as in environmental impact studies, and will last for less than one year; or

(C) is required to avoid a violation of laws which encourage the use of minority owned businesses.

(4) The Deputy Secretary may not grant a waiver under this section until—

(A) the Agency has consulted with the employees in the affected unit regarding the waiver;

(B) the waiver request has been concurred in by the exclusive representative of the Federal employees in the affected unit, where applicable; and

(C) the Deputy Secretary has published the request for the waiver in the Federal Register.

PREPARED STATEMENT OF THE AMERICAN HONEY PRODUCERS ASSOCIATION, INC.

My name is Richard Adee. I am President of the American Honey Producers Association, Inc. and I am submitting this statement in its behalf. The American Honey Producers Association, Inc. is a national organization of commercial beekeepers with activities in most of the States in this country.

First, the Association wishes to thank you for the support the Subcommittee has provided in the past for agricultural research activities in behalf of the beekeeping industry. It has enabled the Agricultural Research Service to staff its bee laboratories at the minimum level necessary to meet with critical needs of the industry. To continue this research, the Association supports approval of the President's budget proposal for an additional appropriation of $300,000 in fiscal year 2001 for bee research at the ARS facility at Weslaco, Texas. The Association also recommends an increase of $300,000 in the level of funding for the ARS honey bee breeding, genetics, and physiology laboratory at Baton Rouge, Louisiana.

Background.—Honey bees pollinate over 90 cultivated crops whose estimated value exceeds $14.6 billion and produce an average of 200 million pounds of honey annually. Since 1984, the survival of the honey bee has been threatened by continuing infestations of mites and pests for which appropriate controls have not yet been developed and research must provide the answers. Unfortunately, there is no simple solution to these problems. The honey bee industry is too small to support the cost of the needed research, particularly with the current depressed state of the industry. As you know, there are no longer any federal subsidies on honey. Further, there are no funds, facilities, or personnel elsewhere available in the private sector for this purpose. Accordingly, the beekeeping industry is dependent on research from public sources for the scientific answers. The key to the survival of the honey industry lies with the honey bee research program conducted by the Agricultural Research Service.

Research at the ARS Weslaco, Texas, Laboratory.—Parasitic mites, primarily the varroa mite, are causing a crisis for the U.S. beekeeping and pollination industry. Tens of thousands of domestic honey bee colonies are being lost annually to varroa mites. Wild bee colonies have been decimated. The only chemical which has received a general registration for varroa mite control, fluvalinate, is being rendered ineffec-

tive by the development of resistant mite populations. The USDA honey bee lab at Weslaco, Texas, has been working hard trying to find alternative chemicals to control the varroa mite. It appears that they have found a chemical, coumaphos, which has the potential of being equally effective as fluvalinate. This is a real break through for the bee industry, but as of today we have only been able to obtain a section 18 emergency registration. Much work still remains to be done before a section 3 general registration is granted by EPA.

A new pest, the small hive beetle, found in Florida has caused severe bee colony losses. Apparently, it originated in South Africa. Estimates put the losses in just one season at over 30,000 colonies. There is evidence that the beetles are spreading to other areas in the East coast. As the beetles spread, they will just devastate the bee industry. In order to contain the beetle, several states have quarantined bees from Florida, North Carolina, South Carolina, and Georgia or are actively considering such quarantines. If the beetle should be found in California, it will spread rapidly and be difficult to control because of similarity of soil conditions with those in Florida. It seems that coumaphos may help control this insect as well as the varroa mite, but as previously stated it has not received a section 3 registration and it is unclear when such a registration will be granted by EPA.

The USDA–ARS honey bee research scientists at the Weslaco laboratory have been working overtime to find chemicals, techniques, pheromones, or other methods of controlling the beetle. Time is of the essence, as a control must be found immediately as all the bee colonies in the Western Hemisphere are at risk.

Additionally, the Weslaco lab is responsible for finding new and improved methods for control of other parasitic mites, such as the tracheal mite, as well as solving beekeeping problems that interfere with honey production and effective crop pollination, and determining the impact and spread of Africanized honey bees.

The additional appropriation recommended by the Administration would help in finding a chemical solution to our most pressing problems.

Research at the ARS Baton Rouge, Louisiana, Laboratory.—The Association also recommends an increase of $300,000 in the appropriation for the ARS laboratory at Baton Rouge, Louisiana. The Baton Rouge lab is the only laboratory world-wide focusing on the development of long-term, genetics-based solutions to the varroa mite. Their research programs have taken them to the far corners of the world looking for mite resistant bees. In eastern Russia, they found bees that have co-existed for decades with the mites and survived. The bees were brought to the United States and are in the process of being evaluated to assure that the resistance holds up under a wide range of environmental and beekeeping conditions. Attributes such as vigor, pollination, and honey production are being tested. There is an immediate need to propagate the resistant queen bees in large numbers for wide scale distribution to beekeepers so that this evaluation can be accomplished. The work is slow and tedious. It is also costly. The requested appropriation will accelerate the research, development, and transfer of queen bee stock resistant to varroa mites by providing for the employment of another research scientist and supporting staff.

Summary.—In conclusion, we wish to thank you again for your support of honey bee research in the past. We would appreciate your continued support by approving the additional funding of $300,000 that the Administration would add to the fiscal year 2001 appropriation for the Weslaco, Texas, lab, by adding another $300,000 to the appropriation for the Baton Rouge bee facility, and by otherwise supporting the Administration's request for bee research. Only through research can we achieve and maintain profitability in the U.S. beekeeping industry and continue to provide stable and affordable supplies of bee pollinated crops which make up fully one-third of the U.S. diet.

I would be pleased to respond to any questions that you may have.

PREPARED STATEMENT OF THE AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, on behalf of the American Indian Higher Education Consortium (AIHEC) and the 30 Tribal Colleges that comprise the 1994 Land-Grant Institutions, we thank you for this opportunity to share our funding requests for fiscal year 2001.

We respectfully recommend the following funding levels for fiscal year 2001 for our 1994 programs. Specifically, we request: $5 million for our extension grants program; $7.1 million for the Native American endowment fund, and report language that will give the Tribal Colleges the flexibility to use this funding to address the critical infrastructure needs at the 1994 Institutions; $3 million for our equity

grants; $3 million for our 1994 research program; and $1.7 million for institution capacity building grants. These requested funding levels are fully supported by the National Association of State Universities and Land Grant Colleges (NASULGC) and are included in their fiscal year 2001 budget recommendations.

This statement will cover two areas: First, it provides a brief background on the Tribal Colleges and our long-awaited inclusion in this nation's land-grant system; and second, it lays out the 1994 Institutions' ambitious plan through our authorized land-grant programs to fulfill the agricultural potential of American Indian communities and to ensure that American Indians have the skills needed to maximize the economic development potential of our resources.

BACKGROUND ON TRIBAL COLLEGES

Today, almost 140 years after enactment of the first land-grant legislation, Tribal Colleges, more than any other institutions, truly exemplify the original intent of the land-grant legislation. The first Morrill Act was enacted in 1862 specifically to bring education to the people and to serve their fundamental needs. This is the definition and mission of the Tribal Colleges. We truly are institutions by, of, and for our people.

The dismal statistics concerning the American Indian experience in education brought tribal leaders to the realization that only through local, culturally-based education could many American Indians succeed in higher education and help bring desperately needed economic development to the reservations. In the late 1960s and early 1970s, the first Tribal Colleges were chartered by their respective tribal governments, to be governed by boards comprised of local tribal people. These first colleges were started, with little money and a lot of determination, in abandoned and even condemned government buildings and old trailers, often using three-legged desks, wood crates for shelves and typewriters with missing keys. In 1972, six tribally-controlled institutions came together to form the American Indian Higher Education Consortium. Today, AIHEC is a cooperatively sponsored effort and integral support network for 33 member institutions in the United States and Canada, 30 of which are 1994 Land-Grant Institutions.

Located in 12 states, Tribal Colleges and Universities now serve more than 25,000 students from over 250 federally recognized tribes. Tribal Colleges offer primarily two-year degrees, with some colleges offering four-year and graduate degrees. All of the Tribal Colleges, with the exception of four institutions that are accreditation candidates, are fully accredited by mainstream regional accreditation associations.

Tribal Colleges serve as community centers, providing libraries, tribal archives, career centers, economic development and business centers, public meeting places, and child care centers. Despite our many obligations, functions, and notable achievements, Tribal Colleges remain the most poorly funded institutions of higher education in this country. Most of the 1994 Institutions are located on federal trust territory; states have no obligation and in most cases, do not fund the Tribal Colleges. In fact, most states do not even fund the institutions for the non-Indian students who attend our colleges despite the fact that non-Indian enrollment at the Tribal Colleges averages 20 percent.

1994 LAND-GRANT PROGRAMS—AMBITIOUS EFFORTS TO REACH ECONOMIC DEVELOPMENT POTENTIAL

Current land-grant programs at the Tribal Colleges are modest, yet, our 1994 authorizing legislation is vitally important to us because of the nature of our land base. Of the 54.5 million acres that comprise American Indian reservations, 75 percent are agricultural lands and 15 percent are forestry holdings.

Tragically, due to lack of expertise and training, millions of acres lie fallow, under-used, or have been developed through methods that render the resources nonrenewable. The Educational Equity in Land-Grant Status Act of 1994 is our hope for turning this situation around. It is essential that American Indians learn more about new and evolving technologies for managing our lands. We are committed to becoming, as we were when your forefathers came to this land centuries ago, productive contributors to this nation's—and the world's—agricultural base.

Extension Program.—Recent years show impressive efforts to address economic development through land use, as 1994 Land-Grants enter into partnerships with 1862 Institutions through extension projects. Our extension program represents an ideal combination of federal resources and Tribal College-state institution expertise, with the overall impact being far greater than the sum of its parts. Some examples of the innovative programs that are funded through competitively awarded extension grants include:

—United Tribes Technical College and North Dakota State University Extension Service are collaborating to provide diabetes prevention education to Native Americans through the creation of an Inter-Tribal Diabetes Education Center. Diabetes has spread epidemically in Indian Country. Through nutrition, health and wellness education programs, which are culturally appropriate and community supported, participants will have a greater understanding of how to control and even prevent this disease. The first phase of this vital project is now underway through a survey to determine the health habits and diet intake of Tribal College students statewide. This nutrition study will provide baseline data to share with tribal stakeholders and will assist in developing relevant health and wellness educational programs.

—The Native American Pastoral Textile Project at the Institute of American Indian Arts in Santa Fe, New Mexico provides educational outreach through workshops and seminars to utilize traditional methods of weaving natural fibers into products that can be widely marketed generating revenue that will help families and their communities achieve economic self-sufficiency.

Additional funding to support such efforts is needed because extension services provided by the states on our reservations are woefully inadequate, and the Tribal Colleges need to fill the gap. It is important to note that this program is not duplicative of ongoing extension activities, as it is specifically designed to complement and build upon the Indian Reservation Extension Agent program.

In fiscal year 2000, the 1994 institutions were awarded $3,060,000 for extension grants. We request that Congress build on the $3.5 million proposed in the President's fiscal year 2001 budget, and raise funding for this vital program to $5 million, the authorized level.

Native American Endowment Fund.—The endowment installments paid to the 1994 Institutions, remains with the U.S. Treasury, only the interest is distributed to our colleges. It is important to note that these funds are not scored as current budget outlay or authority. The fiscal year 1999 interest payment distributed among the thirty 1994 Land Grant Institutions totaled $980,913.

Just as other land-grant institutions historically received large grants of land or endowments in lieu of land, this sum assists the 1994 Institutions in establishing and strengthening our academic programs in such areas as curricula development, faculty preparation, and instruction delivery. As earlier stated, Tribal Colleges often serve as primary community centers. Although conditions at some have improved substantially, many of the colleges still operate in trailers, cast-off buildings, and facilities with crumbling foundations, substandard and exposed wiring and leaking roofs. In order for the 1994 Institutions to become full partners in this nation's great land-grant system we need and deserve the facilities and infrastructure necessary to engage in education and research programs vital to the future health and well-being of our reservation communities. We respectfully request Congress to build this much needed endowment by increasing the endowment fund payment to $7.1 million for fiscal year 2001, and further support this program with report language giving the 1994 Institutions the flexibility to use the interest income from this fund to address the critical infrastructure issues so prevalent at the Tribal Colleges.

1994 Institutions' Educational Equity Grant Program.—Closely linked with the endowment fund, this program has for the last two years provided almost $52,000 per 1994 Institution to assist in academic programs. Given that current authority for this program is $50,000 per Institution, this level of funding reflects recognition by Congress that the current authorization is simply insufficient. The fiscal year 2001 budgets of the USDA and the Administration also, acknowledge that the 1994 Equity Grant program has outgrown its current authority by requesting funds above the authorized level. We respectfully request that the Subcommittee expand on this program and fund it at $3 million to allow the colleges to build upon the courses and activities that the initial funding launched. Through the appropriations made available since fiscal year 1996, the Tribal Colleges have been able to begin to support vital courses and planning activities specifically targeted to meet the unique needs of our respective reservations. Some examples of this include:

—Fort Peck Community College in Poplar, Montana has designed a program to strengthen the college's instructional delivery system by providing telecommunication courses and workshops from Montana State University (MSU) Bozeman, MSU Northern and Rocky Mountain College, in business and Agribusiness. The program has also allowed Fort Peck to hire an administrative assistant for community outreach services, and offer programs that promote home economics through Native customs, values and traditions.

—Northwest Indian College (NWIC) has used its Equity Grant funds to develop and implement a Bachelor of Technology degree program in Natural Resources Management, with options in (1) Fisheries and Shellfish Management (to in-

clude Aquaculture and Processing); (2) Water Quality Management; (3) Environmental Technology; and (4) Forest and Land Use Management. NWIC has chosen to combine its share of the interest income from the Land-Grant Institutions Endowment Fund with the Equity fund to achieve the goals of this project.

Other Tribal Colleges have started courses and programs in natural resource management; environmental sciences; horticulture; forestry; as well as in dietetic programs and buffalo production and management, which are helping to address the chronic problem of diabetes among American Indian people.

1994 Research Program.—We are requesting increased funding for our research program, which was authorized in the Agriculture Research, Extension, and Education Reform Act of 1998, at "such sums as necessary". The program was initially funded in fiscal year 2000 at $500,000. We recognize the budget constraints that Congress is working under yet, with 30 institutions competing for these research dollars, we feel the President's suggested level of $1 million is simply not adequate. Therefore, we respectfully request an appropriation of $3 million with the intention of building this funding over time to a level adequate to address the pressing agricultural and nutritional research needs of the communities we serve.

This research program is vital to ensuring that Tribal Colleges finally become full partners in this nation's land-grant system. Many of our institutions are currently conducting applied agriculture-based research projects, yet they struggle to find the resources to conduct this research and meet their communities' needs. Some of the projects in progress include soil and water quality projects; amphibian propagation; pesticide and wildlife research; range cattle species enhancement; and native plant preservation for medicinal and economic purposes. We urge the subcommittee to fund this program at $3 million allow our institutions to develop and strengthen their research potential.

1.7 million Institutional Capacity Building Grant Program.—This competitive grant program, which requires a non-federal match, would provide the 1994 Institutions with the investment necessary to allow us to strengthen and more fully develop our educational infrastructure. Facilities maintenance and improvement are urgently needed at Tribal Colleges, many of which are still operating in donated, abandoned and even condemned buildings. As discussed earlier, many of our colleges are in serious disrepair with leaking roofs, asbestos insulation, exposed wiring, and crumbling foundations, being the norm rather than the exception. The results of a recent needs assessment suggest that a minimum of $120 million is needed just to address the critical safety issues at the nation's Tribal Colleges. These improvements are needed to provide American Indian students with the education necessary to fully compete in the modern agricultural world.

CONCLUSION

The 1994 Institutions have proven to be efficient and effective tools for bringing education to American Indians and bringing opportunity and hope for self-sufficiency to some of this nation's poorest regions. The modest federal investment in the Tribal Colleges has already paid great dividends in terms of employment, education, and economic development, and continuation of this investment makes sound moral and fiscal sense. American Indian reservation communities are second to none in their need for land-grant programs and no institutions better exemplify the original intent of land-grant concept than the 1994 Institutions.

We appreciate your long-standing support of the Tribal Colleges and are grateful for your commitment to making our communities self-sufficient. We look forward to continuing our partnership with you, the U.S. Department of Agriculture, and the other members of the nation's land-grant system—a partnership that will bring equal educational, agricultural, and economic opportunities to Indian Country.

Thank you.

PREPARED STATEMENT OF AMERICAN RIVERS

Mr. Chairman and Members of the Subcommittee on Agriculture, Rural Development, and Related Agencies, on behalf of more than 450 conservation and recreation organizations, community groups, religious affiliations, companies, and other groups across the country, American Rivers would like to thank you for the opportunity to testify before you today.

We urge you to support increased funding for Natural Resources Conservation Service soil and water conservation programs, including $400 million for the Environmental Quality Incentives Program (EQIP) and $25 million for the Wildlife Habitat Incentives Program (WHIP).

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

We urge you to appropriate $400 million for EQIP, a voluntary program designed to help farmers and ranchers facing threats to soil, water, and other natural resources develop successful resource conservation practices. The program provides financial, technical, and educational assistance to help landowners implement conservation plans that address issues such as nutrient management, manure management, integrated pest management, irrigation and water management, and wildlife habitat management. Participants join in five- to ten-year contracts that provide financial incentives and cost sharing to implement these conservation practices.

Appropriating $400 million for EQIP will permit the Natural Resources Conservation Service (NRCS) to meet demand for assistance, increase conservation opportunities for low-income farmers, and more effectively target watersheds and subwatersheds that are significant contributors of nutrients.

WILDLIFE HABITAT INCENTIVES PROGRAM

We urge you to appropriate $25 million for WHIP, which provides financial incentives to landowners to voluntarily develop and implement practices that will protect and preserve important wildlife habitat. By helping improve wildlife and fish habitat, WHIP can help improve the quality of life for participants and have a positive impact on local economies. According to the Fish and Wildlife Service, wildlife watchers spent $29.2 billion on trips, equipment, and other related expenditures in 1996 alone.

WHIP is a valuable tool for restoring aquatic habitat, adjacent streambanks, and uplands, benefiting many species of wildlife and fish. In Maine, WHIP has restored habitat for Atlantic salmon and brook trout and critical habitat for other important fish and wildlife species. In Illinois, seventy-five counties secured a total of 333 WHIP contracts through fiscal year 1999, covering 7448 acres.

We urge you to increase funds for NRCS programs that conserve our soil and water resources, including $400 million for the Environmental Quality Incentives Program and $25 million for the Wildlife Habitat Incentives Program.

Thank you for your consideration of our requests. We strongly believe that these funding levels will be excellent investments in the long-term health of our nation's watersheds, the urban and rural communities they serve and the economies they sustain.

PREPARED STATEMENT OF THE AMERICAN SEED TRADE ASSOCIATION

Mr. Chairman and members of the Subcommittee, we appreciate this opportunity to provide you with our views on the fiscal year 2000 agricultural appropriations bill. The American Seed Trade Association (ASTA) strongly urges you to provide a $20 million increase for the USDA National Plant Germplasm System for fiscal year 2001.

The ASTA, founded in 1883, is one of the oldest trade associations in the United States. With over 900 members, the ASTA is the premiere advocate for the seed industry and related interests. Our diverse membership consists of the leading companies that are developing, providing, supporting, and promoting new varieties that hold tremendous promise and opportunity for farmers and consumers everywhere.

Our request for a $20 million increase for the NPGS is the number one appropriations issue and the number one legislative issue for ASTA. This increase will allow seed companies to meet the diverse challenges facing our customers. Support for significant increases to the NPGS goes well beyond industry; we, also, have the support of our customers and the scientific community since they recognize that this will pay huge dividends. In addition to ASTA, the following organizations support a $20 million increase for the NPGS:

—American Farm Bureau Federation
—American Society of Agronomy
—American Soybean Association
—Association of Seed Certifying Agencies
—Crop Science Society of America
—National Association of Wheat Growers
—National Barley Growers Association
—National Corn Growers Association
—Society of American Florists.

This past year, the Department of Agriculture, also, recognized the need for a significant increase for the NPGS when it requested an increase of $19.4 million for the NPGS in its fiscal year 2001 budget submission to the OMB. Unfortunately, the

OMB reduced the increase to the $5.6 million level included in the Administration's budget request. While we appreciate the increase, it is simply not sufficient to maintain the NPGS.

The NPGS germplasm collections underpin crop-breeding efforts throughout the U.S. Preservation of and filling gaps in the base collections is a unique Federal responsibility. The NPGS:

—acquires germplasm;
—develops and documents information on the germplasm;
—preserves and distributes germplasm; and
—maintains quarantine facilities for testing imported germplasm for pests and pathogens before introduction in the U.S.

Many of the challenges confronting the U.S. can be met through the application of plant-based technologies. Continued use of and access to a broad diversity of germplasm is necessary, if we are to develop varieties to meet new and changing circumstances and if we are to sustain agricultural productivity. The improvement of plants is based on the utilization of genetic diversity. Unless we have a wide diversity of genetic resources, there will be nothing available, eventually, to improve plants or to prevent plants from becoming genetically susceptible to plant pathogens.

With sufficient genetic resources, we will have an abundant, safe, nutritious, and affordable supply of food and fiber that is produced in an environmentally friendly manner and that ensures a reasonable return for our farmers and livestock producers. In addition to food and fiber, American agriculture can provide continually renewable resources for a wide range of consumer products if diverse genetic resources are available and accessible to U.S. scientists and plant breeders.

Narrow genetic bases can result in widespread crop losses. For example, in 1970, Southern corn leaf blight cost farmers 15 percent of the corn crop; in the 1950s and early 1960s, about 70 percent of the wheat crop in the Pacific Northwest was wiped out by stripe rust; and the Irish potato famine of the 1840s was the result of the reliance on only a single variety of the potato. Breeders must have open access to extensive, well-maintained, and well-documented genetic resources.

Preserving the genetic diversity of plants is essential to the future of agriculture as the genes to add new traits, such as tolerance to diseases and resistance to insects, are often present in wild relatives of the major crops. Wild ancestors and relatives of cultivated plants give us the sustained ability to develop new varieties. Most of the U.S. crops raised and used for food, fiber, ornamentals, and industrial feedstocks originated from outside of the U.S. Consequently, the plant breeding community is highly dependent upon germplasm from other countries, some of which is endangered. Once lost, the germplasm cannot be fully reconstructed.

To ensure that these genetic resources are accessible and that they remain available, the NPGS must obtain a significant increase in funding. In 1991, the NPGS reported that an annual budget of $40 million would be required to remedy shortfalls in secure storage, backup, evaluation, and development of core germplasm collections. Funding for the NPGS has not come close to approaching the $40 million considered as necessary in 1991. We recognize the tight budget constraints under which the Subcommittee must operate; however, the following list outlines the precarious situation of the NPGS:

—Funding for the NPGS has declined by more than 14 percent, in constant dollars, since 1992, jeopardizing vital germplasm;
—Lack of funding has resulted in decreased supplies of germplasm that limits distribution and impedes the progress of research and breeding programs;
—93 percent of all clonally-propagated samples and 19 percent of all seed samples are not duplicated and are at high risk of catastrophic loss, which could result in lost opportunities for biodiversity and, perhaps, a wonder drug;
—No backup has been made for citrus and nearly all tropical fruit crops in the NPGS collections, due to lack of funds to develop effective storage methods;
—Long-term backup methods do not exist for many clonal crops and will not be developed without a significant infusion of funds;
—Without a significant infusion of funds, many of the clonally-propagated crops in the collection will remain at risk of catastrophic loss;
—NPGS cannot assume that duplicates of "lost" germplasm can be obtained elsewhere;
—Internationally, destruction of natural habitats, limited gene bank capacity, inadequate management, and lack of consistent funding has left much of the world's germplasm at high risk of loss;
—Acquisition of endangered germplasm will slow or stop completely without an increase in funding;

—Due to funding constraints, the Plant Germplasm Quarantine Office has found it necessary to establish quotas for importing germplasm thereby restricting the amount of materials available to U.S. scientists and plant breeders;
—Funding is insufficient for the Quarantine Office to take full advantage of molecular diagnostic techniques;
—99.9 percent of the germplasm accessions at Griffin, GA, and 68 percent of the accessions at Pullman, WA, have not been tested for viability within the past 10 years due to lack of funding;
—At least 30 percent of all NPGS accessions need to be regenerated during the next couple of years and with current funding it will take at least 9 years;
—18 percent of NPGS accessions are unavailable for distribution primarily due to lack of funding; and
—Without an increase in funding, many NPGS sites will be unable to pay for utilities, general operations, and facility repairs.

To fulfill its mission to provide access to diverse genetic resources, the NPGS must have a balanced program that includes (1) acquisition of germplasm to fill gaps in the collections and to preserve endangered germplasm; (2) maintenance and preservation of germplasm with secure backups to prevent loss; (3) adequate documentation and characterization of the germplasm; (4) sufficient supplies of viable seeds to allow for distribution; and (5) quarantine facilities that make germplasm available in a timely manner. The steady decline in available funding has had an extremely negative impact on the ability of the NPGS to have a balanced program.

The above problems are just a few of the many that are plaguing the NPGS due to the lack of adequate funding. However, they are jeopardizing the security of the U.S. food and fiber system. As some plant breeders have stated, genetic diversity is the engine that drives plant breeding. Without new sources of genetic variation, plant breeders cannot make improvements. Without improvements, we will be unable to ensure the continued economic viability and security of our food and fiber system.

The NPGS is a fundamental, strategic resource that we cannot afford to jeopardize. Without a significant infusion of funds, the NPGS will not be able to ensure the preservation of important germplasm. Our very existence and posterity hinges on our ability to provide breeders with the blueprints and genetic codes necessary to ensure new, plentiful foods, fibers, consumer products, and drugs. If the NPGS is not funded at a sufficient level, we will have lost opportunities for biodiversity and, perhaps, lost the germplasm for a possible wonder drug or the cure for some dreaded disease. The consequences of not funding the NPGS adequately are severe. The NPGS is a good investment for taxpayers and for the American consumer.

We strongly, urge you to provide an increase of $20 million for the NPGS for fiscal year 2001. We recognize that this will be difficult and that there are many competing priorities for limited resources; however, we cannot afford to be complacent about the fundamental resources that underpin our entire future.

Thank you for the opportunity to present ASTA's views on the importance of the National Plant Germplasm System. We look forward to working with you to ensure that the NPGS is able to provide the germplasm necessary for U.S. agriculture to meet the demands and challenges of the 21st Century.

PREPARED STATEMENT OF THE ASTA CORN AND SORGHUM BASIC RESEARCH COMMITTEE

SUMMARY

We are requesting $500,000 be appropriated annually for enhancing corn germplasm.

—Corn is a key resource providing food, industrial uses, livestock feed, and export.
—Corn production in the U.S. is based on less than 5 percent of corn germplasm available in the world. Broadening the germplasm base would provide genes to improve yields and protect against new disease, insect and environmental stresses. Exotic germplasm would also be a source for changes in grain quality being demanded by export markets, industrial processors, and other end users.
—Most exotic germplasm is unadapted to growing conditions in the U.S. This proposal is a joint USDA/ARS, university, and industry effort to adapt this material, so that it can be used by commercial breeders in the development of new hybrids to meet the demands of the American consumer and our foreign markets.

—We greatly appreciate the $500,000 previously appropriated for this research, beginning with the 1995 Federal budget. This funding is supporting the two main USDA/ARS locations involved in this research (Iowa and North Carolina), as well as USDA/ARS and university locations in Delaware, Illinois, Iowa, Missouri, Ohio, New York, Tennessee, Texas and Wisconsin. Industry is providing $450,000 in-kind support annually for this effort.

—The additional appropriation of $500,000 annually would enable the Iowa and North Carolina locations to purchase equipment and add staff necessary for carrying out this research. It would also provide funding for the increased germplasm evaluation and breeding necessary to test and enhance the exotic materials available.

BACKGROUND

Corn is the major crop on the cultivated land of the U.S.A. where approximately 75 million acres are planted each year. U.S. corn production, accounting for about half of the world's annual production, adds over $16 billion of value to the American economy as a raw material. About 20 percent ($3.2 billion) of this production is exported each year, thereby providing a positive contribution to the nation's trade balance. Approximately 17 percent of the yearly corn crop is industrially refined. A portion of the refined products is exported resulting in an additional $1.4 billion in export. Through feeding livestock, the rest of the crop is processed into meat and dairy products that affect everyone in our society. Corn is a key resource within our country.

CONCERNS

All of this production is based on using less than 5 percent of the corn germplasm available in the world. Less than 1 percent of our commercial corn is of exotic (foreign) origin, and tropical exotic germplasm is only a fraction of that. This situation exists because private sector corn breeders have generally concentrated on genetically narrow based, or elite by elite, sources for their breeding efforts, since their use results in getting hybrids to the marketplace faster.

Traditionally, corn has been treated as a commodity. In recent years corn grain users and processors have become more interested in the quality characteristics of the grain itself and how this affects their business. Since much of the exotic germplasm has undergone selection for many indigenous uses (foods, beverages, etc.) by various cultures, it seems likely that new grain quality characteristics will be found in exotic germplasm rather than the narrow-based germplasm now used. A small increase in value to the grain, such as 10 cents per bushel, would increase its annual value by $800 million for an eight billion bushel harvest.[1]

Breeders must still be concerned with breeding for higher yields so that U.S. corn farmers can remain competitive. Tapping into the broader germplasm pool could provide new sources of genes for higher yield and other performance traits, such as disease and insect tolerance or improved stalk and root strength.

A further concern with a narrow genetic base is the potential for widespread disease or insect damage due to new diseases or insect species spreading into U.S. corn growing areas. It is more likely that resistance to these dangers would be found in genetically diverse exotic germplasm sources than in our breeding material. One major benefit would be reduced pesticide use. In addition to protection against diseases and insects, these exotic materials provide insurance for unforeseen climatic or environmental problems.

LAMP PROJECT

What would be the source of this exotic germplasm? Over the years, collections of corn have been made from farmers' fields and other sources all over the world, and are stored in various germplasm banks. In 1987, the Latin American Maize Project (LAMP) was initiated to evaluate these corn collections (accessions). It was a cooperative effort among 12 countries to identify accessions that might provide valuable source material for further improvement in hybrid and open-pollinated cultivars in the U.S.A. and other areas. Pioneer Hi-Bred International gave USDA/ARS $1.5 million to fund the LAMP research.

Nearly 12,000 maize (corn) germplasm accessions were evaluated. In successive stages, the project identified the top 268 accessions. The environmental areas of ad-

[1] Salhuana, Pollak, Tiffany 1994. Public/Private Collaboration Proposed to Strengthen Quality and Production of U.S. Corn through Maize Germplasm Enhancement, Diversity Vol. 9, no. 4, 1993/Vol. 10, no. 1, 1994.

aptation for these 268 "elite" populations range from temperate to tropical, and are prime candidates for enhancing the U.S.A. corn germplasm base.

GERMPLASM ENHANCEMENT

Most of this germplasm is unadapted to growing conditions in the U.S. and requires genetic enhancement to make it adapted, or able to grow and mature in our environmental conditions. Enhancement basically means that these exotic materials will be bred with U.S. adapted materials and breeders will select progeny that carry the desired exotic traits and are also adapted to U.S. growing conditions. This will require a concerted long-term breeding approach by corn breeders at numerous locations (environments) throughout the U.S. Only after this process of enhancement will these exotic materials be ready to enter commercial corn breeding channels and be effectively utilized by a broad cross-section of the industry in the development of new hybrids for farmers and corn users.

The total process of enhancement is too large and long-term for public institutions and/or seed companies to accomplish individually. An ambitious task of this nature can only be completed through a coordinated and cooperative effort between the USDA/ARS, land-grant universities, and industry.

The Corn and Sorghum Basic Research Committee of the American Seed Trade Association has been concerned that enhancement of this exotic germplasm would proceed. The Committee consists of representatives from about 30 companies actively involved in the corn and sorghum seed industry, and at the committee's request, Dr. Linda Pollak, Research Geneticist, USDA/ARS, et al, developed a proposal for enhancing exotic germplasm starting with materials which will include the elite LAMP accessions as noted above. This proposal has developed into the U.S. GEM (Germplasm Enhancement of Maize) Project.

U.S. GEM PROJECT OUTLINE

Since this project serves a national need, the primary effort and direction has come from the USDA/ARS. Two permanent USDA/ARS locations are being used as primary sites for enhancement breeding and coordination. One is in Ames, Iowa, where the USDA/ARS currently conducts corn evaluation and enhancement efforts. Dr. Linda Pollak, Research Geneticist, is located there. Dr. Pollak was the Principal Investigator of the U.S.A. for LAMP, and is the lead scientist for this project.

The other permanent site is the USDA/ARS location in North Carolina. This site has responsibility for initial evaluation and conversion of the tropical materials. Tropical corn populations normally will not reach maturity in the Corn Belt, but will produce seed in North Carolina. After initial enhancement of the tropical materials in the South, they will be sent to Ames for further enhancement and testing in Corn Belt conditions. Dr. Marty Carson is in charge of this program.

A number of corn researchers at various land-grant universities and other ARS locations are also taking part in the enhancement and evaluation of this exotic germplasm. This cooperative effort is very important and serves not only as a source of improved germplasm but also provides excellent training for future plant scientists.

Industry is also involved. Due to the success of the GEM program, an initial group of 19 companies has increased to a total of 27 companies that have pledged research nursery and yield trial plots to be used in this breeding effort. This in-kind support is valued at $450,000 per year.

An important component of the project is an annual meeting of all cooperators to evaluate progress and plan strategies. An information network has been established to keep everyone up-to-date. A U.S. GEM Technical Steering Group consisting of members from USDA/ARS, University, and Industry has been formed for guidance and administration of this cooperative effort.

This germplasm enhancement project is public and is open to all public sector institutions as well as private seed companies. Information will be freely available and publicly developed materials will remain in the public domain, accessible to all.

ACCOMPLISHMENTS IN 1996–1999

Following is a description of accomplishments and research conducted at various locations using 1996–1999 funding.

Ames, Iowa.—Priorities for the corn enhancement work at this location are overall project coordination, data analysis and management, management and release of enhanced germplasm, analysis of materials for value-added traits, and as one of the many breeding sites. To date, 186 hybrids from crosses with GEM breeding lines have beaten the average of commercial check hybrids in trials analyzed in Ames.

The laboratory is continuing to evaluate oil, starch, and protein in the exotic accessions and in the breeding populations made up of exotic materials crossed to proprietary corn belt inbreds. In results from 1996, a line from one breeding cross measured total protein of 16 percent (corn belt germplasm has 10 percent) and total oil level of 6 percent (corn belt is 4 percent). It is extremely unique to find increased levels for both of these traits in the same line, and it is potentially very useful for food and feed applications. In 1997, lines were identified with unique starch characteristics, which may be beneficial for human food products. In 1998, three lines were identified with high percent retrogradation, which may have applications as a new source of dietary fiber or as a dry lubricant. Other lines were found to exhibit certain potentially useful traits, such as low protein (5.1 percent), high protein (15.4 percent) and high starch content (73.6 percent). In 1999 five lines were found with improved starch quality (three for improved gelatinization and two for Peak Height Index) and several lines were identified with enhanced fatty acid content.

GEM's World Wide Web site opened on July 15, 1996. From this site cooperators can obtain the latest data from yield tests, disease and insect screening, and value-added trait research, as well as news and upcoming events.

Raleigh, North Carolina.—The focus of this location is twofold. One priority is to develop enhanced material adapted to the Southern U.S. corn growing conditions. The second is to be a stepping stone for adapting tropical material to Midwest conditions.

Breeding populations were tested for resistance to various leaf diseases and stalk rots. Selections were made for improved material with resistance to these diseases as well as for improved yield, standability, and adaptation to southern U.S. conditions. For example, in 1997 significant resistance to Fusarium ear rot was found in four GEM breeding populations. Resistance to Aspergillus ear rot was also found in two of these same four populations. Hybrids of about 55 advanced breeding lines developed from tropical by elite breeding populations yielded equal to or outyielded the mean of commercial check hybrids over two years. These lines are now candidates for release.

Other public cooperators conducted evaluations and are finding many positive results in 1999 as follows: Grain quality in Delaware and Ohio. Yield data accumulation in Georgia, North Carolina, Maryland, Tennessee, Kentucky, Missouri, Texas and Delaware. Starch quality and disease resistance in Illinois. Fusarium ear rot resistance in Iowa. Wet milling properties, starch functionality, and other value added grain traits in Iowa. Aflatoxin resistance, corn earworm tolerance and grain quality in Texas. Resistance to corn rootworm in Missouri. Resistance to anthracnose stalk rot in New York. Breeding in Tennessee. Evaluation of silage quality in Wisconsin.

Demonstration nurseries were planted at Iowa and North Carolina for viewing by cooperators. Fall field days were held at Iowa and North Carolina.

In 1999, private cooperators continued the breeding and adaptation of about 15 accessions following the protocol developed by the GEM Technical Steering Group. Companies increased their nursery and yield trial in-kind support by approximately 25 percent in 1996. In 1999, six additional private cooperators joined GEM and are providing in-kind support.

RESEARCH IN 2000

Research will continue at the various USDA/ARS, university, and company locations similar to 1999.

EFFECTS OF INCREASED FUNDING BEGINNING IN 2001

Appropriation of the additional $500,000 annually would provide funds to increase research in the following ways:

Ames, Iowa.—The increase in the integrated field and laboratory experiments and breeding projects requires the addition of a field technician (GS–7). Continuation of the postdoctoral position for value added trait research (after a one year hiatus) would provide for the study of food technology aspects of the unique traits being discovered. A graduate research assistant would study the inheritance of these value added traits, developing invaluable information for the breeding effort. A database management system has been purchased, which needs additional programming to meet GEM needs. By nearly tripling the amount for public cooperators, it would greatly enhance the data gathering and adaptation breeding of these materials in the various States where these cooperators are located.

Raleigh, North Carolina.—This location has a number of equipment needs, such as a seed storage unit, because current facilities are filled to capacity and a minivan for transportation. A technician would be added to handle the expanded field work.

Current resources restrict testing and development work to relatively few breeding populations. With the increased funding, the number of breeding crosses could be increased, greatly speeding up the introduction of adapted GEM material into private and public breeding programs. Additional funding would provide for yield trial testing at more locations and more extensive disease and insect resistance screening, greatly increasing the precision in selecting materials that are high yielding and have high levels of pest resistance.

Other Public Cooperators.—The increase in funding for public cooperators (to $266,250 per year in the third fiscal year) would allow for full evaluation and development of new breeding materials improved for productivity as well as disease and insect resistance and value-added traits. Most public cooperators are willing to participate, but cannot unless they have at least partial funding. There are approximately 30 public cooperators now in many States, and as the project develops we are likely to have more.

CONCLUSION

Corn hybrids in the U.S. have a very narrow genetic base, utilizing only a small percentage of all available corn germplasm. This greatly increases vulnerability to unforeseen pest problems, and may lead to an eventual yield cap. Exotic corn germplasm could provide genes for resistance to pest problems and for increased yields. These exotic materials may also contain quality traits to meet new market demands. This will help ensure the U.S. maintains its world leadership in providing the best raw materials to meet the demand for the production of meat, eggs, milk, and many other food and industrial uses.

The LAMP project identified the top 268 corn accessions from among 12,000 populations evaluated. The present proposal represents a joint USDA/ARS, land-grant university, and industry effort to enhance these and other exotic accessions so that they can enter commercial corn breeding programs. The result of this cooperation will be an increase in the productivity, quality, and marketability of hybrid corn in the U.S. and for export, benefiting the farmer, the feed and processing industries, and the consumer.

Therefore, the ASTA Corn and Sorghum Basic Research Committee hereby requests the 106th Congress of the United States to add funding of $500,000 (in addition to the $500,000 appropriated initially in 1995, for a total of $1,000,000) annually for this corn germplasm enhancement project beginning with the 2001 Federal budget.

BUDGET SUMMARY

This is a summary of the operational and capital budgets for 2000, 2001, and 2002. The budget is divided into the Corn Belt Location and corresponds to Ames, Iowa (USDA–ARS) and the cooperators in the Corn Belt area. The Southern Location corresponds with Raleigh, North Carolina (USDA–ARS) and the cooperators in the States in the South. For a complete copy of the budget, please contact Dr. David Harper, Holden's Foundation Seeds LLC, Box 839, Williamsburg, IA 52361 or 319–668–1100.

Items	2000	2001	2002
Corn Belt Location:			
Board Reductions	$20,200	$20,900	$21,500
Personnel	142,100	248,700	271,270
Office/Field	52,800	68,700	70,980
Capital Equipment	24,900	80,450	55,000
Specific Agreements for Public Cooperators [1]	60,000	181,250	181,250
Total for Corn Belt Location	300,000	600,000	600,000
Southern Location:			
Personnel	68,600	113,000	115,400
Indirect Costs	16,213	13,363	13,363
Office/Field	30,187	43,637	45,237
Capital Equipment	5,000	65,000	41,000
Specific Agreements for Public Cooperators [1]	30,000	65,000	85,000

Items	2000	2001	2002
Total for Southern Location	150,000	300,000	300,000
Summary:			
Corn Belt Location	300,000	600,000	600,000
Southern Location	150,000	300,000	300,000
USDA/ARS Overhead	50,000	100,000	100,000
Grand Total	500,000	1,000,000	1,000,000

[1] Specific Agreements for Public Cooperators: Agreements for public cooperation can be made with universities and ARS scientists in many locations which could include the following States: Delaware, Ohio, Pennsylvania, Indiana, Illinois, Wisconsin, Kentucky, Missouri, New York, Iowa, Michigan, Minnesota, North Dakota, South Dakota, Nebraska, North Carolina, Mississippi, Georgia, Louisiana, Texas and Tennessee. Research at these locations would include selection for disease and insect resistance, evaluation for value added traits, and yield trials.

Prepared Statement of the American Society for Nutritional Sciences

The American Society for Nutritional Sciences (ASNS) is the principal professional organization of nutrition research scientists in the United States representing 3,000 members whose purpose is to develop and extend the knowledge and application of nutrition science. ASNS members include scientists involved in human as well as animal nutrition research. Our members hold positions in virtually every land grant and private institution engaged in nutrition-related research in the United States as well as industrial enterprises conducting nutrition and food related research.

ASNS wants to express gratitude for the work that this committee did last year, on both sides of the aisle, to help maintain competitively awarded agricultural research in the National Research Initiative Competitive Grants Program (NRICGP) against many other worthy competing programs. However, significant growth in fiscal year 2001 for the NRICGP is needed to help set the course for increased emphasis in the critically emerging areas such as genomics and genetics. While genomics is being studied under NIH and NSF funded grants, they have not addressed the areas of the genetic influence on nutrient requirements of individuals, nutrient gene interactions, and nutrient metabolism on the genetic basis of diseases in their intramural grants programs. These areas easily fit into the purview the of USDA's NRI mission. ASNS supports these and other key elements that will enhance cross-cutting areas of nutrition research having broad health outcomes.

The President's Budget for fiscal year 2001 calls for a net increase of $31 million above fiscal year 2000 funding for the NRI. We strongly endorse this substantially needed investment, plus an additional $73 million that would provide the NRICGP with $203 million in fiscal year 2001.

We know there would be concerns from this Committee and the Congress about how the competitive grants program might absorb such a substantial increase and effectively manage any new competitive initiatives. At this time we offer some suggestions as to how USDA's CSREES may incorporate such an increase so that the funds are effectively managed for the best possible health research outcomes. ASNS encourages Congress to urge department officials to consider administering all ongoing and new initiatives through a centralized office. This allows new grant administrators to take advantage of the investment and experience of an established program. Our Society stresses that the NRICGP use the model of other federal agencies that have more than one review cycle per year. Two or three cycles per year would allow for timely resubmission and encourage institutions to provide bridging funds for quality programs. However, despite the potential for further advancement, the USDA research budget has actually decreased in constant dollars by nine percent in the last five years. Currently only 25 percent of qualified grants receive funding. Consequently, inadequate funding limits the productivity of researchers that the NRICGP is able to fund and deters researchers from spending valuable time writing additional grant proposals. Furthermore, NRICGP awards are small, averaging $133,210 in fiscal year 1999, and short, averaging 2.3 years for a total average support of about $60,000 each year. Though, according to a the Federation of American Societies for Experimental Biology (FASEB) Federal Funding Consensus Report for fiscal year 2001, it is important to note that the number of applications received in

fiscal year 1999 increased by 157 over fiscal year 1998 following an increased appropriation to the program's budget.[1]

A recent report from the National Association State Universities and Land Grant Colleges (NASULGC) stated that research and development funding for space exploration, the environment, basic science research, and health research has increased in constant dollars from 23 to 58 percent over the last ten years. But during this same time period, the funding for agricultural research and extension programs, the lifeblood of our food supply system, has shrunk by eight percent in constant dollars. Base funds have eroded by 16 percent. These funds support the scientists and extension educators who can respond quickly and effectively to unexpected problems that arise for producers and consumers. The benefit is a food system that enables the consumer dollar and the welfare family's food stamps to purchase inexpensive, safe, and nutritious food. A food system that creates jobs, competes worldwide, and conserves its natural resources base.[2]

RESEARCH FUNDING MECHANISMS AND ISSUES:

Competitive Grants

A competitive system for allocating Government research funds is the most effective and efficient mechanism for focusing efforts on cutting edge research aimed at improving the health of the American people. Competitive grants provide the most effective, efficient and economic return to the public. ASNS strongly supports the competitive grants process as reflected in the National Research Initiative and believes that an open, merit and peer review process, applied as extensively as possible throughout the research system, is the best way to distribute research funds among qualified scientists.

Initiative for Future Agriculture and Food Systems (IFAFS)

IFAFS calls for priority mission areas to be addressed: food genome; food safety; food technology and human nutrition; new and alternative uses and production of agricultural commodities and products; agricultural biotechnology; and natural resource management. The Initiative also includes provisions that allow merit/peer review and lets those who benefit from agricultural research provide input about the priority setting process. ASNS supports this Initiative and urges members of this sub-committee make it a funding priority in fiscal year 2001.

National Needs Fellowship Grants Program

Another important area where funding has remained stagnant is the National Needs Fellowship of the Graduate Fellowship Program at the Higher Education Office of the USDA. This program is fills an important need to help train the next generation of agricultural researchers. Despite its importance, funding for the program has seen a dramatic decline in recent years after peaking in 1996 at $5 million. ASNS endorses $5 million for the National Needs Program so that it may be restored to its previous funding levels. We also support the review and subsequent reorganization of USDA-sponsored graduate training.

Special Grants

ASNS strongly believes that the best research results come from research that is peer reviewed. That is why researchers funded by federal agencies, such as the NIH and the NSF, that award grants on merit have made such great progress. There is a potential danger that special grants and earmarked research funds from USDA may be awarded on the basis of politics rather than merit, priority or research need. Therefore, the perception might be that the integrity of the research system and agricultural science is undermined. Last year special grants were appropriated at nearly $74 million even though the Administration's request for this year was less than half of that figure. We recognize that there is pressure to maintain these special grants. While special grants have their place to address emergency needs of national priority such as food safety, they may also be used to address research that is not deemed of the highest priority or merit. Thus, the proportion of special grants in comparison to the total research budget at USDA should be decreased.

THE NEED FOR NUTRITION-RELATED RESEARCH

The need for nutrition science and research is critical within the USDA. Nutrition and agricultural research are areas that impact the constituents of every congres-

[1] Federal Funding for Biomedical and Related Life Sciences Research Fiscal Year 2001, Federation of American Societies for Experimental Biology, 2000, p.15.

[2] Investments that Make a Difference, National Association of State Universities and Land-Grant Colleges, Fiscal Year 2000 Budget Proposal.

sional district in the nation. New technologies are demanded to reduce the likelihood of pathogen transmission by food, to improve the quality of processed foods, and to deliver greater nutritional value in foods. Additionally the economic impact on society in healthcare costs produced by advances in nutrition research is significant in the number of dollars saved by the American taxpayer. As health costs continue to rise, it is imperative that our medical practices take a preventive approach. This requires a thorough understanding of the role of nutrients in foods in preventing chronic illnesses such as heart disease, cancer and diabetes.

The USDA has a unique role in the area of nutrition research, particularly as it applies to human nutrition. For example, although there is a serious and obvious commitment to the funding of disease-related research within the National Institutes of Health, issues important to the basic mechanisms of nutrient function and the safety of the food supply have traditionally been the purview of USDA funded research. Most of the recent work on nutrient content and availability in various foods has come from USDA–NRI supported research. From a consumer perspective, it is this type of information that is often the most useful.

FOOD SECURITY AND BEHAVIORS

A 1994 Institute of Medicine Report stated that reducing foodborne illness will require research in all aspects of the food system, from production to consumption.[3] For example, identifying the foods most involved in foodborne illnesses, characterizing new foodborne pathogens, and developing new monitoring protocols are some ways to detect pathogens or toxicants responsible for outbreaks and minimize their impacts. Studies are also needed to identify food behaviors and nutritional effects in relation to more vulnerable populations such as infants and the elderly. Also, knowing more about health protectants will enable individuals to maximize the nutrition and "healthfulness" of their food choices relative to the prevention of disease. The need also exists to better understand the biology and behavior of food choices. Here we also need to study consumption related to risk analysis which demands better data on food consumption.

BIOTECHNOLOGY AND NUTRITION

Increased interest in enhancing the nutritional quality of the food supply has sparked ways to design foods not just for disease prevention but also for health promotion. For example, opportunities exist to influence food habits and food choices, by using technology to enhance healthful foods.

Ultimately we will want to know what compositional changes in crop plants have the best nutritional value. There are many basic questions left unanswered on the role of diet in health and disease when it comes to phytonutrients in plants.

USDA is encouraged to collaborate with other federal agencies in the area of nutrition whenever possible. This objective naturally spans research done in both the USDA and NIH.

GENETICS AND NUTRITION

Studying genetic interactions will allow us to address several issues at once. For example, what intakes of nutrients are needed to achieve optimal health and minimal risk of various diseases associated with diet? Do requirements differ depending on genetics? How do genetics influence efficiency of metabolism and does this affect nutrient requirements? What are metabolic and health consequences of inadequate nutritional status, as affected by genetics? Many research opportunities exist in this area.

GENOMICS AND NUTRITION

ASNS supports a recent report from the Federation of American Societies for Experimental Biology that states, increased funding should bring an emphasis on all aspects of genomics. Such an initiative would significantly enhance existing programs within the NRI. One example might be functional genomics. ASNS has provided detailed scientific background about this kind of research to USDA program directors at a recent stakeholders meeting.

Research and resources devoted to unraveling the genomes of a few selected organisms have been expanding dramatically in recent years. While the administration of large-scale programs has been placed in agencies other than USDA, the power and long-term impact of a large-scale genome initiative directed toward agriculturally important organisms—including animals, plants, and microbes (plant, animal

[3] Opportunities in the Nutrition and Food Sciences, Institute of Medicine, 1994, p. 111.

and human pathogens)—represents a major opportunity and fulfills an important need in agriculture.

USDA's NRICGP is well positioned to use genomic data to address programs in agriculturally important organisms. However, given its present budget—and even with the most optimistic incremental increases—the NRICGP currently lacks the resource depth to meet this challenge. Portions of our proposed increase would be wisely used in the critically important area of genomics.

ANIMAL WELFARE ACT

Research using animals has been crucial to virtually every advance in medicine in the past century. Agents for control of high blood pressure and the management of diabetes, vaccines for the control of poliomyelitis and mumps, development of artificial joints and heart-lung machines, and many more medical advances have depended on animal research.

USDA's Animal and Plant Health Inspection Service (APHIS) is charged by Congress to enforce the Animal Welfare Act (AWA). Under the AWA, USDA licenses dealers to buy and sell random-source animals to research facilities that are unable to obtain them from municipal pounds and shelters. This provides access to a critical supply of animals since animals bred specifically for research often lack characteristics needed by researchers studying health-related problems. Much of their work relies on older, larger, and genetically diverse animals.

ASNS recommends that Congress provide APHIS with adequate funding for enforcement of the Animal Welfare Act in fiscal year 2000 so that it can continue to ensure compliance with the AWA.

CONCLUSION

Agriculture is and will continue to be important to human health in terms of food that provides proper nutrition for healthier people. As the future challenges us with more complicated diseases, research must expand outside the traditional disciplines and approaches, such as the work that is being done is plant and animal genomics. New approaches must be implemented to address new societal concerns. For example, despite our hard efforts to plan healthy diets for school children much of this food is being wasted. Nutritionists are constantly challenged to develop nutrient-balanced meals that will encourage our children to choose more healthful foods. New demands to fit busy lifestyles is another example. Issues such as product convenience, uniformity of products, ease of preparation, "automatic" nutrient balancing, and packaging are all areas scientists must address. Research in areas of how our food is produced, pesticide usage, animal care and food handling issues also present demands to our scientists. These demands and opportunities must be answered in a way that sustains or enhances our quality of life. Although greater challenges lie ahead, agricultural research funding continues to have slow growth despite significant increases at other research agencies such as the NIH and NSF.

It is for these reasons that ASNS reiterates the following recommendations to the sub-committee:

—Increase funding for USDA's NRICGP from $119 million to $203 million, of which a portion should be allotted for a genomics initiative.
—ASNS recommends $120 million for the Initiative for Future Agriculture and Food Systems in which human nutrition research remains a research priority.
—Provide an increase of $5 million to the National Needs Fellowship Grants Program so that it may be restored to its previous funding levels.

PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR MICROBIOLOGY

FOOD AND DRUG ADMINISTRATION

The Food and Drug Administration (FDA) plays an essential role in protecting the nation's health. The Agency enters the 21st century with rapidly expanding responsibilities and an urgent need for more resources. The American Society for Microbiology (ASM), which represents over 42,000 members, believes the Administration's proposed FDA budget for fiscal year 2001 is a good first step toward providing increased support for the critical public health activities of the FDA. The nearly $1.4 billion budget requested for FDA by the Administration represents an increase of 13 percent, or $176 million over the fiscal year 2000 enacted level.

Providing an adequate budget for the FDA is essential because the nation's burgeoning medical and food research efforts will result in steadily increased numbers of products before the FDA for review. This review must be based on solid, state-of-the-art science, which requires financial resources and trained personnel. The fis-

cal year 2001 budget request recognizes the importance of FDA's traditional dual roles: that of ensuring the highest level of safety for already marketed products, and that of ensuring in a timely fashion the release of new products that benefit the American public.

FDA research should be recognized as an important component of the nation's overall biomedical research program and should receive increased attention and funding. Every FDA decision which influences public health must be based on current, highest quality research.

With its focus on the microbiological sciences, the ASM fully appreciates the complexity and critical nature of the FDA's efforts to manage health risks to humans and animals, to develop new scientific research within the Agency itself, and to interact effectively with the public, industry and academia alike. Several specific areas of the FDA mission are of particular interest to the ASM membership and demonstrate the need for additional resources: FDA research in the Center for Biologics Evaluation and Research (CBER) which enables FDA to respond to scientific and technological advances, vaccine safety, blood safety, gene therapy safety and diagnostics related to infectious diseases; FDA capacity to respond to food safety involving foodborne pathogens and antibiotic resistance acquired by pathogenic microorganisms and to reduce the number of deaths from medical errors; and FDA participation in U.S. bioterrorism preparedness to ensure an adequate program in this country.

FDA RESEARCH

The ASM strongly supports budgetary increases to improve FDA's science base. The FDA must be given the resources to keep pace with accelerating technology and to take advantage of scientific opportunities to best serve the American public.

Basic research by the FDA's Center for Biologics Evaluation and Research contributes to the Agency's ability to respond to escalating product market in a timely and knowledgeable manner. The ASM recommends adoption of the Adminstration's fiscal year 2001 budget request for increased support of CBER and its research efforts, at a time when the demands on the FDA's expertise are growing rapidly.

To ensure the fruits of the nation's biomedical research successes, the FDA will face complex, often unexpected, demands in this new century, as both science and public needs change and change again over time. We can predict challenges, such as continued safety of our blood supply and enlarging stockpiles of vaccines to counter potential bioterrorism. Others, such as still unknown microbial pathogens and expanding antibiotic resistance, can only be anticipated. Not only must the FDA have at hand the latest in known technology, it must consistently develop innovative ways to eliminate future threats to public health and remain able to adapt rapidly to ever new challenges.

In the past 20 years, expenditures in drug research have increased seven-fold, resulting in more and more potential products in need of science-based evaluation by the FDA. Although the FDA is not a basic research agency, it must be able to respond to constant changes in both its consumer constituency and the challenges it faces daily. Thus research is an important component of its broad based mission. In the face of a rapidly shifting research environment, the FDA, like all research agencies, must stay at the forefront of scientific knowledge, through both the efforts of its own scientists and the communication with others involved in safeguarding public safety. It must be able to recruit and retain high quality personnel capable of adapting to consumers' concerns, changes in the marketplace, the varied threats to public health, and new processing practices by the growing numbers of product producers. This enormous task mandates strong fiscal support from the Congress, sustained over time and into the future.

FOOD SAFETY AND ANTIBIOTIC RESISTANCE

The ASM commends the Congress' and the Administration's support in recent years of the national Food Safety Initiative, a collaborative program of the FDA, the Centers for Disease Control and Prevention, and the U.S. Department of Agriculture. The $30 million requested by the Administration for this important initiative in fiscal year 2001 will support program goals already underway, including expansion of domestic food inspection, development of nationwide standards for on-farm and in-plant preventive controls, further research on molecular methods to rapidly identify foodborne pathogens, and completion of the National Antimicrobial Resistance Monitoring System.

The Food Safety Initiative is just one example of science-based success in the past year. In addition to the National Antimicrobial Resistance Monitoring System, two other national systems to assure food safety are now in place: FoodNet, a foodborne

disease tracking system, and PulseNet, a computerized database of bacterial DNA subtypes to help determine whether scattered disease outbreaks are due to a common food source. The FDA recently developed a method to detect as many as 13 foodborne pathogens in one suspected food sample. Several outbreaks of foodborne illness were shortened in the past year, in part through the efforts of the FDA and its partners in food safety.

Food production and consumption patterns have changed considerably in recent decades. New foodborne pathogens, more meals prepared and eaten away from the home, more complicated food processing methods multiply the possibilities of contamination. Some foodborne pathogens have become far more deadly in recent years, such as pathogenic E. coli and antibiotic resistant Salmonella. The local food market is now part of a global grocery store, a system of imported and exported foods that must be regulated by the FDA. And the populations most vulnerable to foodborne diseases, such as children and the elderly, have increased to account for as much as 25 percent of the U.S. population further complicating the FDA's mission as protector of public health.

MEDICAL ERRORS

As the nation's population ages and becomes more diverse, the health care system becomes more stressed, more susceptible to human and technological errors. This has been and continues to be a major area of concern to the FDA, as the Federal agency charged with product safety. A recent study by the Institute of Medicine estimated that nearly 100,000 Americans may be dying each year as a result of preventable medical errors. Part of this disturbing situation can be attributed to human error, part to an exploding array of drugs, medical devices, blood and other biological products used in health care settings.

The $12.8 million requested to respond to preventable medical mistakes will help assure the safety of vaccines, therapeutic agents, blood products, medical devices and other tools used by the U.S. health care industry—an important step toward minimizing the number of deaths.

BIOTERRORISM

Unfortunately, the threat of a biological attack against American citizens must be taken seriously, and U.S. preparedness for an emergency response is essential. There is need to ensure expeditious development and licensure of new vaccines for smallpox, anthrax and other biological agents that might be weaponized. The ASM recommends that Congress provide the requested $11.5 million to FDA to help counter bioterrorism and work, in collaboration with NIH, CDC, DOD, academia and private industry, to ensure the development of vaccines, diagnostics and therapeutics to be used in response to selected biological and chemical agents. The FDA needs resources to expeditiously review and approve new drugs, therapeutics, vaccines and anti-toxins against biological warfare agents in the interest of national security and public health.

CONCLUSION

Through its many and diverse responsibilities, the FDA provides the United States with not only an improved national health but a collective peace of mind. Much of its work is never recognized, as the FDA often works behind the scenes to benefit the American public. The Agency provides tangible results such as prevention of foodborne disease through systematic monitoring of production facilities and screening of the blood supply. FDA approval of the Hemophilus influenzae type B vaccine will save the United States an estimated $150 to $400 million annually in health care costs. The FDA is also targeting as a principal concern medical errors, which are estimated to cost as much as $80 billion a year. FDA researchers contribute as well to the scientific knowledge base, thus enhancing new product development by industry and public research organizations, and helping the United States remain a world leader in new product development.

The ASM thanks the subcommittee for the opportunity to submit testimony and would be pleased to respond to any questions.

PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR MICROBIOLOGY

RESEARCH AND EDUCATION PROGRAMS

The U.S. agricultural system is one of the most productive and efficient in the world, due in part to past technological innovations. Agricultural research plays a

crucial role in promoting the nation's economic growth, improving environmental quality, and assuring innovative scientific research. Federal support for agricultural research is essential, in order to build the broad knowledge base needed to commercialize new and improved agricultural products and tools.

U.S. agriculture, however, continues to face an array of challenges, including the threats of new and emerging diseases, public concern about food safety and the agriculture industry's impact on the environment, not to mention an increasing global population. It is critical to increase the investment in research to respond to these challenges. We encourage Congress to build on the renewed focus on agricultural research in recent years, which will benefit not only U.S. agriculture but also the health and well being of every American citizen.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE

The ASM strongly supports competitive peer reviewed research that is open to all the nation's scientists. The ASM urges the Subcommittee to support the President's request of $150 million for the National Research Initiative Competitive Grants Program (NRI) within the Cooperative State Research, Education and Extension Service (CSREES), an increase of $31 million over the fiscal year 2000 appropriation. The proposed increase will address important research areas in agriculture including food safety, plant and animal genetics, and pest and disease management.

The ASM is pleased to see the President's continued support for the Initiative for Future Agriculture and Food Systems (IFAFS). This competitive grants program differs from the NRI in that it provides $120 million in fully offset mandatory funding for research and extension projects that are multi-disciplinary and applied in scope and target critical and emerging agriculture issues. ASM encourages the Congress to support this needed infusion of research money.

AGRICULTURAL RESEARCH SERVICE

The ASM supports the President's request to increase funding for the Agricultural Research Service (ARS) by 7.7 percent or $64 million in fiscal year 2001. This increase will enable the ARS to support both ongoing and new initiatives in such areas as emerging and exotic diseases, invasive species, plant and animal genetics research, food safety, technologies for production and conversion of crops into biobased products and bioenergy, and research initiatives on soil, water and air quality.

U.S. agriculture is experiencing severe problems caused by new and reemerging infectious diseases in plants and animals, a threat which requires immediate attention. Changes in agricultural practices, population growth, climate, microbial evolution, animal migration, and international trade and travel are all factors in the threat of introducing new plant and animal diseases into the U.S. agriculture system. The lack of knowledge to effectively manage and control new and reemerging infectious disease often leads to serious consequences such as reduced crop yield and unacceptable quality. Billions of dollars are lost through trade embargoes, quarantines, and the destruction of agricultural fields to control the spread of disease. The President's budget requests $23.2 million for ARS to address major threats to U.S. agriculture from exotic diseases, pests and invasive species. This increase includes $10 million for expanding the diagnostic capabilities to prevent acts of chemical and biological terrorism against U.S. agricultural and food security systems. The increase will also provide additional funds to prevent and control emerging infectious and zoonotic diseases afflicting livestock and aquaculture. The ASM urges the Congress to provide the President's request for these activities.

BIOBASED PRODUCTS

The ASM supports the requested increase of $14 million for research to accelerate the conversion of agricultural materials and feedstocks into biofuels, and enhance the advancement of valuable biobased products. Such scientific advancements in biobased product research allow for enhanced farm income, strengthened U.S. energy security, and environmental protection.

USDA FOOD SAFETY INITIATIVE

The ASM recommends that Congress provide additional funding to USDA of at least the $5.7 million increase to expand food safety research in support of the President's Food Safety Initiative. New funding is essential for research on antibiotic resistant bacteria in poultry, swine and cattle; to control bacteria and pathogens carried by animals and transmitted to humans and to develop intervention

strategies used in HACCP to reduce the risk of pathogen infestation in meat and poultry, as well as implementation of the Shell Egg Action Plan.

USDA'S NATIONAL FOOD GENOME STRATEGY

The ASM is disappointed that no request has been made for genetic resources for microorganisms. Microbes are involved in all aspects of agriculture—from beneficial uses of microbes in food (i.e. yogurt, cheese, bread, beer and wine) to pest controls to the spread of disease in plants and animals and the contamination of the food supply. Studying the genomes of agricultural microbes could lead to the development of new technologies to provide improved foods and better pest control to protect the nation's crops, to reduce the incidence of plant and animal disease, and to ensure a safer food supply.

USDA ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The ASM urges the Congress to provide the requested $16 million, an increase of $5 million, for the fiscal year 2001 appropriation for the Animal Care Unit within the Animal and Plant Health Inspection Service (APHIS), which is the regulatory body mandated to enforce laboratory animal care. This increase would maintain current activities, while allowing for increased inspections and improved follow-up to verify corrections of prospective violators. Additionally, APHIS would expand outreach efforts to the general public and AWA regulated facilities by increasing the amount of educational resources available, encourage participation at industry meetings, and allow the development of industry specific training for animal care and welfare.

Thank you for the opportunity to provide testimony on USDA programs. We would be pleased to respond to any questions.

PREPARED STATEMENT OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES

The Association of American Medical Colleges (AAMC) is pleased to submit its views on the fiscal year 2001 appropriation for the Food and Drug Administration (FDA). The AAMC represents the nation's 125 accredited medical schools, some 400 major teaching hospitals and health systems, and 91 academic and professional societies representing over 75,000 faculty members. Our members and institutions educate and prepare physicians to meet evolving health needs, conduct research leading to the discovery of medical knowledge and the development of innovative treatments and therapies, and provide basic and specialized health care services. We believe that the FDA should be recognized as an important component of the nation's overall commitment to biomedical research and should receive similar attention and funding. The AAMC supports the administration's $1.4 billion budget request for fiscal year 2001 as a good first step toward providing increased support for the agency's critical public health activities.

As the FDA enters the 21st century, the agency faces rapidly expanding responsibilities and an urgent need for more resources. The presence in the FDA of a vigorous, high-quality intramural research program provides the essential foundation for sound regulatory policy, and ensures that the FDA is, and will continue to be, well positioned to carry out its statutory responsibilities to protect, promote and enhance the health of the American people. Providing an adequate budget for the FDA is essential because the nation's burgeoning medical research efforts will result in steadily increased numbers of products for the FDA to review.

In the past 20 years, expenditures in drug research have increased seven-fold, resulting in more potential products in need of scientific-based evaluation. In the next several years, the FDA expects a continued increase in both the number and complexity of applications. To address properly the challenges of facilitating the development and use of traditional and novel pharmaceutical products, FDA research programs will be directed toward solving the scientific problems that impact regulation. FDA research is needed to address issues where there may be a significant lack of the information required for scientific decision-making. This includes data necessary for risk assessments, validation of methods, and standardization of products.

A strong FDA science capability is equally critical in understanding and managing risks associated with products that are already on the market. These reviews must be based on solid, state-of-the-art science, which requires financial resources and trained personnel. A strong and well-managed intramural research program provides the foundation for creating a climate of scientific communication and discovery within the FDA that enhances the ability of the agency to recruit and retain high-quality personnel. Internal research expertise enhances the agency's ability to seek

out and critically evaluate external scientific input, and creates a platform from which agency staff can productively interact with external scientific expertise from academia, industry and other Federal agencies as respected and knowledgeable colleagues.

In the face of a rapidly changing research environment, the FDA, like all research agencies, must stay at the forefront of scientific knowledge. Given the extraordinarily rapid pace of achievements in fundamental scientific disciplines, the intimate proximity and interaction of cutting-edge scientific research with review and regulatory activities is more important today than ever before. If the FDA is not in a state of scientific readiness when applications are received, then the agency must either delay regulatory decisions on important new products until we have adequate knowledge, or make very conservative decisions in order to err on the side of caution.

Through its many and diverse responsibilities, the FDA provides the nation with not only an improved national health but a collective peace of mind. Much of its work is never recognized, as the FDA often works behind the scenes to benefit the American public. The FDA's role in evaluating existing and novel drugs and devices must not be overlooked in the national efforts to increase funding for biomedical research. To keep pace with the increasing quantity and complexity of scientific progress, the FDA needs additional financial and human resources.

The fiscal year 2001 budget request recognizes the importance of research in FDA's traditional dual roles of premarket review and postmarket surveillance, which ensure the highest possible levels of safety for current products, and timely review and release of new products to benefit the American public. Once again, we ask you to consider carefully the Administration's $1.4 billion fiscal year 2001 budget request for the FDA as critical first step toward providing increased support for the agency's public health activities. The AAMC thanks the subcommittee for this opportunity to comment on funding for the FDA's research efforts.

PREPARED STATEMENT OF THE ASSOCIATION OF RESEARCH DIRECTORS OF THE HISTORICALLY BLACK 1890 LAND-GRANT UNIVERSITIES

Senator Thad Cochran, Chairman, and other distinguished members of the Committee, my name is Samuel L. Donald, Regional Research Director for the Association of Research Directors of the Historically Black 1890 Land-Grant Universities, including Tuskegee University (hereafter referred to as the 1890s). Mr. Chairman, I submit, on behalf of the 1890 community, this written testimony in support of the fiscal year 2001 Budget recommendations for the 1890s.

GENERAL INFORMATION

Mr. Chairman, today, the rich legacy of the land-grant tradition remains prominent on the campuses of the 1890s. These institutions are increasingly serving as economic instruments of the State and the nation. They have their extraordinary influence on the lives of all citizens including African Americans and other minority groups. While enduring inequities in State and Federal funding, the 1890s serve as exemplary role models; provide educational access to those who may otherwise be denied the opportunity to pursue a college education; and foster an unyielding commitment to academic excellence, social equality and the assurance of a decent future for all students including those from the lowest economic strata of the nation. These universities have been in the forefront of educating youth-at-risk, producing research vital to the quality of life and the environment, and addressing the social and economic needs of urban and rural communities. Teaching, research and extension remain prominent on the campuses of the 1890s.

ACCOMPLISHMENTS AND IMPACTS

Historically Public Black Colleges and Universities (HPBCUs) constitute some of the largest and most prestigious institutions of higher education in the nation. Among them, two of the largest are 1890 HPBCUs. Several of the 1890s offer doctoral degrees and/or professional degrees in engineering, food science, toxicology, environmental science, and other areas of national need. Three of the top five HPBCUs in the nation contributing to the production of African American doctorates are 1890s. Annually, six HPBCUs produce nearly 20 percent of all African American bachelor degree recipients in engineering and the 1890s graduate over 80 percent of all Black recipients of bachelor degrees in agricultural sciences. Tuskegee University alone has trained more than 80 percent of the nation's Black veterinarians.

The 1890s depend heavily on Federal support for sustaining their academic, research, and extension programs. These institutions contributions to science and other accomplishments are reasons for maintaining and expanding the Federal partnership. For the purposes of improved food quality and food safety, improved and sustained agriculture production, improved quality of life for rural people, etc., some of the more recent accomplishments of the 1890s are:

—Provided small farm clients with management and production techniques that led to new business opportunities.
—Responded to the changing demands in food and agricultural systems by listening and developing new approaches that meet clientele needs.
—Developed new invitro systems for enhancing root system development of pine and hardwood trees.
—Found that increased production of rapeseed will provide an efficient domestic source of erucic acid oil, reduce expensive imports of rapeseed oil, help control environmental pollution resulting from use of inorganic pesticides, and assist in the development of sustainable crop production.
—Found that N-methyl aspartate enhanced growth and reduced fat in swine and chickens.
—Encouraged (and assisted) small farmers to take advantage of niche markets to generate additional farm income.
—Provided educational resources to assist small farmers and limited resource families acquire jobs and better manage what they earn.
—Determined that lambs and kids produced on cowpeas are lean and low in fat and are preferred by consumers.
—Through research and outreach, provide small farmers with information about alternative enterprises that are environmental friendly.
—Developed a new vegetable-legume cropping system for small-scale farmers in the Southeast.
—Provide sound science as the basis for improving food quality.
—Determine that dietary omega–3 polyunsaturated fats have beneficial properties to change physical and biochemical processes to control blood pressure.
—Developed technology to improve goat meat and fiber production.
—Developed intensified "Farm Planning Program" for farmers to improve profitability from crops, livestock, and alternative farm enterprises.
—Conducted senior citizens conferences on consumer fraud, security, energy conservation, and modification of dwellings for handicapped use and access.

The above accomplishments had major impacts on improving (a) the quality of lives of people served and (b) the entrepreneurial skills and farming operations of farmers served. The bottom line is, due primarily to Federal appropriated dollars to the 1890s, many under-served clientele, customers and stakeholders have a "brighter" tomorrow.

BUDGET RECOMMENDATIONS

The 1890s support the fiscal year 2001 budget recommendations of the National Association of State Universities and Land-Grant Colleges (NASULGC) which emphasizes modest increased funding for the research, extension, and academic programs. Mr. Chairman, the 1890s urge the Committee to strongly support the NASULGC recommendations which includes the following for the 1890s:

Evans-Allen Research Program ($36.197 Million).—The 1890s request a marginal increase in base funds for research. These funds will enhance the capacity of these institutions to become more competitive in the private sector and in domestic and international research endeavors designed to undergird the vitality of the nation's agricultural enterprise. This support will enhance the ability of the 1890s to compete for grants and contracts in a wider variety of programs in the U.S. Department of Agriculture, other Federal agencies, and the private sector.

Capacity Building Grants Program ($15 Million).—The Capacity Building Grants Program is making a major difference in the quality and quantity of teaching and research programs in food and agricultural sciences and technology on the campuses of the 1890s. Since the creation of this enormously important program, the 1890 leadership has strongly advocated a substantial and sustained increase in funding at more than $25 million annually. This level of funding would allow these institutions to significantly improve the range and level of academic programs offered, enhance the performance and productivity of faculty in the sciences, and increase research opportunities for undergraduate and graduate students. However, consistent with NASULGC's recommendation, the 1890s support the request of $15 million.

1890 Facilities Grants Program ($15 Million).—The 1890s unequivocally support the $15 million facilities funding request in the NASULGC budget for renovation,

maintenance and overall improvement of the infrastructure on our campuses. The 1890s face nearly insurmountable barriers in attracting public and private support for enhancement of facilities. Although this level of funding will not fully address the critical facility needs of our institutions, it will complement existing efforts to make major improvements.

Extension Program ($31.674 Million).—The 1890s support a modest increase in base funding requested by NASULGC for extension activities. This marginal increase will allow our institutions to sustain program activity at current levels and respond more efficiently to the growing demand for services in severely depressed and under-served communities.

Mr. Chairman, in addition to the NASULGC budget recommendations for the 1890s, support is sought for the following:

1890 Agricultural Biotechnology Research/Graduate Program Grants ($8 Million).—A new initiative that is not in the NASULGC budget recommendations for the 1890s is a Research/Graduate Program, emphasizing biotechnology. Biotechnology is one of the major areas in which the 1890s are recognizing the importance of strengthening their role as a national resource in conducting research in biotechnology, biosafety and food security. The 1890s seek support to conduct basic and applied research in biotechnology and to engage in partnerships with national laboratories and biotech industries. Funds would be used to develop graduate programs that build and strengthen areas of specialization in food and agricultural sciences, biotechnology and related disciplines, to provide fellowships and assistantships for graduate students, summer research and professional development fellowships for graduate students, and research and professional development assistance for faculty. The budget request is a permanent line item of $8,000,000 to be appropriated to the Agricultural Research Service of USDA, exclusively for 1890s.

CLOSING COMMENTS

Mr. Chairman, based on past accomplishments and visionary approach, the 1890s are positioning themselves to enter the 21st Century with a renewed commitment and capacity to implement their land-grant mission of teaching, research and extension. Full appropriations of the fiscal year 2001 budget recommendations as stated above will facilitate this and is vital to the 1890 Land-Grant Universities.

PREPARED STATEMENT OF THE BIOTECHNOLOGY INDUSTRY ORGANIZATION

The following is the statement of the Biotechnology Industry Organization (BIO) in support of increased funds for the U.S. Food and Drug Administration (FDA) in the fiscal year 2001 budget. BIO represents more than 900 biotechnology companies, academic institutions and State biotechnology centers in 47 States and 26 nations. BIO members are engaged in biotechnology research on medicines, diagnostics, agriculture, pollution control and industrial applications.

Our industry's goal is to develop products that will cure disease, improve the quality and quantity of the world's food supply, and clean up the environment. Our success in achieving those objectives is dependent upon an expert and productive FDA.

BIO supports increased funding for the FDA. In addition to our own advocacy efforts, we have joined together with organizations representing some of the other FDA-regulated industries to urge Congress to provide increased funds for fiscal year 2001 for the agency. Specifically, our coalition has called for an increase of at least 13 percent over last year. This is the amount included in the President's budget request absent the imposition of additional user fees. The text of our coalition's letter to the Chairman and Ranking Member of this subcommittee is attached.

Funding for the FDA will have a direct impact on the lives of millions of Americans. Important new biopharmaceuticals are being developed for a variety of diseases including cancers, Alzheimer's Disease, and diabetes. In 1992, industry and the FDA negotiated an innovative collaboration pursuant to which industry funds a portion of the FDA review program through user fees on prescription drugs and biologics.

However, the Federal appropriation for the FDA has remained relatively flat over the past several years. The result is that despite the revenues generated by user fees paid by our industry, the true operating budget of the agency has shrunk after inflation and federally-mandated pay raises for staff have been calculated.

In constant dollars, the agency has less money now than it had in 1993 for its activities not funded by user fees or earmarked programs such as tobacco and food safety. Therefore, while the agency has received a $450 million increase in current

dollars since 1993, only $91 million has been available for non-user fee, non-earmarked programs.

When the FDA Modernization Act (FDAMA) was enacted in 1997, both industry and the FDA agreed to implement programs that would accelerate the drug development process. In fact, FDAMA expressly recognizes that FDA should not only serve as a regulator, but also as an agency that provides assistance to biotechnology companies that are developing drugs and biologics.

Many of these new responsibilities are resource intensive and are not fully financed by user fees. For example, if FDA places a "clinical hold" on a research trial, it must respond in writing within 30 days of receipt of a written request to remove the hold and specify the reasons for its decision. In addition, the law requires FDA to meet with companies in an effort to reach agreement on the design and size of clinical trials on a drug or biological product.

The Congressional Budget Office has estimated that FDAMA implementation will cost $41 million each year. Without sufficient funding, FDA reform cannot succeed. This will lead to development delays for important and cost effective new drugs, compromising an already stressed health care system. Moreover, review of some biologic products fall outside the user fee program. These applications will suffer serious delays without additional resources for the agency.

Our nation makes a huge investment in biomedical research. For example, a few years ago, Congress began the process of doubling the budget for the National Institutes of Health over a five year period. BIO supports these increases. However, for Americans to benefit from this investment, the FDA must be capable of reviewing and regulating the products that are ultimately developed from this research. Otherwise, potentially life saving drugs and other products will never reach the patients that need them. A recent survey of biotechnology, pharmaceutical and medical device firms confirms that the lack of highly skilled reviewers unduly delays product approval.

Over the past several years, the Clinton Administration and some in Congress seem to have adopted a strategy that assumes additional user fees will be enacted and paid by other regulated industries. Accordingly, the appropriations for the agency have been less than adequate. This occurred again in the President's fiscal year 2001 budget request that includes unauthorized user fees. BIO agrees that it is appropriate for industries to pay user fees. However, this issue should be debated independent of the appropriations process.

In addition to its existing commitments, the agency needs to have the resources to respond to new situations. For example, since the tragic death of Jesse Gelsinger, the FDA is considering new actions to increase oversight of gene therapy clinical trials. Some initiatives have already been announced and others are still being developed.

There are two reasons why it is critical that the FDA have the monies to perform these functions. First, we support FDA's initiatives because FDA oversight is critical to maintain public confidence in the safety of this new and promising research. Moreover, when the agency takes action to respond to pressing issues such as these, extra resources are needed so that other critical, longstanding agency priorities are not slowed.

An adequately funded FDA is also necessary for capital formation for our industry. Our investors need to know that products from biotechnology companies will get a timely and high-quality review from the agency. Increased funds are necessary to achieve this goal. In addition, when the overall appropriation for the agency is low or remains flat, critical infrastructure needs such as personnel, facilities, and equipment are left unmet. This hurts the overall performance of the agency.

The FDA plays a critical role for our nation. By providing science-based regulation, it helps speed the delivery of new, life saving products to the public, while ensuring that these products are safe. An investment in the FDA today will clearly pay large dividends in the future.

For more information about BIO's views on this issue, please call Michael Werner, Esq., Director of Federal Government Relations and Bioethics Counsel at (202)–857–0244 or mwerner@bio.org.

Thank you for your attention to this important matter.

PREPARED STATEMENT OF THE CALIFORNIA INDUSTRY AND GOVERNMENT CENTRAL CALIFORNIA OZONE STUDY COALITION

Members of the Subcommittee: On behalf of the California Industry and Government Central California Ozone Study Coalition we are pleased to submit this state-

ment for the record in support of our fiscal year 2001 funding request of $250,000 from CSREES for the Central California Ozone Study (CCOS).

Ozone and particulate matter standards in most of central California are frequently exceeded. In 2003, the U.S. Environmental Protection Agency (U.S. EPA) will require that California submit SIPs to for the recently promulgated, national, 8-hour ozone standard. It is expected that such SIPs will be required for the San Francisco Bay Area, the Sacramento Valley, the San Joaquin Valley, and the Mountain Counties Air Basins. Photochemical air quality modeling will be necessary to prepare SIPs that are acceptable to the U.S. EPA.

Central California Ozone Study (CCOS) is designed to enable central California to meet Clean Air Act requirements for ozone State Implementation Plans (SIPs) as well as advance fundamental science for use nationwide. The CCOS field measurement program will be conducted in the summer of 2000 in conjunction with the California Regional PM10/PM2.5 Air Quality Study (CRPAQS), a major study of the origin, nature and extent of excessive levels of fine particles in central California. CCOS includes an ozone field study, a deposition study, data analysis, modeling performance evaluations, and a retrospective look at previous SIP modeling. The CCOS study area extends over central and most of northern California. The goal of the CCOS is to better understand the nature of the ozone problem across the region, providing a strong scientific foundation for preparing the next round of State and Federal attainment plans. The study includes six main components:

—Developing the design of the field study (task already underway)
—Conducting an intensive field monitoring study, scheduled for June 1 to September 30, 2000
—Developing an emission inventory to support modeling
—Developing and evaluating a photochemical model for the region
—Designing and conducting a deposition field study
—Evaluating emission control strategies for the next ozone attainment plans

CCOS is directed by Policy and Technical Committees consisting of representatives from Federal, State and local governments, as well as private industry. These committees, which managed the San Joaquin Valley Ozone Study and are currently managing the California Regional Particulate Air Quality Study, are landmark examples of collaborative environmental management. The proven methods and established teamwork provide a solid foundation for CCOS. The sponsors of CCOS, representing state, local government and industry, have contributed approximately $8.6 million for the field study. In addition, CCOS sponsors will provide $4 million of in-kind support. The Policy Committee is continuing to seek additional funding ($9.0 million) for a future deposition study, data analysis, and modeling. California is an ideal natural laboratory for studies that address federal, agriculture-related issues, given the scale and diversity of the various ground surfaces in the region (crops, woodlands, forests, urban and suburban areas).

For fiscal year 2001, our Coalition is seeking funding of $250,000 through the U.S. Department of Agriculture (USDA) Cooperative State Research, Education, and Extension Service (CSREES). Domestic agriculture is facing increasing international competition. Costs of production and processing are becoming increasingly more critical. The identification of cost-effective options for addressing environmental options affecting agricultural costs will contribute significantly to the long-term health and economic stability of local agriculture. A CSREES grant is needed to address the issue of biomass burning and alternatives to open burning. Biomass burning is managed in order to minimize smoke impacts and avoid violations of ambient air quality standards. The air quality impacts of using biomass as a fuel source and as an alternative to open burning need to be addressed. CCOS will improve the ability to assess the impacts of biomass power plants.

There is a national need to address national data gaps and California should not bear the entire cost of the addressing these gaps. National data gaps include issues relating to the integration of particulate matter and ozone control strategies. The CCOS field study will take place concurrently with the California Regional Particulate Matter Study—previously jointly funded through Federal, State, local and private sector funds. Thus, CCOS is timed to enable leveraging of the efforts for the particulate matter study. Some equipment and personnel can serve dual functions so that CCOS is very cost-effective. From a technical standpoint, carrying out both studies concurrently is a unique opportunity to address the integration of particulate matter and ozone control efforts. CCOS will also be cost-effective since it builds on other successful efforts including the 1990 San Joaquin Valley Ozone Study. To effectively address these issues requires federal assistance and CCOS provides a mechanism by which California pays half the cost of work that the Federal Government should pursue.

Scientists at the University of Nevada, Desert Research Institute (DRI) are the principal investigators for CCOS. To expedite research studies related to biomass burning and smoke management for CCOS, it is requested that funds provided by CSREES be allocated directly to DRI.

We appreciate the Subcommittee's consideration of our request. Thank you very much.

PREPARED STATEMENT OF THE CITY OF GAINESVILLE, FLORIDA

Mr. Chairman: On behalf of the City of Gainesville, Florida, I appreciate the opportunity to present this written testimony to you today. The City of Gainesville is seeking federal funds in the fiscal year 2001 Agriculture, Rural Development, FDA and Related Agencies Appropriations bill to assist our efforts to protect the Florida Aquifer from stormwater runoff which starts out in Gainesville's Sweetwater Branch Basin.

Sweetwater Branch Project

The City of Gainesville is seeking $1.5 million in funding assistance for a $2 million stormwater management project intended to remove 90 percent or more of the sediment and debris from the Sweetwater Branch creek flow preventing those undesirable materials from entering the Paynes Prairie Preserve, thereby helping to insure and protect the Florida Aquifer as the major source of drinking water for the State of Florida.

The Sweetwater Branch basin contains approximately 1,710 acres, and is located mainly in the southeast central portion of the City of Gainesville. The outfall from this basin discharges into Paynes Prairie, a State-owned preserve and park system, where the creek flow is directed into the Alachua Sink. The Alachua Sink is a natural sinkhole that drains directly into the Florida aquifer.

The Florida Aquifer provides the majority of drinking water to Florida's residents and has a direct impact on the Florida Everglades. In addition, many domestic water wells are used to obtain water from surficial and intermediate aquifers in the Gainesville area.

The Sweetwater Branch drainage basin contains urban, commercial, industrial, and residential area stormwater runoff. Because the Sweetwater Branch runs through some of the oldest portions of Gainesville, most stormwater runoff is directly discharged into the Branch with very little flooding attenuation or pollution loading reduction. In addition, there is insufficient undeveloped land available to accommodate stormwater management facilities except for the area very near the Paynes Prairie outfall.

Pollution reduction of the Sweetwater Branch surface waters before entering the Paynes Prairie Preserve will assist in the re-establishment of the Preserve's natural aesthetics and re-establishment of the natural ecological systems of the Preserve, in addition to providing protection for a major source of drinking water. The runoff also has the potential to negatively impact threatened and endangered wildlife such as the American Bald Eagle, the Woodstork, the Florida Sandhill Crane and the Southeastern American Kestral. In summary, the situation has created a concern amongst environmentalists, business leaders, and concerned citizens throughout the region that Paynes Prairie and the Florida Aquifer are being compromised.

With this in mind, the City of Gainesville, Alachua County, the Florida Department of Environmental Protection, the St. Johns River Water Management District, and local citizens are all seeking a comprehensive ecosystem management solution to the problem of stormwater runoff from downtown entering Sweetwater Branch, Paynes Prairie and the Alachua Sink.

The project devised by these groups would reduce or eliminate the sediment, debris, nutrients and general pollutants currently being discharged into Paynes Prairie and eventually the Florida aquifer from the Sweetwater Branch Creek.

Current projections are that the project would consist of the following three components:

—the purchase of undeveloped property in the vicinity of State Road 331 and Sweetwater Branch;

—the construction of maintainable sediment and debris removal systems; and

—the construction of maintainable nutrient removal systems.

Removing all pollutants at the discharge end of Sweetwater Branch would cost at least $14–$20 million. Smaller projects upstream of the Prairie have been initiated at the local level. Expenditures of about $2 million are identified for three such smaller projects: (1) the Duck Pond, (2) the Baffle Box, and (3) the Downtown (a Brownfield Area) Stormwater Facility. These smaller projects are designed to deal

with specific subbasins and water quality issues. The current projects now planned utilizing local resources will only clean up parts of the basin. Considerable flow and accompanying pollution still will go through to the Prairie. An additional facility is needed to clean up the rest of the flow.

An in-depth engineering analysis of the creek system, property topography, associated wetlands, and other pertinent factors would be accomplished to determine the optimum and appropriate scope of property purchase and facilities construction. The City is prepared to pay some of the cost for this analysis, and has received a $500,000 grant from the U.S. Environmental Protection Agency, but we are simply unable to bear the entire burden. As a result, we request that the Subcommittee appropriate $1.5 million to assist our efforts.

The requested federal funds, if awarded, will be used by the City to secure the necessary property rights and to construct the facility. Once the project construction is complete, Gainesville's Stormwater Management Utility, a public utility, would provide the required annual operating and maintenance funding, and no further federal maintenance funds would be needed.

In closing, federal support is critical for this initiative. As a result, we respectfully request that the Subcommittee will give funding assistance for our project every consideration throughout the fiscal year 2001 appropriations process.

PREPARED STATEMENT OF THE COALITION TO PROMOTE U.S. AGRICULTURAL EXPORTS

As members of the Coalition to Promote U.S. Agricultural Exports, we commend the Chairman and members of the Subcommittee for their interest and support of U.S. agriculture and express our appreciation for this opportunity to share our views.

The Coalition to Promote U.S. Agricultural Exports is an ad hoc coalition of over 80 organizations, representing farmers and ranchers, cooperatives, small businesses, regional trade organizations, and the State Departments of Agriculture (see attached). We believe the U.S. must continue to have in place policies and programs that help maintain the ability of American agriculture to compete effectively in a global marketplace still characterized by subsidized foreign competition.

Farm income and agriculture's economic well-being depend heavily on exports, which account for one-third or more of domestic production, provide jobs for millions of Americans, and make a positive contribution to our nation's overall trade balance. Without aggressive action, however, U.S. agriculture exports are projected to remain below $50 billion this year due to a combination of factors, including continued subsidized foreign competition and related artificial trade barriers. U.S. agriculture's trade surplus is also expected to remain around $11.5 billion, down nearly 50 percent from 1996, with continued low commodity prices also forecast.

Also troubling is the erosion in the U.S. market share of global agricultural trade. In fact, this could culminate in the United States losing out to the European Union (EU) as the world's top agricultural exporter sometime this year. We believe that a major reason for this decline in market share lies in the more aggressive promotion expenditures of our foreign competitors.

According to a recent USDA study, the EU and other foreign competitors are outspending the U.S. by a factor of 20 to 1 with regard to the use of export subsidies and other expenditures for export promotion. In 1997, in addition to spending over $7.2 billion in export subsidies, our leading foreign competitors spent a combined $924 million on various activities to promote their exports of agricultural, forestry, and fishery products, including some $365 million by the EU.

According to the most recent information by USDA, spending by these competitor countries on market promotion has increased by 35 percent, or nearly $1 billion, in the past three years, while U.S. spending remained flat. Almost all of this increase has been directed to the high-value and consumer-ready product trade.

Information compiled by USDA also shows that such countries are spending over $100 million just to promote sales of their products in the United States. In other words, they are spending more to promote their agricultural exports to the United States, than the U.S. is currently spending ($90 million) to promote American-grown and produced commodities worldwide! And according to the most recent USDA numbers, for the first time ever, during fiscal year 1999 we imported almost $1 billion more in agricultural products from the EU than we exported to them.

The USDA study noted above goes on to say that "because market promotion is a permitted "green box" activity under World Trade Organization (WTO) rules, with no limit on public or producer funding, it is increasingly seen as a centerpiece of a winning strategy in the future trade battleground. Many competitor countries have announced ambitious trade goals and are shaping export programs to target

promising growth markets and bring new companies into the export arena." European countries are expanding their promotional activities in Asia, Latin America, and Eastern Europe. Canada, Australia and New Zealand have also sharply bolstered their export promotion expenditures in recent years.

Clearly, as the EU and our other foreign competitors made clear in Seattle, they intend to continue to be aggressive in their export efforts. For this reason, we believe the Administration and Congress should immediately strengthen funding for MAP and other export programs, and ensure that such programs are fully and aggressively utilized. Since MAP was originally authorized, funding has been gradually reduced from a high of $200 million to its current level of $90 million—a reduction of more than 50 percent. Again, given what our foreign trade competitors are doing, we believe it's time to restore funding for this vitally important program up to its original level. American agriculture is the most competitive industry in the world, but it can not and should not be expected to compete alone against the treasuries of foreign governments.

In order to reverse the decline in funding over the past decade for a number of our agricultural export programs, the Coalition is strongly supporting legislation (S. 1983) introduced by Senators Murray (D-WA) and Craig (R-ID), et al. that would authorize no less than $90 million and up to $200 million per year for MAP. The bill would also provide a minimum of $35 million for the Foreign Market Development (FMD) Cooperator Program for cost-share assistance to help boost U.S. agriculture exports. Further, it would allow up to 50 percent of available funds under the Export Enhancement Program (EEP) to be used for related market development and promotion activities.

Both MAP and FMD are administered on a cost-share basis with farmers and other participants required to contribute up to 50 percent of their own resources. These programs are one of the few tools specifically allowed under the Uruguay Round Agreement to help American agriculture and American workers remain competitive in a global marketplace still characterized by subsidized foreign competition. By any measure, they have been tremendously successful and extremely cost-effective in helping maintain and expand U.S. agricultural exports, protect American jobs, and strengthen farm income. In addition to helping achieve these objectives, enactment of S. 1983 would provide needed flexibility to respond to changing market conditions and capitalize on potential new market opportunities. It would also send a powerful message to our foreign competitors and strengthen the U.S. negotiating position in future trade talks.

For all these reasons, we want to emphasize again the need to help strengthen the ability of U.S. agriculture to compete effectively in the global marketplace. As a nation, we can work to export our products, or we can export our jobs. USDA's export programs, such as MAP and FMD, are a key part of an overall trade strategy that is pro-growth, pro-trade and pro-job.

Again, as members of the Coalition to Promote U.S. Agricultural Exports, we appreciate very much this opportunity to share our views and we ask that this statement be included in the official hearing record.

PREPARED STATEMENT OF THE COLORADO RIVER BASIN SALINITY CONTROL FORUM

The Congress concluded that the Colorado River Basin Salinity Control Program should be implemented in the most cost-effective way and realizing that agricultural on-farm strategies were some of the most cost-effective strategies authorized a program for the Department of Agriculture. With the enactment of the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA), the Congress concluded that the Salinity Control Program could be most effectively implemented as one of the components of the Environmental Quality Incentives Program. Since the enactment of FAIRA, the Salinity Control Program has not been funded at a level adequate to ensure that water quality standards in the Colorado River, with respect to total dissolved solids (salinity), will be honored, nor is the funding sufficient to prevent salt loading from irrigated farms from impacting the quality of water delivered to Mexico under a minute of the International Boundary and Water Commission, United States and Mexico.

The Salinity Control Program has been subsumed into the EQIP program without the Secretary of Agriculture giving adequate recognition to the requirement in Section 202(c) in the Colorado River Basin Salinity Control Act to carry out salinity control measures. Water users hundreds of miles downstream are the beneficiaries of this water quality improvement program. Agriculturalists in the Upper Basin, however, see local benefits as well as downstream benefits and have submitted cost-effective proposals to the State Conservationists in Utah, Wyoming and Colorado.

Priority Area proposals for EQIP funding are ranked in each state under the direction of the NRCS State Conservationist. Existing ranking criteria, however, does not consider downstream benefits (particularly out of state benefits) when proposals are being evaluated.

After longstanding urgings from the states and directives from the Congress, the Department has concluded that this program is different than small watershed enhancement efforts common to the EQIP program. In this case, the watershed to be considered stretches more than 1200 miles from the river's headwater in the Rocky Mountains to the river's terminus in the Gulf of California in Mexico. The Department has now determined that this effort should receive a special fund designation and is moving to appoint a coordinator for this multi-state effort.

The Basin states were led to believe by Congressional staff that when the EQIP program was created, the $200,000,000 annual Commodity Credit Corporation (CCC) borrowing authority given to the Secretary would ensure that through the year 2002 at least this amount of funding would be expended for the EQIP program. The Forum is very dismayed as this committee acted to reduce the funding for the current fiscal year to $174,000,000. This level of funding is not adequate for this most important nationwide program and the Administration does not believe that it provides sufficient funds to implement National Priority Areas as allowed by Congress under FAIRA. The Forum urges that the funding for EQIP for fiscal year 2001 total $325,000,000.

This last year, the Natural Resources Conservation Service (NRCS) earmarked funds to use in areas of special interest in the amount of about $5.3 million. The states added about $2 million in up-front cost-sharing and local farms, we estimate, contributed about another $2.3 million. The plan for water quality control of the river prepared by the Forum, adopted by the states, and approved by EPA requires that the USDA portion of the effort to be funded at $12 million. Hence, there is a shortfall from the federal side of $6.7 million this last year. State and local cost-sharing is triggered by the federal appropriation. Hence, the entire effort is only at about 44 percent of what is needed. The USDA indicated that a more adequately funded EQIP program would result in more funds being allocated to the salinity control program. The Basin states have cost sharing dollars available to participate in on-farm salinity control efforts in the cost-sharing fashion provided by the Congress. The agricultural producers in the Upper Basin are waiting for their applications to be considered so that they might also cost share in the program.

The Forum urges that this committee support the funding of $325,000,000k from the CCC in fiscal year 2001 for EQIP. The Forum also requests that this Committee advise the Administration that $12,000,000 of these funds be designated for the Colorado River Basin Salinity Control Program.

OVERVIEW

The Colorado River Basin Salinity Control Program was authorized by Congress in 1974. The Title I portion of the Colorado River Basin Salinity Control Act responded to commitments that the United States made, through a minute of the International Boundary and Water Commission, to Mexico with respect to the quality of water being delivered to Mexico below Imperial Dam. Title II of the Act established a program to respond to salinity control needs of Colorado River water users in the United States and to comply with the mandates of the then newly legislated Clean Water Act. Initially, the Secretary of the Interior and the Bureau of Reclamation were given the lead federal role by the Congress. This testimony is in support of funding for the Title II program.

After a decade of investigative and implementation efforts, the Basin states concluded that the Salinity Control Act needed to be amended. Congress revised the Act in 1984. That revision, while keeping the Department of the Interior as lead coordinator for Colorado River Basin salinity control efforts, also gave new salinity control responsibilities to the Department of Agriculture, and to a sister agency of the Bureau of Reclamation—the Bureau of Land Management. Congress has charged the Administration with implementing the most cost-effective program practicable (measured in dollars per ton of salt removed). It has been determined that the agricultural efforts are some of the most cost-effective opportunities.

Since Congressional mandates of nearly two decades ago, much has been learned about the impact of salts in the Colorado River system. The Bureau of Reclamation is now completing studies on the economic impact of these salts. Reclamation recognizes that the damages to United States' water users alone are hundreds of millions of dollars per year.

The Colorado River Basin Salinity Control Forum (Forum) is composed of Gubernatorial appointees from Arizona, California, Colorado, Nevada, New Mexico, Utah

and Wyoming. The Forum has become the seven-state coordinating body for interfacing with federal agencies and Congress to support the implementation of a program necessary to control the salinity of the river system. In close cooperation with the Environmental Protection Agency (EPA) and under requirements of the Clean Water Act, every three years the Forum prepares a formal report analyzing the salinity of the Colorado River, anticipated future salinity, and the program necessary to keep the salinities at or below the levels measured in the river system in 1972.

In setting water quality standards for the Colorado River system, the salinity concentrations measured at Imperial, and below Parker, and Hoover Dams in 1972 have been identified as the numeric criteria. The plan necessary for controlling salinity has been captioned the "plan of implementation." The 1999 Review, Water Quality Standards for Salinity, Colorado River System, includes an updated plan of implementation. In order to eliminate the shortfall in salinity control resulting from inadequate federal funding for the last seven years for USDA, the Forum has determined that implementation of the salinity control program needs to be accelerated. The level of appropriation requested in this testimony is in keeping with the agreed to plan. If adequate funds are not appropriated, state and federal agencies involved are in agreement that the numeric criteria will be exceeded and damage from the high salt levels in the water will be widespread and very significant in the United States and Mexico.

STATE COST-SHARING AND TECHNICAL ASSISTANCE

The authorized cost sharing by the Basin states, as provided by FAIRA, was at first difficult to implement as attorneys for USDA concluded that the Basin states were authorized by FAIRA to cost share in the effort, but the Congress had not given USDA authority to receive the Basin states' funds. After almost a year of exploring every possible solution as to how the cost sharing was to occur, the states, in agreement with the Bureau of Reclamation, with state officials in Utah, Colorado and Wyoming and with NRCS State Conservationists in Utah, Colorado and Wyoming, agreed upon a parallel program wherein the states' cost sharing funds will be used. We are now in the fourth year of that program and, at this moment in time, this solution to how cost sharing can be implemented appears to be satisfactory.

With respect to the states' cost sharing funds, the Basin states felt that it was most essential that a portion of the program be associated with technical assistance and education activities in the field. Without this necessary support, there is no advanced planning, proposals are not well prepared, assertions in the proposals cannot be verified, implementation of contracts cannot be observed, and the most valuable partnering and education efforts cannot occur. Recognizing these values, the "parallel" state cost sharing program expends 40 percent of the funds available on these needed support activities. Initially, it was acknowledged that the federal portion of the salinity control program funded through EQIP was starved with respect to needed technical assistance and education support. The Forum is encouraged with the Administration's determination that 19 percent of the EQIP funds will be used for technical assistance. The Forum urges this Committee to appropriate adequate funds for these support activities rather than to direct NRCS to borrow these needed funds from the CCC.

PREPARED STATEMENT OF THE COLORADO RIVER BOARD OF CALIFORNIA

Your support and leadership are needed in securing adequate funding for the U.S. Department of Agriculture with respect to it's on-farm Colorado River Basin salinity control program for fiscal year 2001. This program has been carried out through the Colorado River Basin Salinity Control Act, since it was enacted by Congress in 1974. With the enactment of the Federal Agricultural Improvement and Reform Act (FAIRA) in 1996, specific funding for salinity control projects in the Colorado River Basin were eliminated from the Federal budget, and aggregated into the newly created Department of Agriculture Environmental Quality Incentive Program (EQIP) as one of its program components. With that action, Congress concluded that the salinity control program could be more effectively implemented as one of the components of the EQIP. Prior to FAIRA, the Department of Agriculture had specific line item funding for salinity control projects as high as $14.7 million, but in recent years the level of appropriations have been reduced to between $3.4 and $5.1 million which is inadequate to ensure that water quality standards in the Colorado River, with regards to salinity can be met. It has been estimated through previous Federal studies that Colorado River water users in the Lower Basin States' (Arizona, California, and Nevada) were suffering economic damages estimated to be in excess of

$750 million per year in 1995 due to the salts in the River system. Most of that damage is occurring in California. The potential impact of failing to move forward with the plan of implementation for salinity control would be to permit these damages in the Lower Basin to reach an estimated $1.25 billion annually by the year 2015.

The Colorado River Board of California (Colorado River Board) is the State agency charged with protecting California's interests and rights in the water and power resources of the Colorado River System. In this capacity, California along with the other Basin States through the Colorado River Basin Salinity Control Forum (Forum), the interstate organization responsible for coordinating the Basin States' salinity control efforts, established numeric criteria, in June 1975, for salinity concentrations in the River. These criteria were established to lessen the future damages in the Lower Basin States as well as assist the United States in delivering water of adequate quality to Mexico in accordance with Minute 242 of the International Boundary and Water Commission. The goal of the Colorado River Basin salinity control program is to offset the effects of water resource development in the Colorado River basin after 1972 rather than to reduce the salinity of the River below levels that were caused by natural variations in river flows or human activities prior to 1972. To maintain these levels, the salinity control program must remove 1.48 million tons of salt loading from the River by year 2015. To date, only 721,000 tons of salt load reduction have been achieved. In the Forum's last report entitled 1999 Review, Water Quality Standards for Salinity, Colorado River System released in June 1999, the Forum found that additional salinity control measures were necessary to meet the implementation plan that had been adopted by the seven Colorado River Basin States and approved by the Environmental Protection Agency. Since implementation of the EQIP, Federal allocations by the Department of Agriculture have not equaled the Forum's identified funding needs for the Department of Agriculture's portion of the program. The Forum identified a "backlog" of salinity control measures which stands at 384,000 tons. This is in addition to future controls designed to lower the River's salt loading by 372,000 tons by 2015 in order to meet the established salinity standards. The Forum has presented testimony to Congress recommending that the salinity control efforts through EQIP be accelerated to continue to meet the salinity standards through 2015. It has developed a plan that recommends the removal of at least 87,000 tons per year of salt loading through 2005.

The President's proposed budget for fiscal year 2001 contains funding of $325 million for implementation of EQIP, up $125 million from the $200 million Commodity Credit Corporation borrowing authority provided the Secretary of Agriculture by FAIRA per year. The Colorado River Board is pleased with the Administration's statement that it intends to expend $325 million in fiscal year 2001 through EQIP. Of the amount to be appropriated for EQIP, the Colorado River Basin Salinity Control Forum, at its meeting in San Francisco, California, in October 1999, recommended a funding level of $12.0 million for on-farm salinity control in the Colorado River Basin for fiscal year 2001 to maintain water quality consistent with the established standards. These Federal dollars, if earmarked, would be augmented by State cost sharing of 30 percent with an additional 30 percent provided by the agricultural producer with whom the Department of Agriculture contracts for implementation of salinity control measures. The Colorado River Board supports the recommendation of the Forum. The salinity control program has proven to be a very cost effective approach to help mitigate the impacts of higher salinity. Continued Federal funding of the program is essential.

In addition, the Colorado River Board recognizes that the Federal Government has made significant commitments to the Republic of Mexico and to the seven Colorado River Basin States with regard to the delivery of adequate quality water to Mexico. In order for those commitments to be honored, it is essential that in fiscal year 2001 and in future fiscal years, the Congress provide funds to the Department of Agriculture to allow it to continue providing needed technical support to the producers for addressing salinity control in the Basin.

The Colorado River is, and will continue to be, a major and vital water resource to the 17 million residents of southern California as well as throughout the Lower Colorado River Basin. As stated earlier, preservation of its quality through an effective salinity control program will avoid the additional economic damages to users of Colorado River water in California, Arizona, and Nevada..

The Colorado River Board greatly appreciates your support of the Federal/State Colorado River Basin Salinity Control Program and again asks for your assistance and leadership in securing adequate funding for this program.

PREPARED STATEMENT OF COLORADO STATE UNIVERSITY

Mr. Chairman, Members of the Subcommittee, my name is Judson M. Harper. I am Vice President for Research and Information Technology at Colorado State University, located in Fort Collins, Colorado. I appreciate this opportunity to submit my testimony for the record of proceedings on the fiscal year 2001 Department of Agriculture Budget. I would like to testify in support of the budget request for funds related to carbon sequestration mitigation strategies and take this opportunity to inform you of the ongoing work in this field being conducted by the Consortium on Agricultural Soils Mitigation of Greenhouse Gases.

The Consortium for Agricultural Soils Mitigation of Greenhouse Gases (CASMGS) includes Colorado State University, Texas A&M University, Iowa State University, the University of Nebraska, Kansas State University, Michigan State University, Montana State University, The Ohio State University and Battelle-Pacific Northwest National Laboratory. These institutions have been working individually and collectively for the past few years in the fields of soil carbon dynamics, soil-derived greenhouse gases, soil erosion, water quality and computer modeling, land resource data analysis, agricultural resource economics and integrated assessment.

The Administration's Budget for the Department of Agriculture proposes $12 million for conservation technical assistance programs to develop accurate baseline soil carbon data and to determine the impacts of federal programs on soil carbon stocks across the country. An additional $3 million is proposed to fund demonstration and research pilot projects to test various carbon sequestration mitigation strategies and monitoring mechanisms. We support these initiatives and feel prepared to partner with the federal government in reaching its objectives.

Concern has been mounting about the considerable buildup of carbon dioxide (CO_2) in the atmosphere. This atmospheric buildup has been greatly accelerated by industrialization and the burning of fossil fuels (coal, oil and natural gas). Crops and other plants remove carbon dioxide from the atmosphere and, following harvest their residue and roots remain in the soil for long periods. Carbon accumulation in soils can be greatly improved by various forms of conservation management, such as no-till and replanting with grasses. This carbon sequestration occurs because there is less soil disturbance and more carbon is added to the soil. Corollary benefits of carbon sequestration are increased soil fertility, reductions in erosion and increases in soil quality.

To help reduce carbon dioxide emissions, a new plan is emerging—sequester carbon in U.S. agricultural soils, which helps the soil and air and benefits the U.S. agricultural economy. It has been estimated that 20–40 percent of targeted emission reductions can be met by agricultural soil carbon sequestration. Under a private emission trading strategy, U.S. farmers, practicing appropriate conservation practices, could sell carbon "credits" to carbon emitters. Alternatively, government policies might be implemented to directly support farmers for implementing conservation management practices. Either strategy would help mitigate carbon dioxide rise while the needed long-term technical solutions are found for producing clean energy.

The goal of CASMGS is to provide the tools and information needed to successfully implement soil carbon sequestration programs intended to lower the accumulation of greenhouse gases in the atmosphere, while improving the soil and providing income and incentives to farmers. Specifically, the Consortium will:

—Produce national inventories of all major greenhouse gas fluxes from soils.
—Provide measurement and modeling tools for quantifying and verifying soil carbon sequestration rates to support carbon dioxide emission credit or trading schemes.
—Provide integrated assessment models to evaluate alternative national and global economic and policy strategies for carbon sequestration. These models will provide insights on the impacts of such programs on crop production potential, food security and environmental quality.
—Provide a standing capability to meet the short-term needs of Federal agencies, Congress and the White House, for information, data and analysis on issues relating to soil carbon sequestration and soil greenhouse gas emissions.
—Participate in the transfer to and adoption of technology by other countries for quantifying and verifying carbon sequestration rates.
—Provide information to each of the stakeholder groups: policymakers, agricultural sector, energy and transportation industries, the scientific community and the general public, through annual and special reports, scientific and trade journals, popular publications and an internet website.

The work of the Consortium will enhance the capacity to sequester carbon in agricultural soils and provide time for industry to develop and implement clean energy technologies. We are hopeful that this Committee will acknowledge the important

role that agricultural lands play in carbon emissions mitigation, as well as, the unique opportunity for farmers to earn monetary rewards for sound agricultural practices that not only sequester carbon, but also improve the quality of the soil.

PREPARED STATEMENT OF THE COSMETIC, TOILETRY, AND FRAGRANCE ASSOCIATION

The Cosmetic, Toiletry, and Fragrance Association (CTFA)[1] appreciates the opportunity to submit testimony regarding the fiscal year 2001 budget request for the Food and Drug Administration (FDA) and, in particular, to support an increase in funding for the Center for Food Safety and Applied Nutrition (CFSAN) and its Office of Cosmetics and Colors. The Administration's budget proposal maintains the funding for the Office of Cosmetics and Colors at the fiscal year 2000 level of approximately $5.2 million. We are concerned that this continuation of current funding will have the effect of reducing the office's resources because inflationary and mandatory salary increases are not funded. We believe funding this office sufficiently to cover those automatic expenses is essential to preserve the integrity of this regulatory program, which ensures consumer confidence in the safety of cosmetic products.

CTFA member companies provide consumers with a wide array of safe cosmetic products, including makeup preparations, shampoos, deodorants, toothpastes, mouthwashes, perfumes, shaving creams, and skin lotions. These products promote personal hygiene, as well as helping people look and feel good. Virtually everyone in the U.S. uses cosmetic products on a regular basis. Thanks to the safety programs of the cosmetic industry, often with the cooperation and participation of the FDA, and the effectiveness of FDA's cosmetic-related activities, everyone can be confident that the products they use routinely are safe. The continued appropriate funding of the Office of Cosmetics and Colors is essential to maintain this level of assurance for this industry and our consumers.

A strong FDA cosmetics regulatory program is critically important for the continuing economic success of the $25 billion cosmetic and personal care industry. Our industry counts on the FDA compliance function to deter the entry into the market of unscrupulous organizations, as well as to ensure that questionable products are quickly removed from the market. A vital FDA program maintains a level playing field for all companies in the marketplace, and for all products. An efficient program allows members of our industry to know what the regulatory requirements are, how they will apply, and that they will be enforced consistently, regardless of whether products are produced domestically or imported into the U.S.

The Office of Cosmetics and Colors has been, and remains, a national leader in setting and maintaining standards for the safety of cosmetic products and for their proper labeling. This national leadership means that consumers throughout the nation can trust that their safety is protected, regardless of where they purchase products. The effective functioning of the Office is essential so that States are encouraged to adopt national standards rather than setting individual, differing state requirements. The resulting patchwork of regulatory requirements would not only confuse consumers but also create impossible difficulties for an industry conducting business in interstate commerce.

The FDA also is recognized internationally as expert in cosmetic regulation, largely as a result of the effective functioning of the Office of Cosmetics and Colors. FDA's international leadership is necessary so that we, along with other industries, can continue to move toward the goal of international harmonization. This was identified by Congress as a priority for FDA in Section 410 of the FDA Modernization Act of 1997.

Finally, in addition to supporting sufficient and stable funding for the office of Cosmetics and Colors, we also wish to take this opportunity to express support for two specific initiatives for which the Administration has requested additional funding in fiscal year 2001. First, the Administration requests $5 million for costs associated with the move of CFSAN to new headquarters facilities. Without these funds, this long anticipated and congressionally supported move will not be completed successfully. For years, CFSAN has occupied seriously outmoded facilities and coped with extreme difficulties in upgrading laboratory, computer, and telecommunications capacity. The funds requested in this budget will allow implementation of

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[1] CTFA is the national trade association representing the cosmetic and personal care product industry. Founded in 1894, CTFA has an active membership of almost 300 companies, which manufacture or distribute the vast majority of the finished cosmetic and personal care products marketed in the U.S. The Association also has approximately 300 associate members, which provide services, equipment, or supplies, such as raw materials and packaging components, to our active members.

a much improved system, which will greatly benefit both consumers and the regulated industry.

Second, the Administration requests $20 million for new laboratory facilities in Los Angeles. The FDA field laboratory in Los Angeles is an unsafe workplace, and its equipment and instrumentation are obsolete and cannot perform the important product analysis and monitoring functions necessary to continue to ensure product safety. This laboratory is especially important to FDA's work in preventing the importation into the U.S. of unsafe foreign-made products. The Los Angeles facility is a principal laboratory for analysis of imported cosmetic products, and its effective functioning is critical to our industry's goal that every cosmetic and personal care product on the U.S. market meet our high standards, whether the product is made in the U.S. or imported.

CTFA thanks you for considering our views as you move forward with your deliberations on the fiscal year 2001 budget. If there is any way we may be of assistance to you, please call upon us.

PREPARED STATEMENT OF THE COUNCIL FOR AGRICULTURAL RESEARCH, EXTENSION AND TEACHING

Thank you Mr. Chairman, I appreciate the opportunity to provide testimony in support of the Land Grant University System.

My name is Daniel M. Dooley, Chairman of the Council for Agricultural Research, Extension and Teaching, commonly called CARET. CARET is a national group of lay support persons working on behalf of the Land Grant University System. The CARET group was formed a number of years ago for the express purpose of enhancing national support and understanding of the important role played by the Land Grant Colleges in the food and agricultural production system, as well as the role of this system in enhancing the quality of life for all citizens of the nation.

I do not intend to take your time discussing all of the contributions that the Land Grant System has made to the food and agricultural production system. I do want you to know, however, that the Land Grant University System has been an essential ingredient to the success of American agriculture and the health of the American public.

Suffice it to say, that the Land Grant University System is very unique and has been a critical component to the long-term success of the agricultural community. It has provided technology and education enabling farmers and ranchers and other stewards of natural resources in this country to manage their productive resources in a way that is efficient and yields the greatest and most nutritious quality and quantity of food in the world. The Land Grant Universities' contribution to agriculture has had enormous impact upon our economy, our balance of trade, the quality of our work force and the health and quality of life of American citizens. Unfortunately, this system is sometimes taken for granted.

It is now time to make substantial new efforts to the further research and development of the agriculture and food production system. This committee must acknowledge the important contributions to be made by support for Section 401 of the Agricultural Research, Extension and Education Reform Act of 1998 (AREERA). It is imperative that the committee find a resolution of the dispute which has emerged among your colleagues in the House of Representatives. Unfortunately, the future health and well being of the agriculture and food production system and the consumers it serves, are at risk because of the internal squabbles about implementation of Section 401. I represent to you that, on behalf of CARET, resolution of this matter is the highest priority facing you.

Additionally, this testimony is principally to request support for the fiscal year 2001 budget recommendations of the National Association of State Universities and Land Grant Colleges (NASULGC) Board on Agriculture of $1,095,229,000.00. These increases, in addition to support of Section 401 of the AREERA, are critical to advance the interests of the agricultural economy in the United States.

CARET and NASULGC do endorse and are pleased with the President's proposed budget increases for the Cooperative State Research, Education and Extension Service of the United States Department of Agriculture. However, we do feel that it is necessary to reallocate some of the proposed increases and to augment increases in other areas.

The budget recommendations that are being advanced by CARET on behalf of the Land Grant Universities are the result of a broad number of stakeholder meetings and receipt of substantial input from those that benefit from the research and education activities. Specifically, I want to address a few funding highlights that are

recommended by CARET. It is our recommendation that the following programs be increased by the amounts noted.

—Base formula funds for research and extension, $50,000,000.00 increase
—National extension priorities (water quality, food safety, pesticide impact assessment program), $20,000,000.00 increase
—Native American and Hispanic serving institution funding, $9,000,000.00 increase
—1890 institution facilities improvements, $3,000,000.00 increase
—National research initiative, $30,000,000.00 increase
—Integrated research extension and education, $43,000,000.00 increase
—Extension and research initiatives—(RUPRI, farm safety, grazing lands), $13,000,000.00 increase
—International Science and Education Grant Program, $8,000,000.00 increase
—Investment in students, $15,000,000.00 increase

Additionally, the CARET recommendations include a number of cross-cutting issues for fiscal year 2001. The cross-cutting issues include investing in minority serving colleges, supporting partnerships to address national issues at the local level, investing in students, and globalizing Unites States universities.

Targeted issues for fiscal year 2001 include investing in farmers and ranchers, investing in food safety, investing in nutrition, investing in the environment, investing in renewable resources, investing in children, youth and families, and investing in new markets in quality communities.

The proposed increases in competitive grants will make the research and education system more responsive to emerging issues that are facing American agriculture in a rapidly changing and globalizing economic environment. The augmentation of the competitive grant program is essential to provide a mechanism which enables major research institutions to develop technology necessary to compete in this environment.

It is the belief of CARET that these proposed budget recommendations will help equip American agriculture for the 21st century. It will facilitate the maintenance of our competitive edge throughout the broad range of the production, processing, distribution and retail system that moves commodities around the world. Further, CARET believes that these recommendations will enhance the health and welfare of the American consuming public.

I have attached a copy of the NASULGC Board on Agriculture Budget Recommendations to this presentation. Thank you very much for the opportunity to present this testimony in support of appropriations for the Land Grant University System.

PREPARED STATEMENT OF DEFENDERS OF WILDLIFE

On behalf of our nearly 400,000 members and supporters nationwide, Defenders of Wildlife thanks you for the opportunity to submit testimony on the fiscal year 2001 Agriculture Appropriations bill. Defenders is a national, non-profit organization focused on conserving wildlife, their habitats and the ecosystems on which they depend. Consequently, we have a very special interest in the U.S. Department of Agriculture's natural resource protection programs. These programs include the Conservation Reserve Program (CRP), the Conservation Reserve Enhancement Program (CREP), the Wetland Reserve Program (WRP), the Environmental Quality Incentives Program (EQIP), the Wildlife Habitat Improvement Program (WHIP), and the Farmland Protection Program (FPP). We also are very interested in the newly proposed Conservation Security Program (CSP) and its potential beneficial impacts on wildlife habitat and ecosystem quality.

Although much remains to be done to improve the effectiveness and efficiency of existing USDA resource conservation programs, we would like to voice our strong support for the Administration's budget request of $125 million for the CRP, $65 million for the FPP, $50 million for the WHIP, and $325 million for the EQIP. We also support the enrollment of an additional 210,000 acres in the WRP program. We believe that the newly proposed CSP is an exciting opportunity to combine natural resource and farm income improvement objectives and that the program should receive the full level of the Administration's budget request of $600 million.

A major constraint to improving the effectiveness and efficiency of existing USDA conservation programs is the lack of adequate monitoring and evaluation of field level projects and their impacts on natural resource quality, especially native wildlife and their habitats. We believe that $5 million should be allocated to defining and implementing a pilot monitoring program(s) over the next two years to evaluate conservation program impacts toward achieving improved native wildlife habitat,

water and air quality, and soil health. Defining and implementing a pilot monitoring program(s) would be a cooperative effort involving the President's Council on Environmental Quality (CEQ), the USDA, the Environmental Protection Agency, the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the United States Geological Survey, with the CEQ serving as the lead agency. The experience from this pilot effort would be used to determine a longer term conservation program monitoring and evaluation program that would be implemented under new Farm Bill legislation in 2002.

Lastly, effective implementation of USDA conservation programs requires increased technical assistance at the field level. We therefore support the Administration's proposed budget increases for field-level technical assistance for the natural resource conservation programs that are implemented and administered by the Farm Services Agency and the Natural Resources Conservation Agency.

On behalf of Defenders of Wildlife, I thank you again for this opportunity to submit testimony.

PREPARED STATEMENT OF DEFENDERS OF WILDLIFE

On behalf of our nearly 400,000 members and supporters nationwide, Defenders of Wildlife thanks you for the opportunity to submit testimony on the fiscal year 2001 Agriculture Appropriations bill. Defenders is a national, non-profit organization focused on conserving wildlife, their habitat and the ecosystems on which they depend. Consequently, we have a very special interest in the U.S. Department of Agriculture's Wildlife Services (WS) program.

The WS program, formerly known as Animal Damage Control, was created in 1931 at a time when the U.S. sheep industry was at its zenith with 52 million head nationwide. Consequently, its primary function became protecting sheep from predators—primarily in the West. Since that time, the sheep industry—for a number of reasons—has experienced a nearly 70-year decline. Sheep production is now less than 15 percent of its 1930s level, with the total number of sheep today at just over 7 million. The 1999 lamb crop of 4.7 million was down 6 percent from 1998 to a new record low and the number of sheep producers as of January 2000 totaled 66,800, down from 3 percent from 1998 and 8 percent from 1997. Despite the serious decline in the number of sheep and sheep producers, a change in sheep population distribution and the emergence of other vertebrate pest threats to agriculture, WS continues to view the western sheep rancher as its primary "customer" and continues to allocate the bulk of its resources to livestock protection.

The WS operations budget appears as a single line item in the budget with seven main program categories to which federal funds can be allocated: livestock protection, human health and safety, forest/range, aquaculture, property, crops and natural resources. Figures 1 and 2 indicate how WS allocated its fiscal year 1998 direct federal appropriation by program category in each state. From this information it is clear that livestock protection receives a disproportionate share (46.3 percent) of the total operations budget while the 6 remaining program categories collectively share the remaining 54.7 percent. Of the amount spent on livestock protection, 95.1 percent was spent within the 17 western states.

By continuing to fund the livestock protection program at such disproportionate levels, WS ignores those with greater needs, such as non-western livestock producers. For example, Iowa ranks 10th in the nation for sheep production with 265,000 head, yet only received $2,625 in federal livestock protection money for fiscal year 1998, resulting in a cost per head of just one cent. A much different scenario exists in the West. Contrasted with Nevada, which has only one-third the number of sheep that Iowa does, this western state receives 7.1 percent of the direct federal dollars that WS dedicates to livestock protection, resulting in a per head cost of $7.57. And if we assume, as studies suggest, that on average only 10 percent of ranchers utilize WS, that means 35 ranchers in Nevada receive a government subsidy of over $20,000 per year.

A further example of how WS ignores the needs of others faced with animal damage conflicts is evident when one analyzes WS' human health and safety program. Although it often touts this to be a major program, in fiscal year 1997, WS allocated just $1.9 million of its direct federal appropriation to addressing human health and safety needs for all of the 50 states. The human health and safety program largely addresses the issue of bird-aircraft strikes at airports. According to a WS publication, the FAA estimates that birds and animals threaten human safety and cause $200 million in damage each year to aircraft in the U.S. Indirect costs, such as flight delays, aircraft changes, and loss of revenues add immeasurably to direct costs. Contrast these figures with the direct federal funds allocated to Idaho and

Montana for livestock protection: $906,103 and $824,681 respectively, for livestock damages that reportedly totaled just $2.5 million. Overall, in fiscal year 1997 (the last year for which WS collected information pertaining to the reported value of resources damaged) WS spent $9.8 million in response to the reported $7.7 million in livestock-related damages and spent just $9.5 million to address the more than $63 million in damages reported in the 6 other program categories.

Figures 1 and 2 also demonstrate how skewed the WS program is in terms of funding levels for eastern programs. Despite the fact that the 31 eastern United States contain 70 percent of the total U.S. population and that six of the top ten states in agricultural products sales, less than 27.5 percent of WS' direct federal appropriation is spent on programs in the East.

Another area where both WS and the Animal and Plant Animal Health Inspection Service have failed to address much more legitimate animal damage conflicts is in the control of invasive exotic species. Invasive exotic species are one of the gravest threats to American agriculture as well as to a variety of natural ecosystems. Based on data on agriculture, forestry and public health, it is estimated that invasive exotic species now cost the nation more than $122 billion per year (Pimentel et al 1999). About 42 percent of the species on the federal Threatened or Endangered Species List are considered at risk primarily because of competition and predation by exotic species and according to a 1998 study, the affect of exotics on imperiled species is second only to habitat destruction among major threats to biodiversity. Despite the magnitude of the threat that invasive species pose to agriculture, WS currently focuses solely on one invasive species, the brown tree snake and incredibly, last year when the Administration proposed a $1.8 million across the board reduction in WS' operations budget, WS proposed eliminating funding of this highly critical program in order to achieve the reduction. This is even more incredible considering that the Department of Defense funds the lion's share of the brown tree snake program.

One exotic species whose control is clearly within the domain of WS is the nutria, a rodent native to South American that was introduced in the United States in the late 19th century. An initial population of 20 nutria in Louisiana reached 20 million individuals within 25 years, and the rodent now has established populations in the coastal and freshwater marshlands of 15 other states. They have damaged 80,000 of Louisiana's three million acres of coastal marshlands, resulting in more than $2.2 billion per year in lost value. Yet despite the tremendous economic losses resulting from nutria damage, WS spends virtually nothing on controlling this highly destructive species and when recently asked to assist with a pilot project at Blackwater National Wildlife Refuge in Maryland aimed at eradicating nutria from the area, WS claimed that there were no funds in their budget available for such assistance.

Clearly, forceful congressional direction is needed to ensure that WS reassesses how it determines its program priorities in the future. In order to provide this direction, we urge the Subcommittee to limit funds for livestock protection to no more than $2.5 million, of which none can be spent on lethal control, and a redirection of funds toward programs that deal with the control of exotic species. Federal funds remaining for livestock protection would be sufficient to allow WS field personnel to provide technical assistance to ranchers with depredation problems.

The Subcommittee has received testimony submitted by Mr. James G. Butler, Chair of the National Wildlife Services Advisory Committee dated March 1, 2000. Although Mr. Butler's testimony was purportedly submitted on behalf of the advisory committee, it was neither reviewed nor approved by the advisory committee, on which a Defenders' employee resides. Thus, Mr. Butler's testimony speaks only for him, and Congress should be aware that not only was his testimony on behalf of the advisory committee ill-advised, but it also potentially violates federal law. As Mr. Butler is a sheep rancher residing within Texas, his views of the WS program are markedly different from those of Defenders and therefore should not be construed to represent Defenders' opinion. We will be pursuing this matter with WS administrators in the very near future.

Lastly, we would like to voice our strong support for the Administration's request for $125 million for the Conservation Reserve Program, $65 million for the Farmland Protection Program, $50 million for the Wildlife Habitat Incentives Program, $325 million for the Environmental Quality Incentives Program and $600 million for a new Conservation Security Program. We also support the enrollment of an additional 210,000 acres in the Wetlands Reserve Program.

On behalf of Defenders of Wildlife, I thank you again for this opportunity to submit testimony.

PREPARED STATEMENT OF EASTER SEALS

Easter Seals appreciates the opportunity to report on the notable accomplishments of the USDA Cooperative State Research, Education, and Extension Service (CSREES) AgrAbility Program and recommend that funding for the AgrAbility Program be increased to $4.6 million in fiscal year 2001.

The AgrAbility Program is an essential, unduplicated, hands-on resource for farmers, ranchers, and farmworkers with disabilities. It is the only USDA program dedicated exclusively to helping agricultural producers with disabilities. It demonstrates the value of public-private partnership by securing donations of funds, talent, and materials to magnify the impact of a modest federal investment. The fiscal year 2000 appropriation is $3,055,000 (minus a 15 percent decrease in funds as part of efforts to cut discretionary spending) which funds 18 state programs.

Disability & Agriculture

Agricultural production is one of the nation's most hazardous occupations. Each year, approximately 200,000 people working in agriculture experience injuries that limit their ability to perform essential farm tasks. Tens of thousands more become disabled as a result of non-farm injuries, illnesses, other health conditions, and the aging process. Nationwide, approximately 500,000 agricultural workers have physical disabilities that prevent them from performing one or more essential farm tasks.

For many of these individuals, the presence of a disability jeopardizes their rural and agricultural futures. Rural isolation, a tradition of self-reliance, and gaps in rural service delivery systems frequently prevent agricultural workers with disabilities from taking advantage of growing expertise in modifying farm operations, adapting equipment, promoting farmstead accessibility, and using assistive technologies to safely accommodate disability in agricultural and rural settings. Yet, with some assistance, the majority of disabled agricultural workers can continue to earn their livelihoods in agriculture and participate fully in rural community life.

AgrAbility's Role and Record of Success

Since 1991, thirty-one states have been served by AgrAbility projects. AgrAbility currently has:

—Provided direct on-farm assistance to more than 4,700 farmers, ranchers, and farmworkers with disabilities and their families.
—Provided information and advice to more than 10,000 persons with disabilities employed in agriculture and related occupations.
—Educated more than 160,000 agricultural, rehabilitation, and rural health professionals on safely accommodating disability in agriculture.
—Recruited and trained more than 3,500 volunteers to assist agricultural producers with disabilities and their families.
—Reached approximately 8.4 million people through 3,800 exhibits, displays, and demonstrations to increase awareness of the challenges affecting and resources available to people with disabilities who work in agriculture.

The AgrAbility Program was established under the 1990 Farm Bill in response to the needs of farmers with disabilities. The Farm Bill authorizes the Secretary of Agriculture to make grants to Extension Services for conducting collaborative education and assistance programs for farmers with disabilities through state demonstration projects and related national training, technical assistance, and information dissemination. Easter Seals is proud to be a partner with Purdue University's Breaking New Ground Program to provide the national training and technical assistance portion of AgrAbility. Thousands of people in states with and without state AgrAbility projects are aided through this initiative.

AgrAbility combines the know-how of Extension Service and national disability organizations to provide people with disabilities working in agriculture the specialized services that they need to safely accommodate their disabilities in everyday farm operations. AgrAbility received strong bipartisan support during the 1998 reauthorization of the USDA research and education programs, and was extended through fiscal year 2004. The $6 million authorization level for AgrAbility was continued.

Under the statute, state and multi-state AgrAbility projects engage Extension Service agents, disability experts, rural professionals, and volunteers in offering an array of services, including: identifying and referring farmers with disabilities; providing on-the-farm technical assistance for agricultural workers on adapting and using farm equipment, buildings, and tools; restructuring farm operations: providing agriculture-based education to prevent further injury and disability; and, upgrading the skills of Extension Service agents and other rural professionals to better promote success in agricultural production for people disabilities.

In 2000, USDA received an allocation from Congress of $3,055,000. To meet the fiscal 2000 budget agreement of reducing discretionary spending by .38 percent, the Department reduced the AgrAbility funding by 15 percent. These funds support eighteen state projects in Colorado, Delaware, Illinois, Indiana, Iowa, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Pennsylvania, South Dakota, Tennessee, Texas, Utah, and Wisconsin.

AgrAbility provides customized assistance to farmers, ranchers, and farmworkers with disabilities and their families. The nature and degree of assistance depends on the individual's disability needs and agricultural operation. For example:

—Ron Brown from Edgar, Wisconsin, sought help from AgrAbility because a 1981 injury that limited the use of his arm and arthritis in his knees was making it increasingly difficult to accomplish the chores on his 40 to 50 head dairy farm. AgrAbility staff worked with Ron and enlisted the help of the state Division of Vocational Rehabilitation to create solutions to allow Ron to stay active in farming. AgrAbility staff recommended new types of equipment to minimize the stress on Ron's knees and arm. A John Deere "Gator" utility vehicle allows Ron to get around the farm easily, helping him herd cows, fix fences and do other chores. Ron did some of the modification work himself. The added extra steps and handrails he added to his tractors allow him to get on and off more easily and safely. Ron says that the partnership has helped make farming "a little better, and easier to do." Ron now travels the state supporting other farmers with disabilities.

—Rodney Lane of Harrison Valley, Pennsylvania has operated a farm in the Harrison Valley since 1979. He has a dairy herd and over 500 acres of crops. He lost his left arm below the elbow and part of three fingers on his right hand in a corn picker accident. He uses a prosthesis on his left arm when tending his cows. AgrAbility for Pennsylvanians worked with Vocational Rehabilitation to acquire a mixed ration wagon that eliminates the need for multiple trips to and from the grain bin and reduces the need for heavy lifting. Rodney has this to say about his modification, "Assistive technology has made things easier so that I can farm more self-sufficiently."

—Darwin Hoffmeister of Ackley, Iowa, lost four fingers and the use of his left arm in a combine accident five years ago. Although plenty of offers to take over his soybean and livestock operation came in after his accident, Darwin wanted to continue in farming. AgrAbility worked with him to change the ladder on his combine, put guardrails on his grain bin and provide him with adapted tools such as a magnetic hammer that allows for one-handed operation. In his own words, "farming is all I've ever done, and I wanted to prove that I could still do it."

—Louis Jones of Biddle, Kentucky, worked for Clarklands Thouroughbreds, a breeding farm, mowing lawns, grooming horses, and performing maintenance. After a spinal cord injury, he contacted AgrAbility staff who helped him explore the possibilities of starting a lawn care business. With AgrAbility's assistance, Louis found the right equipment and funding to start his new company. AgrAbility staff worked with Louis to modify equipment so he can access and maintain all of it. The horse farm where Louis worked will become one of his new clients.

Impact of Current Funding Levels

In the 1990 Farm Bill, a funding floor of $150,000 per state was set to assure that the state programs were successfully implemented. However, because funding has not approached the $6 million authorized level, state projects have been funded at only $85,000 per state. In the 1998 reauthorization of the USDA research and education programs, the Committee reaffirmed a commitment to that $150,000 per state floor. Easter Seals strongly supports full funding of state programs to assure that they continue to be effective for farmers with disabilities. Without a concurrent increase in appropriations, fully funding state projects at $150,000 per state would result in a loss of almost half of the existing AgrAbility projects. The fiscal 2001 request of $4.6 million would bring all current states up to the $150,000 level and would allow eight currently unserved states to implement AgrAbility programs.

AgrAbility projects are underfunded relative to need and objective. At $85,000 per state, only a few staff can be hired to provide state-wide education and assistance to farmers with disabilities, educate rural professionals, recruit volunteers, and work with rural businesses on disability-related issues. Rising demand for services and the great distances that must be traveled to reach farmers and ranchers severely strains even the most dedicated of AgrAbility's outstanding staff. The 15 percent rescission for fiscal 2000 has added to the stress faced by staff. State AgrAbility projects were asked to develop work plans for 2000 based on the original appropria-

tion of $3,055,000, only to be asked to revise and resubmit them to accommodate the 15 percent rescission. Easter Seals fears that failure to invest adequately in this worthwhile program will ultimately cause it to falter.

One of the consequences of limited funding is that in every grant cycle, some states that have existing AgrAbility programs, and can demonstrate a legitimate need for services, are not renewed and forced to discontinue services to farmers with disabilities in that state and often have difficulty getting the access to the limited state and private funding sources that the federal seed money granted them. More than a dozen states have sought AgrAbility funding without success. Other states, including Louisiana, Michigan, New Hampshire, South Carolina, and Vermont, had USDA-funded AgrAbility projects in the past and seek to re-establish their programs. Each of these states can demonstrate significant unmet needs among farm and ranch families affected by disability that AgrAbility could potentially address. In the 1998–1999 grant cycle, projects in Ohio, New York, Idaho/Montana, and New Jersey ceased to receive federal support. The need for the program in these once-funded states is exemplified by the fact that last year the technical assistance telephone line operated by AgrAbility staff at Breaking New Ground Resource Center at Purdue University logged hundreds of calls for assistance from these nine states alone. Any loss of programs will greatly affect farmers with disabilities in states for whom AgrAbility is the primary resource through which they seek information and assistance.

The need for AgrAbility services has never been greater, and its accomplishments to date are remarkable by any standard. Easter Seals is proud to contribute to the ongoing success of the USDA–CSREES AgrAbility Program. Please support the allocation of at least $4.6 million for AgrAbility in fiscal year 2001 to ensure that this valuable public-private partnership continues to serve rural Americans with disabilities and their families. Thank you for considering Easter Seals' views and recommendations.

PREPARED STATEMENT OF THE FDA–NIH COUNCIL

INTRODUCTION

The FDA–NIH Council appreciates the opportunity to submit testimony concerning the importance of a sustainable funding base for the Food and Drug Administration (FDA). This year President Clinton has proposed an impressive 13 percent increase for the Agency. The Council members are grateful for the Committee's support of the FDA and consideration of the Administration's proposal.

The FDA–NIH Council is a coalition of patient advocacy organizations, academic scientists, health professionals, and research-based industry organizations. These partners in the process of medical discovery and innovation have come together as a result of the shared concern about the complex challenges faced by the FDA in carrying out its regulatory responsibilities. The Council members recognize that new advances in research, innovations in technology, and additional resources for research make demands on the FDA that must be addressed.

There is no question that we are on the threshold of medical breakthroughs that were unthinkable just five years ago. We have built a successful discovery process in government, academia, and industry, attracted some of the best scientific minds, and initiated ground-breaking programs that have already yielded critical knowledge, and improved patient care and quality of life. The unprecedented increases at the National Institutes of Health (NIH) have lead to significantly increased activity at the FDA relative to increased product development and clinical trials. Without the resources and necessary funding to support scientific expertise, we limit our ability to rapidly and cost-effectively translate that research and development into commercial products for health professionals and consumers. The FDA must be in a position to respond to the tremendous advances occurring in the public and private sectors.

Over the past five to eights years the FDA's appropriations have increased at a steady and minimal rate. However, trends in a wide variety of external factors have generated workloads and public expectations that are poorly matched with the FDA's capacity to respond in a timely and adequate manner. The Agency's growing responsibilities include Biotech alliances, direct-to-consumer prescription drug advertisement, new drug and biotech patents, food imports to the United States, transgenic crops, and Internet pharmacies, not to mention dietary supplements and generic drug approvals.

While an increasing proportion of the FDA's workforce is new product review staff, funded by user fees under the Prescription Drug User Fee Act (PDUFA), the

number of non-user fee funded full-time equivalent (FTE) positions has declined by more than 800 over the last eight years, which impacts on the Agency's ability to inspect, monitor, and address responsibilities outside PDUFA. In addition, FDA's statute specifies very precise time frames or frequencies for many review and inspection functions. Because most of these activities are very labor intensive, and grow over time, the FDA's ability to accomplish this work is often less than required by the statute.

The FDA–NIH Council supports the FDA's request which focuses on Assuring Safety through Strengthened Science. In the past twenty years, expenditures in drug research have increased seven-fold; the drug discovery process is being driven by major breakthroughs in both biotechnology and information technology; medical device technology has shifted from x-rays and CAT scans to also include robotics, miniaturization, and bio-materials; trade and the standards that guide it have become increasingly globalized; and consumers' purchasing cues have shifted from traditional print and electronic media to the Internet. An increase in the Agency's budget is necessary to bring the FDA into the 21st century with a strong, focused emphasis on managing risk, developing science within the Agency, and pursuing leveraging opportunities with industry and academia.

As a Coalition, we support the accomplishments of the FDA:

Prescription Drug User Fee Act (PDUFA).—In the premarket arena, as a result of PDUFA and the cooperation of the FDA and industry, drugs are now being reviewed expeditiously, allowing consumers to benefit from new and innovative safe and effective medical products on the market more rapidly. The FDA is currently on track to meet or exceed all performance commitments associated with PDUFA for fiscal year 2000.

Streamlining Premarket Activities.—The FDA has completed several reinvention efforts to streamline the premarket review process to accelerate review times for important new medical devices and animal drugs. These efforts have relied on the collaboration with health professionals and industry to assure public health and safety before and after market entry.

FDA Modernization Act (FDAMA).—The Agency has successfully been implementing FDAMA. The FDAMA Statutory Compliance Plan provides a strategic blueprint for the FDA's future direction, and identifies the gap between the Agency's current capacity, and the goals of statutory requirements and public expectations. Working in collaboration with the FDA, stakeholders have articulated the need to strengthen the science and analytical base of the Agency, and the need for improved communications, including maximizing the availability and clarity of information for consumers about new products and for industry about review processes.

The FDA–NIH Council strongly believes that the following items are essential for fiscal year 2001:

The FDA–NIH Council urges the Committee to do all that is possible to ensure that the FDA is provided the resources to carry out its mandates.—We recommend that the Committee support the Administration's request for $1,391 million, and increase of $176 million over the fiscal year 2000 enacted level. Program authority at this level would include the collection of authorized user fees for prescription drugs ($149 million) and mammogram quality screening ($15 million). The Council, and stakeholders in the research and innovation process—patients, health providers, researchers, and industry—agree how successful the user fee program has been in expediting the progress of research to consumer product.

The FDA–NIH Council recommends the FDA maintain a strong science base that keeps pace with accelerating technology.—With an explosion of new technologies, it is imperative the FDA maintain a level of expertise and remain current in science to fully understand the risks associated with new products. New mandates and appropriate prohibitions against resource shifting have eroded the funding for the Centers and base programs supported by the FDA. The Administration has proposed new initiatives and mandates without providing the full funding necessary to maintain the integrity of existing programs in the Agency, which has the potential to weaken the FDA.

The FDA–NIH Council strongly opposes the unauthorized user fees proposed by the Administration, as we have consistently in the past.—User fees should be used to speed and enhance the quality of the review by the FDA. We oppose the collection of unauthorized user fees for deficit reduction. Any user fee program should be authorized prior to implementation. The Council believes that the initiatives proposed by the Administration should undergo the same Congressional consideration that was provided to the Prescription Drug User Fee program.

The FDA–NIH Council understands the inherent difficulties in terms of weighing the available resources and supporting numerous worthy federal programs in light of the severe budget constraints which presently exist. However, we strongly believe

the functions of the FDA are too vital to the health and welfare of our citizens and urge your support for a strong increased appropriation to the Agency.

The FDA–NIH Council thanks the Committee for the opportunity to submit testimony. We appreciate the support of this Committee.

The members of the FDA–NIH Council are: the A–T's Children Project; Candlelighters Childhood Cancer Foundation; Allergy and Asthma Network—Mothers of Asthmatics, Inc.; Alliance for Aging Research; Schering-Plough Corporation; Albert B. Sabin Vaccine Foundation; Merck & Co., Inc; Pfizer, Inc.; American Veterinary Medical Association; Joint Council of Allergy, Asthma and Immunology; American Society of Tropical Medicine and Hygiene; American Academy of Pediatrics; National Multiple Sclerosis Society; Glaxo Wellcome, Inc.; Cystic Fibrosis Foundation; Bristol-Myers Squibb Company; Society of Toxicology; Research Society on Alcoholism; Theracom; Parkinson's Action Network; Academic Contract Research Organization; American Academy of Allergy, Asthma and Immunology; Bermuda Biological Station for Research; and the Cancer Research Foundation of America.

PREPARED STATEMENT OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

Mr. Chairman, Mr. Kohl, Members of the Subcommittee: The Federation of American Societies for Experimental Biology, FASEB, is the largest organization of life scientists in the United States. Founded in 1912, FASEB is comprised of 20 societies with a combined membership of more than 60,000 scientists, including investigators involved in a broad spectrum of agricultural research. Our member scientists hold positions at nearly every land grant and private institution engaged in nutrition-related research in the United States. Many more are pursuing agricultural questions through industrial and biotechnology activities. Their research projects span human and animal nutrition, plant science, animal physiology and reproduction.

Each year, FASEB brings together representatives of our member societies to review the life science research programs at various federal agencies. After considerable deliberation and debate, these scientists produce funding recommendations for each agency examined. This year's proposals are contained in a report released for this budget cycle.[1] It is on behalf of FASEB scientists that testimony to this subcommittee is submitted.

University research supported by the U.S. Department of Agriculture (USDA) throughout the country is critical to achieving the agricultural advances required to feed the world, reduce environmental pollution, provide safe foods, improve nutrition and enhance the competitive position of U.S. agriculture in the global marketplace. The USDA supports basic and applied research through its Research, Education and Extension (REE) budget and through its intramural research arm, the Agricultural Research Service. Half of the total REE budget supports the Cooperative State Research, Education and Extension Service (CSREES), which allocates resources for national and regional priorities through a variety of funding mechanisms. By providing a structure for USDA-university partnerships, CSREES sustains the university-based research and education system that is intrinsic to our agricultural success. Much of this support is disbursed through competitive grants programs, ensuring that funds are invested in the highest quality research projects.

The dramatic rise in the U.S. and world population will significantly increase the demand for food; greater investment in agricultural research today is essential to meeting this need in the future. USDA therefore must be involved in research aimed at creating environmentally sustainable development, rural medical delivery systems and improved technology for food processing, contributing to more effective and cost-efficient health care.[2] Several programs within USDA warrant increased support, in order to capitalize on their ability to address these challenges.

National Research Initiative Competitive Grants Program (NRICGP)

The National Research Initiative Competitive Grants Program (NRICGP) provides important scientific underpinnings to meet the pressing need for a safe and nutritious food supply. This competitive and highly productive merit-reviewed research program supports projects that lead to improved understanding as well as direct applications to enhance agricultural productivity, environmental quality and optimal human nutrition and food safety. Its vitality is crucial to the future of U.S. agriculture.

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[1] Federation of American Societies for Experimental Biology. 2000. Federal Funding for Biomedical and Related Life Science Research fiscal year 2001. http://www.faseb.org.

[2] Coalition on Funding Agricultural Research Missions. 1999. Invest Now for a New Century Bethesda, MD: Co-FARM.

Recent NRICGP-sponsored advances include:

—Improved understanding of the biochemical and genetic basis for plant resistance to cold, drought and salinity, providing the potential for the development of improved varieties of agricultural crops.

—Improved understanding of virulence mechanisms of plant pathogens.

—Enhanced understanding of the mechanism of bovine fertilization and early hormonal interactions between mother and fetus will lead to improved reproduction of livestock.

—Further understanding of the role of soybean lectin gene in plant development, which has direct applications to insect resistance and human nutrition.

—Improved understanding of the genetic regulation of oil production in plant seeds, which has direct application to the production of oils with improved industrial functionality as well as for production of oils with improved nutritional quality for human and animal consumption.

—Improved methods for detection of naturally occurring seafood toxins.

—New strategies for elimination of Salmonella from chickens.

—New insight into the role of dietary fat in regulating metabolism.

—New techniques using nonradioactive tracers to assess nutrient requirements based on rates of metabolic processes.

—Improved understanding of the metabolic basis for nutritional requirements at critical stages of development including pregnancy and infancy.

—The above examples represent only a subset of the NRICGP research portfolio. One of the strengths of this program is its breadth and consequent ability to maximize research contributions across areas of agricultural need.

However, despite the potential for further advancement, the USDA research budget has actually decreased in constant dollars by nine percent in the last five years. In 1998, for example, only 25 percent of the qualified grant proposals were funded. As a result, high-quality projects were turned down, discouraging the nation's best scientists with the most meritorious ideas from competing for USDA funding. And, even at this modest funding level, the awarded budgets were reduced by an average of 30 percent. Consequently, the research capacity of the NRICGP program is underutilized and an effective competitive grants program is impeded. In accordance with this position, it is important to note that the number of applications received in fiscal year 1999 increased by 157 over fiscal year 1998 following an increased appropriation to the program's budget.[3]

Inadequate support limits both the number and the productivity of researchers that the NRICGP is able to fund. NRICGP awards are small, averaging about $60,000 per year, and have a short duration, averaging 2.3 years. Researchers must therefore limit the scope of their work or spend valuable time writing additional grant proposals. Moreover, a congressionally mandated cap on indirect (facilities and administrative) costs for NRICGP grants deters many capable investigators from even seeking NRI grants. The 19 percent cap on these costs does not cover the real expenses associated with the research. These factors have led to more than a 20 percent reduction in proposals submitted since 1994.[4]

In addition to relieving the administrative constraints on NRICGP-sponsored research, support for areas of great opportunity should be augmented, including animal, plant and microbial genomes; improving human nutrition for optimal health; food safety; plant biochemistry; decreasing the environmental impact of animal pollutants; integrated agricultural systems; and infrastructure building. Funds now available for these areas of critical research are insufficient to allow them to reach their full potential.

Therefore, FASEB recommends:

—an appropriation of $203 million in fiscal year 2001 for base funding of NRICGP. This would represent a first step toward the goal of attaining the originally authorized $500 million for a program that has been chronically under-funded since its inception. This increase should not come at the expense of other CSREES programs.

—efforts be made within NRI to fund grants at the lengths and amounts recommended by peer-review panels. FASEB further urges Congress to increase the 19 percent cap on indirect (facilities and administrative) costs for NRI grants.

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[3] U.S. Department of Agriculture. National Research Initiative Competitive Grants Program Annual Reports, fiscal year 1994 through fiscal year 1999 and personal communication, Sally Rockey, Deputy Administrator, Competitive Research Grants and Awards Management, Cooperative State Research, Education and Extension Service.

[4] Ibid.

—maintaining the NRI process for enhancing the funding of new investigators and encourages the NRI to expand the number of these awards.
—continuing the policy of using funds from the NRI program to support young investigators for the President's Early Career Award for Scientists and Engineers.
—USDA and NRI continue their successful collaboration with other federal agencies on issues such as the Plant Genome Project and the Food Safety Institute.

Finally, FASEB applauds Congress for implementing increased accountability of formula-funded research programs and for directing 25 percent of funding into multi-disciplinary research and 25 percent into multi-state projects.

Initiative for Future Agriculture and Food Systems

A second issue that FASEB recommends Congress pursue is the expenditure of funds for the Initiative for Future Agriculture and Food Systems (henceforth referred to as 'the Initiative'). Two years ago, Congress authorized the Initiative to fund competitively awarded research grants to support large, multi-disciplinary, multi-center programs beyond the scope of the NRI. The program includes merit review and priority-setting provisions involving the relevant stakeholder groups.

Within the Initiative, FASEB recommends the creation of a new agricultural genomics program. The power and long-term impact of a large-scale genome initiative directed toward agriculturally important organisms represents a major opportunity and fulfills an important need in agriculture. The most efficient means to establish these new genomic databases is to integrate bioinformatics with large-scale sequencing efforts through the comparative mapping of genes in related organisms. NRICGP is well positioned to then support the resulting database research and to address problems presented in agriculturally significant organisms. FASEB further recommends that this program be coordinated with other USDA activities and with those at NSF, DOE, NIH and the private sector.

Similarly, FASEB recommends the initiation of an agricultural biotechnology/risk assessment program, within the Initiative, as food technology and nutrition and agricultural biotechnology are priority mission areas. USDA is the logical agency to provide leadership and research support for risk assessment to both consumers and the environment relative to genetically modified food products. Areas of emphasis should include identifying protective components of foods that reduce the risk of chronic diseases, investigating how individuals of varying genetic backgrounds respond to different intakes of those food components, bio-engineering of foods to provide increased amounts of nutrients or other components that are important to health and testing the effectiveness and safety of those modifications in animals and humans. Additionally, links between various food components and diseases such as cancer continue to be uncovered, including over 600 plant-derived chemicals with chemopreventive properties, such as antioxidants. Ultimately, as there are many basic questions left unanswered on the role of diet in health and disease, we will want to know what compositional changes in plants and animals provide the best nutritional value.

—FASEB endorses the Initiative for Future Agriculture and Food Systems and recommends full funding of $120 million in fiscal year 2001.

Higher Education

Encouraging and educating the next generation of agricultural scientists is a fundamental prerequisite to sustaining our capability and success in agricultural research. The National Needs Graduate Fellowship Grants Program (NNFG) contributes to the training of outstanding researchers who can interact effectively with agricultural producers and consumers. Despite its importance, funding for the NNFG declined from $5 million in fiscal year 1996 to $3 million in fiscal year 1997 where it has remained.

—FASEB recommends that funding for the National Needs Fellowship Grants be restored to its previous level of $5 million in fiscal year 2001.

In addition to the NNFG, the USDA supports innovation in teaching methods and materials through the Institution Challenge Grants program. The critical need to recruit and train the next generation of agriculture researchers necessitates that these two programs be supported at levels sufficient for them to accomplish their goals effectively.

—FASEB recommends that the Institution Challenge Grants be maintained at $4.35 million in fiscal year 2001.

Use of Animals in Research

Research using animals has been crucial to most of the major medical advances of the past century. Reasonable guidelines concerning how animals are used in research provide safeguards and ensure public confidence. USDA's Animal and Plant

Health Inspection Service (APHIS) is charged by Congress with enforcing provisions of the Animal Welfare Act, and FASEB commends the USDA for its diligent enforcement efforts.

—FASEB recommends that Congress provide the Animal and Plant Health Inspection Service with continued support for Animal Welfare Act enforcement in fiscal year 2001.

In conclusion, agricultural research is crucial to sustaining the productivity of our farmers and livestock breeders, as well as to maintaining consumer confidence in the safety and nutritional value of American foods. As agricultural scientists address the challenges and opportunities in this new century, it is important that USDA programs have the resource capacity to support their progress. The growth and enhancement of the National Research Initiative Competitive Grants Program, the Initiative for Future Agriculture and Food Systems and increased support for the training of the next generation of agricultural scientists is therefore fundamental to ensuring that we are able to provide for our future needs.

PREPARED STATEMENT OF FLORIDA STATE UNIVERSITY

Mr. Chairman, I would like to thank you and the Members of the Subcommittee for this opportunity to present testimony before this Committee. I would like to take a moment to briefly acquaint you with Florida State University.

Florida State University is a comprehensive Research I university with a liberal arts base. The University's primary role is to serve as a center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate programs. Faculty at FSU have been selected for their commitment to excellence in teaching, for their abilities to perform research and creative activities, and for their commitment to public service. Among the faculty are numerous recipients of national and international honors, including four Nobel laureates and eight members of the National Academy of Sciences. Our scientists and engineers do excellent research, and often they work closely with industry to commercialize the results of their research. Florida State ranks third this year among all U.S. universities in revenues generated from its patents and licenses, trailing only Columbia University and the entire University of California system. Having been designated as a Carnegie Research I University several years ago, Florida State University currently exceeds $100 million per year in research expenditures. With no agricultural or medical school, few institutions can match our success.

Florida State attracts students from every county in Florida, every state in the nation, and more than 100 foreign countries. The University is committed to high admission standards that ensure quality in its student body, which currently includes some 192 National Merit and National Achievement scholars, as well as students with superior creative talent. We consistently rank in the top 25 among U.S. colleges and universities in attracting National Merit Scholars.

At Florida State University, we are very proud of our successes as well as our emerging reputation as one of the nation's top public universities.

Mr. Chairman, let me tell you about a project we are pursuing this year involving the development of sustainable marine aquaculture systems and sustainable marine aquaculture opportunities through distance learning.

The opportunity for the U.S. marine aquaculture industry to meet the increasing demand for seafood has never been greater than it is today. The majority of the world's marine aquaculture production takes place in coastal ponds or sea cages. In the U.S., aquaculture industry development has been inhibited by the high cost and limited availability of coastal lands, high production costs, restricted growing season and governmental regulations. In order for U.S. marine aquaculture production to expand and develop, innovative approaches to address the constraints being faced by the emerging aquaculture industry must be found.

Florida State University (FSU) and Harbor Branch Oceanographic Institution (HBOI) have formed a collaboration to design and develop improved energy and filtration treatment technologies for marine aquaculture. Expanding marine aquaculture opportunities to inland sites using species that can be adapted to freshwater, designing low-cost filtration systems for high density production, and designing low-cost energy efficient recirculating systems will provide solutions to several of the production and regulatory constraints faced by U.S. producers. If progress is made in these areas, there will be an increased opportunity for marine aquaculture to develop and expand.

There is an increasing global awareness of the need for sustainable marine aquaculture development. By the year 2025, global population is projected to be nearly 8.5 billion people, with a projected demand for seafood of 120 million metric tons

(MMT). Seafood fisheries reached carrying capacity more than ten years ago with a capture of 60 MMT, but demand for seafood has shown no signs of abating. The United Nations Food and Agriculture Organization (FAO) reported that by 1995, marine aquaculture accounted for only 26 percent of the total world harvest of food fish. In 1997, U.S. seafood imports increased both in volume and value, with shrimp topping the list at 278,600 metric tons valued at $2.7 billion. Shrimp imports continue to be the second largest contributor to the U.S. trade deficit, and it is expected that finfish imports will follow the same scenario. There remains a great need for U.S. marine aquaculture production to fill this void and relieve some of the harvest pressure on natural stocks.

Competition for access to the now limited U.S. coastal land resources requires innovative approaches to develop and expand marine aquaculture into new environments. HBOI has work underway that suggests many saltwater species thrive in freshwater systems with the appropriate chemical makeup. Another issue is environmental protection of coastal waters and biosecurity to protect both wild and farmed aquatic resources from disease and exotic introductions, which necessitates the development of cost effective recirculating production systems. In many locations around the U.S., regulatory constraints already require the use of recirculating marine aquaculture systems. HBOI has designed an intensive recirculating, production system to culture marine finfish species in fresh or brackish water. The first component of this effort will involve the teaming of FSU's Department of Oceanography, the FSU/FAMU College of Engineering and HBOI to conduct parallel experiments to determine the optimal production parameters using hard freshwater in Florida. FSU's research on solar technologies will be utilized to design low-cost energy efficient recirculating systems for this effort as well. All of this work will expand U.S. marine aquaculture production of saltwater species into new locales, result in better utilization of land resources and reduce the demand for imported aquaculture products.

The second component of this collaborative effort will involve a continuation of the program initiated in fiscal year 2000 to facilitate cooperative research, education and public outreach programs focused on marine aquaculture. Educational materials are being developed for an outreach training program in the field of marine aquaculture through the use of distance learning technologies with funding provided in fiscal year 2000. We are requesting continued funding to develop aquaculture education and training programs and expand the program to reach new rural communities throughout Florida.

A number of other marine aquaculture business opportunities exist for rural communities throughout Florida, but their implementation requires that the training and technical support be provided in the home community. Through a combination of distance learning technology and satellite education and support hubs, we will provide marine aquaculture training, technical support and appropriate economic information to rural communities throughout Florida. As materials are being developed in the project, FSU and HBOI will work together with the local community colleges, economic development officials and extension specialists to develop a comprehensive dissemination network for this information.

The two collaborating institutions are seeking an appropriation of $1.97 million in fiscal year 2001 to support the development of sustainable marine aquaculture systems. This effort includes a request of $1.5 million from the USDA Agricultural Research Service to initiate the research component of this project, and the balance of $470,000 to continue the distance education and training program from the USDA Cooperative State Research, Education and Extension Service.

Mr. Chairman, this is just one of many exciting activities going on at Florida State University that will make important contributions toward solving problems our nation faces today. Your support would be appreciated, and, again, thank you for the opportunity to present these views for your consideration.

PREPARED STATEMENT OF THE FRIENDS OF AGRICULTURAL RESEARCH-BELTSVILLE, INC.

Mr. Chairman, and Members of the Subcommittee, thank you for this opportunity to present our statement supporting the Administration's funding request for the Department of Agriculture's Agricultural Research Service (ARS), and especially for the Agency's flagship research facility in Maryland, the Beltsville Agricultural Research Center (BARC). Our organization—the Friends of Agricultural Research-Beltsville—is dedicated to supporting and promoting the Center's agricultural research, outreach, and educational missions.

Mr. Chairman, public investments in agricultural research yield astonishing returns to American taxpayers. As the 20th Century dawned, an American farm produced only enough food for its residents and a handful of others. Yet a new USDA report, without factoring in our huge agricultural exports, notes that today American farms with $10,000-plus in sales each produce enough food annually for 258 Americans. This astonishing success story traces directly to public research and outreach programs such as those of the Beltsville Agricultural Research Center, the world's most comprehensive agricultural research facility.

Highly regarded economists W.E. Huffman and R.E. Evenson have estimated the annual return on agricultural research to be between 135 and 170 per cent. Virginia Tech's George W. Norton puts the return on research in a long-term perspective. He notes that research may take several years to produce economic returns, but then it pays-off for a long, long time. Over a 15 to 20 year period, he estimates roughly a $5 return for each research dollar spent.

Mr. Chairman, we would like to focus the remainder of our statement on three vitally important areas. All urgently need support. Without indicating priority order, we will discuss: Invasive Species; the Human Nutrition Research Initiative; and Modernization of the Beltsville Human Nutrition Research Center, Phase Two.

Invasive Species.—Invasive weeds—such as purple loosestrife, leafy spruge, Canada thistle, salt cedar, water hyacinth, and malaleuca—infest over 100 million acres in the United States at an estimated annual cost of $36 billion in reduced crops, $2 billion in reduced range yields, and $100 million in aquatic weed control. Infested acreage is growing by 8 to 20 percent annually. Approximately half of our endangered and threatened plants are at risk to invasive species.

Invasive arthropods—insects such as whiteflies and the Russian wheat aphid—destroy $14 billion worth of crops annually. The losses of mature hardwood and landscape trees to the Asian Longhorn Beetle are incalculable. Livestock and poultry producers must also contend with the threat of invasive arthropods. Records of introduced species that have plagued U.S. livestock include the stable fly, face fly, horn fly, sheep bot fly, northern cattle grub, common cattle grub, and sheep ked. An enormous number of nonindigenous insects, ticks, and mites that affect animals present the potential for becoming introduced and established in the United States. Losses to lawn and garden pests annually cost Americans another $1.5 billion.

Beltsville scientists have pioneered applied and fundamental research in the detection and identification of invasive plants, insects, and pathogens as well chemical and biological control. The fiscal year 2001 budget proposes increased funding for invasive species research. We applaud this, for much basic and applied work remains to be done. Beltsville research in this vital area is underfunded, and at risk to losing its critical mass of highly qualified scientific expertise.

Human Nutrition Research Initiative.—Beltsville maintains several work areas that are fundamental to the mission of the Agricultural Research Service, indeed to the Department of Agriculture. They are, in a word, mission-critical. Yet, they are underfunded.

One area is the National Nutrient Database. This database contains vital information on the vitamin, mineral, and other nutrient content of U.S. foods. It is the foundation for food consumption tables used throughout the world. Closer to home, it supports the food consumption survey as well as the evaluation of such programs as Women, Infants, and Children (WIC) and school lunches. Moreover, it is the basis for most of the food-labeling content done by industry. Over time, the database has become outdated, failing to keep up with food processing changes, new foods, even new cuts of meat. Adequate funding is needed both to bring the database up-to-date and to maintain it. The closely related Continuing Survey of Food Intakes by Individuals needs support to improve its methodology and validation techniques.

Another area is the Food Composition Laboratory. This unit develops new analytical methods to measure food nutrient content—methods that are used widely by industry. These data go into the National Nutrient Database. We need better methods for measuring phytonutrients—a large complex group of food compounds, such as antioxidants and others—that have beneficial health effects. These complex compounds are hard to measure, and we urgently need to perfect simple, rapid, and accurate methods for accomplishing this.

A third area is Beltsville's exciting new research emphasis on Nutrition and Immunity—the relationship between nutritional status and disease immunity. A Beltsville scientist has shown that a person's nutritional status can affect whether a virus causes disease in that person. Beltsville also needs support to investigate mucosal (lining of the digestive tract) immunity. Beltsville plans to create and operate the only nationwide research program relating human nutrition to mucosal immunity.

Modernization of the Beltsville Human Nutrition Research Center.—We could hardly over-emphasize the importance of funding for the second phase for modernizing the Beltsville Human Nutrition Research Center. Congress appropriated Phase One funds in the fiscal year 2000 budget. Planning is on schedule to begin construction, and if everything goes as intended, there will be a groundbreaking in the fall. We need to keep momentum for this vital work going forward. Thus, Mr. Chairman, we strongly recommend approval of Phase Two funding as proposed in the Administration's budget.

Mr. Chairman, that concludes our statement. We again thank you and Members of the Subcommittee for your support and for the opportunity to present our testimony.

PREPARED STATEMENT OF FRIENDS OF THE NATIONAL ARBORETUM

Chairman Cochran and members of the Subcommittee, thank you for the opportunity to submit testimony in support of the U.S. National Arboretum on behalf of Friends of U.S. National Arboretum (FONA).

The President's budget contains a request for an increase of $3,330,000 for the U.S. National Arboretum consisting of $2.8 million to automate and replace lateral irrigation lines and $530,000 for modernization of the existing heating, ventilating and air conditioning (HVAC) system in the current administration building. These are necessary core maintenance and improvement items, vital to the Arboretum and its 446 acres of plantings. The request is certainly supported by FONA.

These necessary maintenance items do not, however, address the need to advance the statutory educational function of the Arboretum and make it more visitor friendly through implementation of the new Master Plan, nor do they address the increased staffing needs of the Arboretum as hundreds of new visitors each year discover the wonders of this national treasure.

For fiscal year 2001, FONA respectfully requests $110,000 for planning and design of the new Education and Visitors Center at the U.S. National Arboretum and $3,000,000 for planning, design and construction of a new entrance off Bladensburg Road and the attendant widening and storm water control for existing roads at the National Arboretum. Both of these requests are consistent with the new Master Plan for the U.S. National Arboretum and compatible with funding requests by the U.S. National Arboretum.

Thanks to your Committee, and after some years of preparation, the schematic for the new Master Plan is now complete and the U.S. National Arboretum is poised to move into the twenty-first century and enhance its mission of horticultural education mandated by Congress.

The new Master Plan proposes, among other things, a new entrance to the National Arboretum off Bladensburg Road. The District of Columbia is currently preparing to rehabilitate Bladensburg Road with funds provided by Congress in TEA–21 and it is critical that the new entrance from Bladensburg Road into the Arboretum be coordinated with this project. The Department of Public Works of the District of Columbia has been very cooperative, and the $3 Million requested coupled with the $500,000 provided in fiscal year 2000 for engineering and design, would provide the funds the Arboretum estimates as necessary. Creation of the new entrance will also require widening of existing roads and provision for storm water management.

The $110,000 request is for initial planning for the new Education and Visitors Center which is key to the core area of the Master Plan. This enhanced core area is the central feature making the U.S. National Arboretum a more attractive facility for visitors and enhancing its potential for horticultural education. Significant private funds are available to initiate a flowering tree walk which would tie together the various collections in the core area. The new Education and Visitors Center also presents other significant opportunities for private funding.

The foregoing requests for funds are also consistent with requests made by Representatives Bereuter, Goss, Petri, Dooley and Frelinghuysen to Secretary Glickman for fiscal year 2001 funding. We urge you to include this funding for fiscal year 2001 to enhance the U.S. National Arboretum's singular role as a source of horticultural education and as a national showcase for advances in horticulture.

FONA realizes that an enhanced U.S. National Arboretum envisioned by the Master Plan will require additional staff support. Already the Arboretum is attracting new visitors every year, placing a strain on the limited staff in place; there are now close to 7000 visitors for every one staff person. FONA is prepared to support additional staffing requested by the Arboretum and the Department of Agriculture to meet increased usage and visitation.

In an era when horticulture is the fastest growing segment of the agricultural industry, and public interest in horticulture and gardening is at an all time high, making the U.S. National Arboretum a renowned attraction for horticultural education—a "horticultural Smithsonian"—is well worth the effort and the investment.

Thank you for your continued support of the national treasure that is our U.S. National Arboretum.

PREPARED JOINT STATEMENT OF THE GENERIC PHARMACEUTICAL INDUSTRY ASSOCIATION, NATIONAL ASSOCIATION OF PHARMACEUTICAL MANUFACTURERS, AND NATIONAL PHARMACEUTICAL ALLIANCE

Mr. Chairman and Members of the Subcommittee, the Generic Pharmaceutical Industry Association (GPIA), National Association of Pharmaceutical Manufacturers (NAPM), and National Pharmaceutical Alliance (NPA) are pleased to have the opportunity to present these joint comments on the fiscal year 2001 budget request for the Food and Drug Administration (FDA). As part of a coalition of FDA-regulated industries, we support the Administration's requested 13 percent increase in funding for fiscal year 2001. A letter expressing the coalition's support, which was sent recently to this Subcommittee, is attached to our testimony.

As we begin the new millennium, it is imperative that this Subcommittee ensure that American consumers have continued access to safe, effective, and affordable pharmaceutical products. Promoting the availability of cost-effective drugs is the top priority for our members. GPIA, NAPM, and NPA are the three national trade associations representing manufacturers and distributors of finished multi-source generic pharmaceuticals, manufacturers and distributors of bulk active pharmaceutical chemicals, and suppliers of other goods and services to the generic drug industry. The associations' combined membership encompasses virtually the entire U.S. generic pharmaceutical industry.

GENERIC DRUGS CONTINUE TO PROVIDE SIGNIFICANT HEALTH CARE COST SAVINGS

The generic drug industry addresses this Subcommittee with one voice to support FDA's Office of Generic Drugs (OGD) and request that $1.5 million in additional appropriations be allocated to OGD. This appropriation is critical to shore up OGD's work of reviewing and approving generic drug applications, called abbreviated new drug applications (ANDAs).

Generic drugs continue to represent one of the most effective means of controlling healthcare costs in the U.S. Generic drug competition has saved the American consumer, taxpayer, and Federal and state governments billions of dollars since passage of the Hatch-Waxman Act in 1984. According to a July 1998 Congressional Budget Office study, consumers who bought generic drugs at retail pharmacies saved $8–$10 billion in 1994 alone.[1] Since the federal health program spends one out of every five health care dollars on prescription medicine,[2] lower-priced generic drugs save the U.S. government untold billions as well.[3] These savings are possible because generic drugs typically enter the market at 25–30 percent below the brand price and, within two years, decline to 60–70 percent of the brand price.[4] Access to this price discount is important for taxpayers and consumers, but is crucial for those seniors and the uninsured who have difficulty meeting their health care needs.

Despite the healthcare cost reductions that generic drugs have generated, the savings could be even greater if FDA took final action on generic drug applications within the statutorily required six months.[5] Due in large part to the infusion of directed appropriations to OGD in 1998 and 1999, the agency has successfully focused

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[1] CBO Report, "How Increased Competition from Generic Drugs has Affected Prices and Returns in the Pharmaceutical Industry" (July 1998), at Summary.

[2] Joseph McCafferty, Critical Condition, CFO, The Magazine for Senior Financial Executives, Jan. 1999, at 63.

[3] FDA recognizes that generic drugs provide "substantial savings" to the Medicare and Medicaid programs in its Appropriations documents. HHS fiscal year 2001 Performance Plan, Fiscal Year 2000 Final Performance Plan, and Fiscal Year 1999 Performance Report for FDA, at 64.

[4] CBO Report, "How Increased Competition from Generic Drugs has Affected Prices and Returns in the Pharmaceutical Industry" (July 1998), at Summary; "Economic Impact of GATT Patent Extension on Currently Marketed Drugs," PRIME Institute, College of Pharmacy, University of Minnesota (Mar. 1995), at Executive Summary; SBC Warburg Dillon Read Inc., "Industry Report—Specialty Pharmaceuticals: Generic Drugs, May 20, 1998, at 22.

[5] Under the law, FDA must take final action on generic drug applications within 180 days. 21 U.S.C. § 355(j)(5). In 1999, the median time to approval for ANDAs was 17.3 months—almost three times the length mandated by statute. HHS Fiscal Year 2001 Performance Plan, Fiscal Year 2000 Final Performance Plan, and Fiscal Year 1999 Performance Report for FDA, at 64.

on this mandate.[6] Yet, under the present budget, FDA estimates that the improvement will stop—OGD's average review times for ANDAs actually will increase in 2000 and 2001,[7] and much of the fiscal year 2000 appropriations will be consumed by inflationary costs.[8] At the same time, an increase in future generic application submissions is almost guaranteed since, over the next five years, brand drugs with annual sales of $25.5 billion will come "off patent," clearing the way for more generic applications.[9] Therefore, this Subcommittee must continue its support for OGD, to ensure that the agency has adequate funding to approve safe and effective generic drugs promptly and efficiently.

THE GENERIC INDUSTRY REQUESTS DIRECT APPROPRIATIONS FOR FASTER GENERIC APPROVALS

GPIA, NAPM and NPA encourage the Subcommittee to continue its support for cost-effective pharmaceuticals by providing direct appropriations for OGD. These funds would enable OGD to progress further toward meeting the six month statutory period for final agency action on ANDAs, and address the backlog of ANDAs that remains at OGD. Specifically, we recommend that the Subcommittee take the following actions:

—Appropriate $1.5 million directly for the Office of Generic Drugs, in addition to its fiscal year 2000 funding level;
—Continue to insist that FDA provide detailed and accurate information about agency expenditures specifically for, and by, OGD; and
—Include language in the fiscal year 2001 Agriculture Appropriations Bill to emphasize the Subcommittee's commitment to ensuring accelerated FDA review and approval times for cost-effective generic drugs.

These direct appropriations would assist OGD in reducing generic drug approval times through staff training and information technology upgrades, as described below.

WITH DIRECT APPROPRIATIONS, OGD CAN TRAIN STAFF AND ENHANCE EFFICIENCIES

Among the most pressing needs at OGD is one for appropriately trained staff members who can efficiently review generic drug applications. The modest increases in OGD's budget over the last three years have resulted in the addition of reviewers to the OGD staff. While these staff members are essential to handling OGD's ever increasing workload, their productivity can be improved. For example, 75 percent of OGD's microbiology reviewers have less than one year of experience at OGD, 50 percent of OGD's project managers are new, and 20 percent of the chemistry reviewers have less than one year on the job.[10] These new reviewers would reach their potential much faster if given the opportunity and overtime pay to participate in the training programs that OGD used when funds were available.

WITH ADDITIONAL FUNDING, OGD CAN UPGRADE ITS INFORMATION TECHNOLOGY

Another immediate need in fiscal year 2001 is to augment OGD's information technology (IT) capability. An appropriation of $1.5 million would enable OGD to purchase information technology hardware and software to expand and modernize several essential ANDA review programs. These IT programs include: (1) the electronic ANDA submissions program that is eliminating the need for volumes of burdensome paper documents; (2) the computerized tracking system that OGD project managers and generic companies rely on to evaluate the progress of applications; (3) ANDA review software; and (4) a new electronic filing system that is being developed for all offices within the Center for Drug Evaluation and Research.

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[6] OGD's median approval time for ANDAs has steadily decreased, from 19.6 months in 1997, to 18.7 months in 1998, and 17.3 months in 1999. HHS Fiscal Year 2001 Performance Plan, Fiscal Year 2000 Final Performance Plan, and Fiscal Year 1999 Performance Report for FDA, at 64.

[7] HHS fiscal year 2001 FDA Justification of Estimates for Appropriations Committees, at 66.

[8] FDA Allocates $13.5 Mil. For Inspection Requirements In Fiscal Year 2001 Budget, F–D–C Reports, Inc., The Pink Sheet, Mar. 6, 2000, at 27 (quoting Commission Henney at a Feb. 29, 2000 House Appropriations Subcommittee hearing).

[9] SBC Warburg Dillon Read LLC data, reported in Generics: Best Years to Come, MedAd News, Oct. 1999, at 1 (years 2000–2004).

[10] Sporn Leaves OGD With Generic Integrity Rebuilt, Generic Line, Jan. 26, 2000, at 1–2 (quoting Doug Sporn, outgoing Director of OGD); OGD's Approvals Decrease As Drugs Coming Off Patent Increase, FDA Week, Feb. 4, 2000, at 2 (quoting Gary Buehler, incoming Director of OGD).

CONCLUSION

In sum, we request that Congress continue to guide FDA's priorities by allocating resources directly to OGD. As medical treatment becomes even more expensive and reliant on pharmaceuticals, it is important that generic drug applications move through the approval process as quickly as scientifically-sound reviews permit. Every day that a generic drug is delayed from entering the market, Americans pay millions of dollars more than necessary for their prescription drug products.

Finally, Mr. Chairman, we urge this Subcommittee to emphasize its support for cost-effective pharmaceuticals by including the following language in the fiscal year 2001 Agriculture Appropriations Bill:

"One of the most effective and immediate means to address the rising cost of prescription drugs is to ensure that the American consumer has timely access to more affordable generic medicines. In recent years, Congress has provided increased appropriations for the Office of Generic Drugs to hire more reviewers, reduce the backlog of generic drug applications, and accelerate generic drug approvals. Still, current approval times for generic drugs are three times the statutory limit. In an effort to further reduce approval times, the Committee has provided an increase above the amount available to the Office of Generic Drugs of $1,500,000 to be used for employing and training staff, and for upgrading information technology systems that permit the electronic submission and review of generic drug applications."

Mr. Chairman, the members of GPIA, NAPM, and NPA would like to thank you and the Subcommittee for your time and attention concerning this critical aspect of FDA's fiscal year 2001 budget request. We look forward to continuing our work with you and members of the Subcommittee to bring safe, effective, and more affordable pharmaceuticals to the American public.

PREPARED STATEMENT OF THE HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

The Health Industry Manufacturers Association (HIMA) and its members appreciate this opportunity to provide testimony on funding for FDA in fiscal year 2001.

HIMA represents more than 800 manufacturers developing and selling innovative medical technologies that save and improve lives and help reduce costs. HIMA member firms provide nearly 90 percent of the $68 billion of health care technology products purchased annually in the United States, and nearly 50 percent of the $159 billion purchased annually around the world.

This year's budget deliberations occur at a time when FDA and medical technology companies are entering a new era of rapid and dramatic breakthroughs. Fields such as information technology, genomics, nanotechnology and tissue engineering promise to produce exciting life-saving and life-improving breakthroughs in the coming decade.

FDA Commissioner Jane Henney, M.D., summed up the new era her agency faces in recent testimony before this subcommittee. Commenting on the dramatic advances in medical technology we will witness in the years ahead, Dr. Henney said: "New products entering the marketplace will change the face of health care and will help us lead longer, healthier lives. They will also bring enormous economic benefits, both in lessening the cost of health care and in returning profits on the investments that are being made in research."

Medical device and diagnostics manufacturers are investing heavily in research and development to bring these breakthroughs to fruition. A report scheduled for release later this week by the Lewin Group is expected to quantify the significant increases in R&D spending that medical technology companies have made over the last five years.

In making these heavy R&D investments, HIMA members are acutely aware of the challenges FDA faces in making these innovations available to patients in a timely manner.

FDA's premarket review responsibilities will become more complex and difficult as medical technology advances at an increasingly rapid pace. Many of tomorrow's breakthroughs will defy the traditional device/drug/biologic regulatory classifications. FDA faces a tremendous challenge in adapting to this change in a way that allows it to review new technologies and get them to patients in a timely manner.

Clearly, changes are needed soon in order not only to enable FDA to meet its statutory review times but to meet the goal the Administration set in its fiscal year 2001 budget request of beginning "the process of preparing FDA for a new age of rapid biomedical and pharmaceutical innovation." This new age is rapidly approaching, and the time to start preparing is now.

FDA NEEDS ADDITIONAL PREMARKET RESOURCES TO PREPARE FOR THE NEW AGE IN MEDICAL TECHNOLOGY INNOVATION

This new era of biomedical breakthroughs is arriving at a time when the agency lacks the resources to meet even its current premarket review duties. In December 1998, FDA Senior Associate Commissioner Linda Suydam estimated that the agency is $165 million short of what it actually needs to do its job. Last year's funding increase of $7 million for device premarket reviews was an important step forward.

The inclusion in last year's budget of a specific line-item for device premarket review activities also was an important precedent. HIMA believes that FDA's device review program will continue to warrant specific attention in the budget as the agency prepares for the coming explosion in medical technology innovation.

HIMA believes FDA should have the resources it needs to meet its statutory time frames, both now and in the future. This means completing final actions for premarket approval applications for breakthrough products within 180 days and 510(k)s for incremental advances within 90 days.

The performance goals the Administration outlines for device premarket reviews in its fiscal year 2001 budget justification document move in the right direction. Yet they also show that FDA is still not meeting its statutory device review timeframes.

Because of the budget shortfall for premarket reviews, HIMA wholeheartedly supports the Administration's request for increased appropriations for the device program in fiscal year 2001. Specifically, the entire $14 mil. sought by the Administration ($7.7 mil. from appropriations and $5.8 mil. from new user fees) should be allocated to FDA's device review program through direct appropriations. This funding is urgently needed to help FDA prepare for the coming revolution in medical technology.

While HIMA supports increased FDA funding through appropriations we believe that, absent authorizing legislation, the Administration's request for $5.8 mil. in new device user fees should not be approved. Rather, this funding should be provided to FDA through direct appropriations targeted to device premarket reviews. We urge the Administration to use additional premarket funds to contract out portions of device reviews, especially those for which the agency lacks the scientific expertise. This is an important way that FDA can meet its goal of bolstering its science base.

HIMA believes the Subcommittee should consider providing FDA with the appropriations levels proposed in the Administration's budget for review of premarket applications. The funding needed for timely FDA premarket reviews is indeed a small investment in making the life-saving and life-improving fruits of research, both public and private, available to patients. Now is the time to make the necessary investments to ensure that patients have access to the latest medical innovations.

Finally, we point out the importance of FDA's biologics center; an important yet sometimes overlooked aspect of the agency's device review program. FDA's Center for Biologics Evaluation and Research also requires additional resources to meet its device review responsibilities. As the line between biologics and medical devices becomes increasingly blurred, it will become more important to ensure that FDA's Center for Biologics Evaluation and Research has adequate resources to do its job.

REGULATORY CHANGES ARE NEEDED TO PREPARE FDA FOR THE NEW AGE OF MEDICAL TECHNOLOGY INNOVATION

HIMA further believes, however, that increased FDA funding for premarket reviews is only part of the answer to timely patient access to medical innovations. FDA also needs new and better ways of doing its job. In order to meet the coming biomedical revolution, the agency must be as innovative in its regulation of new technologies as researchers are in developing them.

FDA has shown a commitment to finding new approaches to getting its job done, and this commitment should be encouraged and expanded on. FDA has demonstrated this commitment through successfully implementing some key provisions of the FDA Modernization Act, such as exemption of additional devices from 510(k) premarket review. It also is reflected in the improvement in device review times that FDA has made over the past two years.

HIMA has been encouraged by FDA's recent work towards successful implementation of some other crucial FDAMA provisions. The agency's cooperative work with medical technology companies to implement the law's "least burdensome" premarket review provision is one example. We hope to work closely with the agency in completing implementation of other key provisions of the law such as the 510(k) third-party review program and the provision on early meetings with new product sponsors.

Instead of levying a user fee to increase participation in the third-party review program, HIMA believes that FDA can improve the program by expanding the types of devices eligible for outside review. Currently, the vast majority of the devices eligible for outside review are very simple products such as blood pressure cuffs and dental cement where FDA already has an excellent review record. It is interesting to note that the current third-party review program has been most successful for the more complex products such as diagnostic imaging systems for which more premarket expertise is required.

FDA should expand the list of devices eligible for third-party review to add more complex devices so that the program is available to those product sponsors who could benefit most from it. HIMA is encouraged by the agency's recent willingness to expand the third-party review program and to consult with industry stakeholders in this effort.

Contracting out premarket review work to independent third parties and partnering with medical technology companies are two important ways that FDA can meet its goal of expanding its science base.

As FDA Commissioner Jane Henney stated in her recent testimony, the agency "must be able to anticipate and access the cutting-edge science that will be needed to regulate the products of future technology." HIMA strongly agrees that FDA must remain on the cutting edge of science, and believes that one useful way to achieve this goal is for FDA to make greater use of the expertise of the researchers who are advancing this science and applying it to medical technology breakthroughs.

As the pace of medical technology innovation quickens, it will become increasingly important for FDA to look to outside expertise to make sure the agency does not become an ever-tighter regulatory bottleneck.

Medical technology innovation comprises many specialized disciplines, and new fields of research continue to emerge. In addition to the third-party review program for 510(k)s, FDA should also consider contracting out for reviews of some high-tech devices to provide assistance in regulating dynamic and rapidly advancing medical technologies, rather than attempting to acquire internal expertise in every discipline.

FDA MUST MAKE WISE USE OF SCARCE RESOURCES TO PREPARE FOR THE NEW AGE OF MEDICAL TECHNOLOGY INNOVATION

As FDA's regulatory responsibilities become more complex in the coming years, it will be ever more important for it to spend its dollars where they have the greatest impact. This holds true for both device premarket reviews and postmarket activities.

HIMA applauds the steps FDA has taken in its device postmarket program to work more efficiently and effectively. Recent innovative and collaborative initiatives include pre-announced inspections of device facilities, taking steps to create a more open, interactive inspection process, and conducting a survey with industry on the inspection process. Steps such as these help FDA meet its postmarket responsibilities more effectively and efficiently.

Congress Should Consider Voluntary Reporting Methods on Medical Errors

FDA must be especially prudent in spending its resources in light of the broad scope of its regulatory programs, from ensuring food safety to helping reduce medical errors. The Institute of Medicine's recent report on medical errors, as well as a follow-up report by the government's interagency task force, highlight the important work FDA conducts in this area.

As you may know, medical technology manufacturers already have mandatory reporting of device-related adverse events, thus helping to reduce medical errors. In addition, the FDA is in the process of implementing a user facility "sentinel reporting" (also known as the MedSuN) system.

HIMA supports the work FDA is doing under its current statutory authority to gather adverse event reports from sentinel user facilities. This initiative has the potential to generate valuable information on medical errors, and to do so in a way that focuses on the quality rather than the quantity of information gathered.

As FDA implements the sentinel reporting program, it is critically important to make sure the agency is receiving high quality information that is useful to providers and manufacturers in reducing medical errors. It is important to make sure FDA is gathering useful information under its current program before expanding it to additional facilities.

John Eisenberg, M.D., Director of the Agency for Healthcare Research and Quality, stressed the importance of the need for high-quality data at an FDA Science Forum in mid-February, where he urged policy makers and stakeholders "not just to count [errors] but to make it count."

The pressing need to reduce medical errors is another important reason why timely FDA premarket reviews are so important. Many medical device companies are developing technologies that show great promise in reducing medical errors. These products, such as drug infusion monitoring and control systems need to be approved by FDA and brought to bear on the medical errors problem as quickly as possible.

Finally, as policy makers consider how the government can best help reduce medical errors, it is important to keep in mind device companies' long-standing focus on working closely with the health care community to find ways to reduce errors. A good example of this is in area of anesthesia care, where two medical device companies helped found the Anesthesia Patient Safety Foundation (APSF).

In 1984, anesthesiologists, medical equipment manufacturers and other health professionals formed the APSF to tackle the problem of anesthesia-related deaths and injuries. The group for the first time brought together the clinical community, manufacturers, government agencies and patients to address the problem.

The APSF brought about crucial changes in anesthesia practice and technology. For example, it encouraged the widespread adoption of oximeters and capnographs among anesthesiologists so that patients under anesthesia were monitored more effectively. As a result of APSF's work, the anesthesia mortality rate has dropped from an estimated two deaths in 10,000 cases to one in every 100,000 to 200,000 cases.

Although the recent focus has been heavily focused on mandatory reporting, voluntary partnerships between manufacturers, the clinical community, academia, and government agencies like the APSF should form a key component of policy makers' overall strategy for reducing medical errors.

CONCLUSION

HIMA urges this Subcommittee to help prepare the FDA for the coming era of biomedical innovation. To ready FDA for this era and ensure that patients enjoy timely access to the coming dramatic breakthrough is medicine, we must take several important steps:

—First, Congress must adequately fund FDA's device and biologics premarket review programs. HIMA supports an increase in appropriations of $14 mil. for FDA device review activities. Additional resources will become even more critical in the coming years as dramatic new medical breakthroughs begin to arrive at FDA for review.

—Second, FDA needs new and innovative ways to meet its regulatory obligations. Congress should encourage the agency to strengthen and expand on steps the agency has recently taken in this direction. As FDA looks to strengthen its science base, it should find ways to make use of the existing science base outside the agency. Partnering with experts in the clinical, research, and manufacturing fields is one effective way to do this.

HIMA again thanks the committee for this opportunity to present our views and looks forward to working with you in helping prepare FDA for the coming revolution in biomedical innovation.

PREPARED STATEMENT OF THE ILLINOIS SOYBEAN ASSOCIATION

Mr. Chairman and distinguished members of the Agriculture, Rural Development, and Related Agencies Subcommittee: The Illinois Soybean Association, an organization of approximately 4,000 leading soybean producers, and the University of Illinois, a major land-grant institution, join in requesting that $3.5 million in federal funds be authorized to establish a Soybean Disease Biotechnology Center within the National Soybean Research Laboratory at the University of Illinois. Among other goals for this initiative, we wish to foster well coordinated public and private research leading to safe, nutritious, healthy, affordable, and convenient soy products for consumers and sustainable competitive advantage for the U.S. and Illinois soy industries.

We will ask the Illinois Soybean Checkoff Board to contribute $500,000 to help establish the Center. We will also ask them to entertain proposals from the Center for program support in the future. The University of Illinois will contribute core staff, space, general support services and facilities, and utilities and will operate and maintain the Center henceforth in support of soybean disease biotechnology research.

ROLE OF THE CENTER

The Soybean Disease Biotechnology Center will be the first line of defense against major soybean diseases that threaten the U.S. soybean industry, especially the soybean cyst nematode (SCN). It will provide outstanding research talent and state-of-the-art facilities, equipment, and support services for cutting-edge biotechnology research on major soybean diseases. The Center will bring the power of the new sciences of structural, comparative, and functional genomics and genetic transformation to bear on SCN and other current and potential disease threats, including major diseases not yet in the U.S., such as soybean rust.

Center researchers will identify and create new and improved mechanisms of disease escape, tolerance, and resistance. The aim is to protect the soybean crop and increase its profitability throughout the industry. Genetic disease control mechanisms in the germplasm and genetic stocks of the National Soybean Germplasm Collection, located at the University of Illinois, will be a unique, readily accessible resource for the Center. In addition, genetic mechanisms of escape, resistance, and tolerance in other species will be identified and transferred to the soybean. Accordingly, highly effective disease control genes can be used for "stacking" in soybean varieties. This will assure the realization of gains from other genetic improvements, such as unique quality traits.

SETTING FOR SOYBEAN DISEASE BIOTECHNOLOGY RESEARCH

Researchers in the Soybean Disease Biotechnology Center will use the support services of the University of Illinois' new Keck Center for Comparative and Functional Genomics, with its high throughput genetic sequencing, unequaled bioinformatics capabilities, and unique, one-of-a-kind genetic analysis tools. This will greatly facilitate evaluation of materials in the National Soybean Germplasm Collection. Researchers will also have ready access to the University of Illinois Biotechnology Center, which provides recombinant DNA and protein science services, immunological resources, flow cytometry, high capacity transgenic plant production, and cell and tissue culture, among other valuable support services.

There will be direct access to superb conventional greenhouse and controlled environment facilities in adjacent, connected structures. As part of this project, a biocontainment greenhouse will be constructed specifically to provide the levels of isolation and protection required for sophisticated disease biotechnology research. An elaborate system of research farms will be available for testing new developments in a wide range of soil, climatic, and socio-economic conditions.

The Center will complement and connect with the new St. Louis-headquartered Danforth Plant Science Center and participate in the Illinois-Missouri Biotechnology Alliance. As part of the program of the National Soybean Research Laboratory (NSRL), work at the Center will be strategically integrated with other public and private efforts to conceive, plan, and implement soybean production and marketing systems of the future. This will foster interdisciplinary and cross-functional efforts that speed development and adoption of new technology and gain competitive advantage for the U.S. soybean industry.

NSRL is a major interface between the soybean industry, as represented by state and national soybean organizations and checkoff boards, and university research and education programs. NSRL was initiated by a USDA special grant of $5 million. NSRL is directed by a Chair Professor of Agricultural Strategy, the only so-named professorship in the nation. The Chair position was endowed by the soybean industry, which contributes $40 to $80 million annually to soybean research.

NSRL fosters strategic public/private alliances within the soybean industry and with other commodity-based industries. It achieves extraordinary levels of communication, coordination, and integration of publicly and privately financed research and educational programs across the nation. As developer of STRATSOY, the most sophisticated and useful commodity website, NSRL provided the soybean industry with a powerful tool for uniting its far-flung checkoff-funded programs, disseminating information, eliminating redundancy, sharpening strategic focus, and increasing the return on both public and private investment in soy research.

Its association with the NSRL will assure that research in the Soybean Disease Biotechnology Center will fully complement and benefit from other soy research programs across the nation and world. It will assure that the results of fundamental soybean disease biotechnology research are quickly translated into practical technology, useful information, and sustainable competitive advantage for the industry. The NSRL mission of increasing the volume of profitable, sustainable business in the soy industry will become the mission of the Soybean Disease Biotechnology Center.

This is an excellent time to establish the proposed Center because the University of Illinois is ramping up its Postgenomic Biotechnology Program. A multi-million investment of state funds will provide new biotechnology positions in functional genomics, bioinformatics, developmental biology, microanalytic systems, and cellular and molecular bioengineering. This will enhance the effort to fill new positions in plant disease biotechnology with outstanding scientist/educators who already have established impressive track records. The Center will also benefit from the investment of Illinois in an expanded University of Illinois business incubator and research park to assure rapid commercialization of promising new technologies from the University's research program.

GOALS OF THE CENTER

The Soybean Disease Biotechnology Center will:

—Provide a superb setting for cutting-edge soybean disease biotechnology research.
—Foster and support the very best soybean disease biotechnology research team in the world.
—Assure that effective soybean disease escape, resistance, and tolerance genes are available for "stacking" in top U.S. soybean varieties.
—Eliminate the soybean cyst nematode as a major threat to the U.S. soybean industry and prevent harm from introduction of foreign disease organisms.
—Enable molecular soybean pathology research through which the Illinois and U.S. soybean industries will achieve and maintain preeminence in global and domestic markets for soybeans and soybean products.
—Enable the U.S. soy industry to capture proprietary benefits from soybean biotechnology research and other research conducted all over the world.
—Enhance the global and strategic significance of the National Soybean Research Laboratory and empower its scientists, thus maximizing its benefits for the nation.

SUMMARY

We request that $3.5 million be authorized to establish a Soybean Disease Biotechnology Center within the National Soybean Research Laboratory at the University of Illinois. These funds, complemented by state funds and industry contributions, will be used to staff, equip, house, and operate the center, and launch and sustain its programs.

PREPARED STATEMENT OF IMPERIAL COUNTY, CALIFORNIA

Mr. Chairman, we appreciate this opportunity to acquaint you with the important research and biological control efforts underway by Federal, State, regional, County and local entities to combat and effectively control, not only the persistent whitefly and pink bollworm, but also threats by newly introduced exotic species.

In the last twelve months, Imperial County and other areas of the Southwestern United States have experienced the introduction of four new exotic pests; the pink hibiscus mealybug; giant salvinia, an aquatic weed; the citrus leafminer; and the red gum lerp psyllid. Also, we are on the fringe of an infestation of the glassy-winged sharpshooter/Pierce's disease complex. Even though the glassywinged sharpshooter has not reached Imperial County, the potential threat to our small, but prosperous grape industry is very high.

The following testimony will focus on funding for the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) (specifically, the Methods Development Lab and the Plant Protection Centers) and the Agricultural Research Service (ARS) for fiscal year 2001.

FUNDING FOR SILVERLEAF WHITEFLY (BEMISIA AGENTIFOLII)

The silverleaf whitefly (SLW) remains a serious national pest problem, resulting in conservatively estimated crop losses exceeding $500 million a year in the United States. Economic losses from the silverleaf whitefly have involved cotton and a wide range of ornamentals, melons and vegetable crops.

The need for an effective SLW biological control program is paramount. While chemicals continue to provide a short term solution to the problem, the threat of insecticide resistance and the importance of an effective management program cannot be overemphasized.

We are continuing an aggressive pursuit of IPM methodology using biological control, natural predators, and plant pathogens coupled with intensive weed control

and crop sanitation. In addition, we are using fewer chemical applications and less toxic pesticides. These IPM technologies are designed to comply with the Clinton administration's 1993 policy statement of utilizing IPM practices on 70 percent of United States farmland by the year 2000.

In the Imperial Valley, the USDA has made numerous augmentative releases of exotic parasitoids in the refugia and commercial fields to assess their effectiveness against the silverleaf whitefly. Four of these exotic species have become established and have been recovered up to six miles away from the original release sites. The USDA APHIS PPQ Methods Development Unit has also begun an extensive multivariant analysis to assess the effect of the surrounding crops and chemical usage on SLW and their parasites and also the effect of the parasites on the SLW populations.

We cannot overemphasize the importance of the five-year Silverleaf Whitefly National Research, Action, and Technology Transfer Plan (1997–2001). This plan defines the continuing need for a highly coordinated and cooperative program, including long term goals and objectives, and provides technology transfer to the scientific community, legislators, regulators, the agricultural industry, and the public. This is the all-important vehicle by which the agricultural community will directly benefit from the significant SLW research which the five-year plan has yielded. Long-term economically, socially, and environmentally acceptable management systems are being developed from the extensive knowledge base developed to provide a more complete understanding of whitefly biology, ecology, and host plant interactions. This plan is designed to provide a smooth transition of this research into the field. We urge you to fund the Technology Transfer, New Research and Action Plan at no less than $5.8 million for ARS and $1.85 million for APHIS.

FUNDING FOR PINK HEBISCUS MEALYBUG (MACONEFFICOCCUS HIRSUTUS)

During the late fall of 1999, the pink hibiscus mealybug (PHM) was detected in Imperial County. This was the first detection recorded in the continental United States. This mealybug, present in the Caribbean since the mid 1990's, was first expected to arrive in Florida. How it came to appear in Imperial County is still a mystery. However, there is a great potential for this pest to cause serious economic damage to agriculture in Imperial County and the southwest.

There are international quarantines imposed against several types of fresh market produce which are reported to harbor this pest. These quarantines could have a serious impact on our ability to export fresh produce to the Pacific Rim.

Following the detection of this pest in Imperial County, it was found across the border in the Mexicali Valley of Mexico. With the rapid assistance of USDA–APHIS, a survey and public outreach program was undertaken in a very expeditious manner. I must state my praise for APHIS' quick reaction to this pest.

At the same time, a leading USDA scientist in the Caribbean responded rapidly with exotic biological control organisms. These parasitic wasps have been very successful in containing PHM in the Caribbean. This scientist not only put on workshops, but also released several thousand parasites on both sides of the border. Subsequent to that, a second shipment of parasites arrived and were released by biologists from Imperial County and the California Department of Food and Agriculture.

Imperial County, in conjunction with the California Department of Food and Agriculture and the APHIS Methods Development Center, has established a rearing facility for these PHM parasites in Imperial County. We hope to be able to produce and release enough parasites to keep this potentially harmful pest below significant economic levels in Imperial County, surrounding regions and Mexico.

Because of the numerous parties involved, including the USDA–AP1HS and ARS, the University of California, the California Department of Food and Agriculture (CDFA), and the Imperial County Agricultural Commissioner's Office, this project requires a significant amount of coordination to avoid overlap and duplication of project activities. We are requesting $50,000 to fund a Project Coordinator, which would provide a single point of contact to which all involved parties could report. The Project Coordinator would also synchronize the efforts of all agencies and would provide public outreach and education.

FUNDING FOR THE CITRUS LEAFMINER (PHYLLOCNISTIS CITRELLA)

This pest was found but a few weeks ago during a routine inspection of a local retail nursery. The citrus leafminer is considered an serious pest and is currently found in Florida and Texas. Follow up surveys of the surrounding areas verified that the pest was also present in a large commercial orchard in the Mexicali-San Luis Valley of Mexico and several backyard locations in southern Imperial County.

The large areas in which this pest was found made it impossible to undertake eradication, especially since it has been reported to be present in Arizona.

In cooperation with the nursery owner where the initial find was made, the young, heavily infested citrus trees were destroyed. The mature trees on the property were stripped of foliage showing signs of leafminer infestation and the cuttings destroyed.

Since this pest spends almost all of its life inside the leaf, conventional pesticides are not effective. The most successful method of control for this pest are biocontrol agents. There are several indigenous parasitic wasps that are effective against this pest. Also, there is a very voracious exotic parasite that requires importation from Australia. This parasite has been reported to be up to 90 percent effective. Again, we are faced with the necessity of having to locally rear parasites in sufficient numbers for release to provide adequate control and to help reduce the economic impact this pest could have on our citrus industry. We are requesting $50,000 to expedite the foreign exploration, importation, and evaluation of exotic parasites to combat this pest.

FUNDING FOR GIANT SALVINIA (SALVINIA MOLESTA)

Giant salvinia is an exotic aquatic weed that was recently discovered in an agricultural drain of the Palo Verde Irrigation District, the lower portion of the Colorado River (on both the California and Arizona sides of the river) and a large portion of the Imperial Irrigation District canal system. This plant, if left uncontrolled, has the potential to completely clog the waterways currently infested, thereby severely restricting the flow of water. The potential negative economic impact this could have is manyfold, but the primary impact is increased maintenance costs to keep the waterways free and flowing.

This weed is currently under eradication. The involved agencies are using two strategies to eradicate this pest. First, an herbicide is used to reduce the surface size of giant salvania mats; then, a weed-eating beetle is used to complete the task.

Releasing these predacious beetles on salvinia is not only time consuming, but could take several years to accomplish. A facility will be required to rear these beetles over a large period of time. This weed is also found in Texas and Arkansas. We are requesting $50,000 for expanded and expedited survey, detection, and eradication activities.

It seems as though the desert southwest has become the revolving door for the introduction of exotic pests. It also appears, particularly in light of the recent actions caused by the Food Quality Protection Act, that the most logical method by which to combat these pests is through the introduction of biocontrol agents. The vast majority of these biocontrol agents are small parasites and predators. In order for us to rapidly attack and continue to do battle with these exotic pests, we must have the ability to take known biological control agents which have been released from quarantine and evaluated by either the University of California or the APHIS Plant Protection Centers, and mass rear them locally for release.

As a result of the increased biocontrol activity caused by all of these exotic pests, we are requesting $100,000 to fund a feasibility study which would identify the resources, partners, and personnel necessary to establish a mass rearing facility for biological control agents, possibly at the Brawley Research Center. The facility would not compete with the biocontrol quarantine facility at either the University of California (UCR) or other USDA facilities, but rather would act cooperatively with them to mass rear parasites which they have evaluated and released from quarantine.

FUNDING FOR RED GUM LERP PSYLLID (GLYCASPIS BRIMBLECOMVEI) AND GLASSY-WINGED SHARPSHOOTER (HOMALADISCA COAGULATA)

There are currently no known biocontrol agents for either red gum lerp psyllid or glassy-winged sharpshooter. A world-wide search is currently being conducted and if effective parasites or predators are found, having a mass rearing facility available would expedite the rearing and release of these agents.

FUNDING FOR PINK BOLLWORM (PECTINOPHORA GOSSYPIELLA)

Pink bollworm has been an exotic pest of cotton for several years. It is singularly responsible for the decline of cotton acreage not only in the southwestern United States, but northwestern Mexico. Costs to control this pest using conventional methods have risen dramatically and that, in combination with declining cotton markets, has made it impossible to continue to grow this crop in an economical manner. Through the efforts of the USDA APHIS Methods Development Lab, the University of California and the California and Arizona Cotton Growers, a bi-national strategy

was developed which would eventually lead to the eradication of the pink bollworm from the cotton growing regions of the United States.

Even though the Arizona cotton growers have temporarily put their participation in the project on hold, the cotton growers in the upper Rio Grande/Trans-Pecos area and their counterparts on the Mexican side of the Rio Grande River have embraced the project with sincere enthusiasm.

Research needs to continue on such soft technologies as the autocidal biocontrol agent currently being developed by APHIS Methods Development and the University of California at Riverside. This particular agent holds great promise by becoming the biocontrol agent that could replace transgenic "Bt" cotton in the continuing effort to eradicate pink bollworm.

$2.6 million dollars is needed for APHIS–PPQ and Methods Development to achieve the important objectives of promoting strategies for region-wide eradication of PBW in California, Arizona and northwest Mexico, as well as continuing to keep this voracious and economically devastating pest out of the prime cotton producing areas of California's San Joaquin Valley. This technology would also help cotton farmers comply with the reduced use of pesticides as required by the Food Quality Protection Act. Ultimately hundreds of thousands of pounds of pesticides could be eliminated from the environment if the pink bollworm was eradicated from the southwestern United States and northwestern Mexico.

SUMMARY OF FUNDING REQUESTS

Continuation of funding for the Silverleaf Whitefly National Research, Action and Technology Transfer Plan: $5.8 million for ARS and $1.85 million for APHIS.

Funding for pink hibiscus mealybug joint county-state-federal-binational coordination: $50,000.

Funding for citrus leafminer for foreign exploration, importation and evaluation of exotic parasites: $50,000.

Funding for giant salvinia for survey, detection and eradication activities in California and Arizona: $50,000.

Funding for identifying resources, partners and personnel necessary to establish mass rearing Biological Control Center for desert southwest which is an invasive species corridor for exotic pests: $100,000.

Funding for the APHIS–PPQ Methods Development dealing with pink bollworm in California, Arizona and northwest Mexico and prevention in San Joaquin Valleys: $2.6 million.

PREPARED STATEMENT OF THE INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

NATURAL RESOURCE CONSERVATION SERVICE (NRCS)

The Natural Resource Conservation Service has immense responsibilities for implementing the conservation provisions of the 1985 Food Security Act (FSA), the 1990 Food, Agriculture, Conservation and Trade (FACT) Act, and the Federal Agricultural Improvement and Reform (FAIR) Act of 1996.

Technical Assistance.—The USDA publication "Geography of Hope" identifies that the need for general Conservation Technical Assistance for America's private landowner will continue to increase to 2002 and beyond. An fiscal year 1999 workload analysis indicated the need for an additional $300 million for technical assistance. The Association applauds and supports the $86.4 million requested increase in Conservation Operations as a move in the right direction but recognizes a yet unbudgeted shortfall of an additional $250 million. The Association enthusiastically supports the increase of 1,843 staff years for more field staff to provide technical assistance required for existing programs as well as the Administration's proposed new initiatives.

In addition to increasing general (non-programmatic) technical assistance, increased technical assistance funds are needed to implement increasingly popular provisions of the 1996 FAIR Act. The budget for the Wetlands Reserve Program (WRP), Wildlife Habitat Incentives Program (WHIP), and the Farmland Protection Program (FPP) all include the customary 19 percent to 20 percent for technical assistance. The Association strongly supports this level of funding provided to ensure that optimum agriculture and natural resource benefits will accrue from these programs. Not obvious in the list of programs that provided adequate levels of technical assistance is the Environmental Quality Incentives Program (EQIP). The proposed fiscal year 2001 budget raises EQIP from $174 million to $325 million, which the Association applauds. It is not clear, however, that additional funds are available

to provide the required technical assistance to a field level program with such a large increase. Some Programs (CRP, WRP, CFO and FPP) have a technical assistance cap set by Section 11 of the CCC Charter Act at the 1995 spending level. No such constraint exists on EQIP. The Association therefore strongly urges the designation of the customary 19 percent for technical assistance on EQIP. The Association further recommends raising the Section 11 cap on CCC funds to $95 million, which are the funds necessary to provide technical assistance for CCC funded programs at the 2001 level.

Increasingly, state fish and wildlife agencies are contributing staff time to help NRCS field offices service landowner participation in USDA conservation programs including WHIP, CRP, WRP and EQIP. The Association strongly encourages the Administration to consider sharing technical assistance funds, allocated for these programs, with state agency partners.

Conservation Security Program (CSP).—This new program initiative is intended to support and secure the environmental benefits that all Americans enjoy—clean air and water, reduced erosion, improved wildlife habitat and sustainable soil. The Association strongly supports the concept of the proposed CSP as well as the budget item of $510 million for financial assistance to landowners plus $90 million for technical support. Especially notable is the mandatory allocation of an approximate 17 percent of total funding to technical assistance.

Wetland Determination.—We believe the need for wetland determination, certification, and mapping is great and urge NRCS to proceed as soon as possible, under the guidance of the FAIR Act of 1996. The Association urges expeditious completion of the wetland determinations required to implement the Swampbuster provisions of the 1985 FSA, 1990 FACT Act, and the 1996 FAIR Act as well as the FAIR Act directed interagency cooperation whereby NRCS assumed responsibility for wetland designation for Section 404 (Clean Water Act) purposes on farmland, including tree farms, rangelands, native pasture, and other private lands used to produce or support the production of livestock. The Association and individual states wish to continue to work with NRCS to help achieve these goals.

Public Law 566.—The Association generally supports the small watershed (Public Law 566) projects. That support is based upon continued emphasis on updated watershed planning and management. Such efforts could utilize and expand upon existing Public Law 566 plans examined in light of present day issues of wetland protection, water quality enhancement and fish and wildlife habitat. The greatest potential for these programs is for land treatment measures that retain the water on the land, improve infiltration, improve water quantity and quality, and provide fish and wildlife habitat. Structural and non-structural land treatment activities require state and local matching funds to leverage greater conservation benefits for each federal dollar spent while promoting valuable partnerships among states, local agencies, and other organizations.

National Buffer Initiative.—NRCS has implemented this initiative in cooperation with industry and other partners. The Association is pleased to be a sponsor of this innovative approach. The National Academy of Sciences has found that buffer strips can reduce off-field pollution by 70 percent, thus also contributing to meeting nonpoint source remediation goals under the Clean Water Act. Unfortunately, the level of sign-up by producers remains very low. NRCS has committed special emphasis and a major effort to use the buffer strip practices covered by the continuous CRP sign-up in a more targeted fashion. Unlike the large or whole field CRP retirements, buffer strips will require extensive outreach plus the much more attractive rental rates than now proposed. The Association supports the allocation of the additional $125 million specifically for new incentives, increased outreach and more attractive rental rates to increase participation in the various buffer practices. In addition, a review and evaluation of why sign-up is low and how it can be improved is strongly recommended.

Forest Incentive Program (FIP).—The Forest Incentive Programs (FIP) has multiple resource values for fish, forests, wildlife, clean water and erosion control. The Association opposes the NRCS proposed intention to zero out FIP funding and strongly recommends that the fiscal year 1999 level of $16.325 million be restored in the fiscal year 2001 budget.

Capped Programs.—The Wetlands Reserve Program (WRP), Wildlife Habitat Incentives Program (WHIP) and Farmland Protection Program (FPP) have all reached or are near authorized acreage or appropriation caps. In addition, funding levels for the Environmental Quality Incentives Program (EQIP) has not been sufficient to meet landowner interest or needs. We believe that due to the overwhelming success, customer acceptance and public benefits of these programs, they should be reauthorized. Therefore, we applaud the Administration's Farm Safety Net proposal to provide additional support to farmers through funding WRP at $286 million, EQIP at

$325 million, WHIP at $50 million and FPP at $65 million. The Association also applauds the efforts of the Administration to raise the cap on the Conservation Reserve Program (CRP) to 40 million acres.

FARM SERVICE AGENCY (FSA)

An adequately funded budget for the FSA is essential to implement those conservation related programs and provisions under FSA administration and/or in cooperation with NRCS as a result of passage of the Federal Agricultural Improvement and Reform (FAIR) Act of 1996. The Association strongly advocates that the budget include sufficient personnel funding to service a very active program and strongly believes that the past erosion of personnel has been inconsistent with program needs. The Association applauds the Administration's proposed personnel levels but also sees the need for an additional 600 staff years of temporary assistance.

FSA programs have tremendous quantifiable impacts on natural resources, and yield substantial public as well as private benefits. Building on the provisions of the 1985 FSA, the 1990 FACT Act, and the 1996 FAIR Act, the Association wants to ensure that each program accomplishes the broadest possible range of natural resource objectives, and encourages close cooperation between FSA, NRCS and the State Technical Committees in implementing the 1996 FAIR Act.

Conservation Security Program.—This new program initiative is intended to support and secure the environmental benefits that all American's enjoy—clean air and water, reduced erosion, improved wildlife habitat and sustainable soil. The Association strongly supports the concept of the proposed CSP as well as the budget item of $510 million for financial assistance to landowners plus $90 million for technical support. Especially notable is the mandatory allocation of an approximate 17 percent of total funding to technical assistance.

Flood Risk Reduction Program.—We believe this program has great potential to mesh with the Army Corp of Engineers Rivers Ecosystem Restoration and Flood Hazard Mitigation Project which is a part of the President's Clean Water Initiative. In addition, this program has excellent potential to secure floodplain restoration through easement purchase, to the benefit of the landowner, and as an alternative to expensive and recurring repair of frequently flooded land. We urge FSA to prepare regulations and budget for implementation and make every effort to ensure that language used in its easements and agreements provide a streamlined basis for appropriate administration and are user-friendly. The Association is disappointed that no budget is requested and urges that a start-up budget of $30 million be initiated to assist in the President's Clean Water initiative.

Conservation Reserve Program.—The continued administration of CRP under the guidelines of the 1996 FAIR Act is a very significant and valuable commitment of USDA and the FSA. The Association applauds FSA efforts to fund and extend CRP contracts for the multiple benefits that accrue to the public as well as the landowner. The Association is especially pleased to note the commitment to raise the authorized ceiling to 40 million acres. The Association provides special thanks to FSA for the continuous CRP sign-up of high value environmental practices and applauds the additional $125 million in new incentives to increase landowner participation as well as ensure that practices incorporate fish and wildlife needs along with soil and water considerations.

The commitment of FSA to provide high wildlife benefits in CRP contracts has been obvious since the advent of the Environmental Benefits Index (EBI) in the 15th sign-up. The Association applauds FSA in those efforts with their special emphasis on native grasses, endangered species and enlightened pine planting. Management/maintenance strategies are essential to ensure continuation of soil, water and wildlife benefits throughout the life of the CRP contract. However, the "up-to-$5/acre" maintenance payment tends to be viewed by many landowners as additional rental payment, whether maintenance practices are performed or not. The Association encourages FSA to convert the annual maintenance fee to cost-share on an as-needed basis to ensure soil, water and wildlife objectives reflected in the EBI are realized as well as to ensure wise use of public funding for CRP.

WILDLIFE SERVICES (APHIS)

The President's fiscal year 2001 proposed budget for the APHIS Wildlife Services Operations is $28,684,000 and reflects a $2,711,000 decrease from the fiscal year 2000 level. For Methods Development, the proposed budget is $10,525,000, a $168,000 increase from the fiscal year 2000 level. For Aquaculture, the proposed budget is $576,000, a decrease of $190,000 from the fiscal year 2000 level. The Association is seriously concerned about reductions to Wildlife Service's budget.

Wildlife Services (WS) a unit of APHIS, is the Federal agency responsible for controlling wildlife damage to agriculture, aquaculture, forest, range and other natural resources; for protecting public health and safety through the control of wildlife-borne diseases; and wildlife control at airports. Its control activities are based on the principles of wildlife management and integrated damage management and are carried out cooperatively with State fish and wildlife agencies. Most APHIS WS operational work is cost shared between the Federal WS program, State and county governments, agricultural producers, and other cooperators.

The cooperation and support of the agricultural community are essential to maintaining wildlife populations because much of the Nation's wildlife exists on private agricultural lands. A progressive wildlife damage management program which reduces the adverse impact of wildlife populations is necessary to maintain the support of the agrarian community and to counter increasing pressures for indemnity due to wildlife damage.

Since Congress transferred the WS program to USDA in 1986, the Association has worked closely with this program on numerous issues critical to the State fish and wildlife agencies including those related to migratory bird and endangered species. The Association commends the WS program for its professionalism and continuing effort to be attuned to the changing public values for the Nation's wildlife, while remaining responsive to the emerging wildlife problems.

The Association is concerned with the Administration's proposed reduction in both the WS operations program and the aquaculture program for fiscal year 2001. The Administration is requesting that cooperating entities assume an ever larger share of the costs for WS services at a time when cooperators are already paying at least 50 percent of the costs if not more. Many wildlife populations such as predators, waterfowl, fish-eating birds, deer, and beavers are at all-time highs. Wildlife conflicts and requests for assistance are also at record numbers, and State wildlife agencies and the public look to WS for leadership and professional expertise in dealing with these conflicts.

The Association requests the WS budget be restored to at least the fiscal year 2000 level for the Operations and Aquaculture line items. WS can be progressive, responsible and successful only if adequately funded and staffed. Of additional concern is the near level funding proposal for Methods Development. Although the fiscal year 2001 budget contains a $168,000 increase, all but $8,000 of this is for increased pay costs. Many of the current control tools such as traps and other restraining devices are becoming less acceptable to the public and are actually being prohibited in many States because of public referendums. The only source of new methods is through research. We commend Congress for recognizing the need to relocate the WS research facility from Denver to Ft. Collins, Colorado. Hopefully, the research center will be completed within the next year. However, increased operating and maintenance costs will then exceed $1 million which is not provided for in the general appropriation. The Association requests an increase of at least $2.3 million to the Methods Development line item to adequately continue nonlethal methods research and address the increased operating and maintenance costs, with $300,000 being dedicated for expansion of commercial trap testing in cooperation with the IAFWA and the State Fish and Wildlife Agencies to help meet and carry out U.S. international understandings to improve animal welfare in state regulated wildlife trapping programs.

The Association recognizes the importance of aircraft to WS for both predator control and the distribution of oral vaccine baits for rabies control projects and we commend Congress for providing $1.2 million in fiscal year 2000 to WS to continue implementing improved safety procedures for their aerial operations. However, no increased funding was proposed in the fiscal year 2001 budget to continue this effort, and the Association recommends that an additional $1.9 million be provided to fully implement the safety recommendations contained in the aerial safety report.

The Association is concerned with recent attempts by various organizations and individuals in the past several years to significantly reduce WS's funding for predator control activities in the western United States. The Association opposes any attempts to reduce the WS budget through any broad scale or across-the-board funding cuts for the program or my efforts to reprogram funds from within. As our wildlife continues to flourish the States need a strong federal partner in animal damage research and management and it is to WS that we look for credible, science-based solutions.

The Association is pleased with the accomplishments of the Berryman Institute at the Utah State University in Logan, Utah. However, we would like to see the Institute enhance its capabilities to conduct social science research, expand continuing education programs, and start a new high quality scientific journal for wildlife damage management that would be patterned after other established journals.

To reach these new goals, the Association supports an increase of the funding to the Berryman Institute by an additional $300,000.

The Association commends Congress for increasing the funding in Montana in fiscal year 2000 by $250,000 to deal with the increasing wolf-related conflicts. However, wolf conflicts are also increasing in Minnesota, Wyoming, and Idaho, and the Association requests an additional $300,000 to deal with these problems in those States as well.

The Association recommends that Congress make $750,000 available in fiscal year 2001 to allow WS to continue to implement the new Management Information Reporting System. The implementation began 2 years ago and will occur over a 5-year period at a total cost of $6–$8 million. The new system will allow WS to provide specific information on resources protected, damage levels, trend information, and data on measurements and outcomes now required by the Government Performance and Results Act.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE (CSREES) U.S. DEPARTMENT OF AGRICULTURE

The Association recognizes that the research and educational programs of the CSREES and its Land Grant Partners effect relevant, positive changes in attitudes and implementation of new technologies by private landowners, managers, community decision-makers, and the public. This results in significant benefits to individuals and to the Nation through building and sustaining a more viable and productive natural resource base and a competitive and profitable agriculture. Since over two-thirds of our lands, approximately 1.35 billion acres, are controlled by over 10 million private landowners and managers, it is most appropriate that the CSREES-Land Grant System, with its grass roots credibility and delivery system, be adequately funded to translate and deliver research-based educational programs and new technologies to help the Nation's private landowners and managers move towards a more sustainable society. However, in the President's fiscal year 2001 budget, we see virtually no emphasis on natural resources research and education directed toward helping these clientele. In fact, the total number of farmers based on recent statistics is just slightly over one million, yet the great majority of CSREES' budget is devoted to production agriculture with only $3.192 million budgeted for the Renewable Resources Extension Act to assist the over ten million private landowners and managers who own and manage most of the nation's natural resource base. The Association is seriously concerned that this amount is infinitesimal and totally inadequate in the CSREES proposed fiscal year 2000 budget of $948.01 million.

IAFWA strongly recommends that the Renewable Resources Extension Act be funded at a minimum level of $15 million in fiscal year 2001. The RREA funds, which are apportioned to State Extension Services, effectively leverage cooperative partnerships at an average of about four to one, with a focus on the development and dissemination of useful and practical educational programs to private landowners (rural and urban) and continuing education of professionals. The increase to $15 million would enable the Extension System to accomplish the goals and objectives outlined in the 1991–1995 Report to Congress. The need for RREA educational programs is greater today than ever because of the fragmentation of ownerships, the diversity of landowners needing assistance, and the increasing environmental concerns of society about land use. It is important to note that RREA has been reauthorized through 2002. It was originally authorized at $15 million annually; however, even though it has been proven to be effective in leveraging cooperative state and local funding, it has never been funded at a level beyond $3.4 million. An increase to $15 million would enable the Extension Service to expand its capability to assist over 500,000 private landowners annually to improve decision-making and management on an additional 35 million acres while increasing productivity and revenue by $200 million.

The Association strongly endorses the increase of McIntire-Stennis Forestry Research funds from $21.93 million to $25 million. The Association feels that it is essential to the future of all aspects of forest resource management on non-industrial private forestlands. With the rapid reduction in timber harvests from public lands, especially in the west, small private forest ownerships are being depended on for playing an increasing role in providing the nation's overall timber supply. This is creating a situation where in many areas of the country timber harvest is exceeding growth of timber stock on private lands. These forestlands play a critical role in providing watershed protection, wildlife habitat, recreational opportunities and environmental quality in both rural and urban communities. There is a significant need to provide more focus on improved management of small forest ownerships since they

are the key to substantial forest resource management in the future. Currently there are over 10 million private landowners, many of whom have yet to realize the need to both manage and sustain these forests and related natural resource benefits for both their and society's future. Success in this arena of providing improved management and sustainability of these forest resources depends on enhancing research directed towards these ownerships through the McIntire-Stennis Research program.

The Association notes with satisfaction and support that funding for water quality integrated programs was increased in the President's 2001 budget by $3.2 million. We are concerned, however, that there is no line item budget for water quality specific to educational programs under Smith-Lever in Extension activities. The Association recommends a minimum of $3.5 million in Extension programs to focus on water quality education targeted at agricultural producers and other private landowners and managers. We believe that such program efforts are urgently needed now to help these landowners learn how to prevent and/or reduce water quality degradation from known sources which are seriously affecting fisheries and wildlife resources, human health, and environmental quality of rural and urban communities.

Finally, the Association is further aware of one particular program contained within the Cooperative States Research, Education, and Extension Service that is of high priority to several states. The U.S. Marine Shrimp Farming Program is an integrated multi-state research program at work in the states of Mississippi, Hawaii, Massachusetts, Texas, Arizona, and South Carolina. The goal of this program is to significantly expand the domestic shrimp farming industry, thereby reducing pressure on wild shrimp stocks and helping to offset the annual $2.5 billion trade deficit. The Association urges the Congress to increase the Appropriation in fiscal year 2001 from $3.354 million to $5 million for fiscal year 2001.

PREPARED STATEMENT OF THE IZAAK WALTON LEAGUE OF AMERICA

On behalf of the Izaak Walton League of America and our 50,000 members and supporters nationwide, I am writing to provide testimony for the record regarding the fiscal year 2001 Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Bill. The League has a 78-year history of supporting sustainable agriculture and sound conservation of our nation's natural resources. Most of our 335 chapters are located in rural areas and a great many of our members farm as a way of life. Accordingly, our organization takes a keen interest in the funding levels provided for natural resource conservation programs administered by the U.S. Department of Agriculture.

The subcommittee has, as always, a daunting challenge in allocating federal dollars among a variety of agencies and many worthwhile programs. At the same time, we strongly believe that the federal programs highlighted below are especially deserving of increased funding levels:

—*Wildlife Habitat Improvement Program (WHIP).*—The WHIP program, authorized under the 1996 Farm Bill, provides cost-sharing assistance to producers who voluntarily undertake efforts to restore and maintain habitat for fish and wildlife on their land. Unfortunately, the tremendous potential benefits from this program have been substantially unrealized due to lack of funding. We fully support the administration's requested funding level of $50 million and strongly urge the subcommittee to make this funding available in fiscal year 2001.

—*Environmental Quality Incentives Program (EQIP).*—EQIP provides technical, educational and financial assistance to farmers and ranchers seeking to minimize and mitigate adverse ecological impacts associated with their present agricultural practices, such as controlling soil erosion or reducing runoff of animal wastes into streams. Many producers want to be better stewards of the land and simply need sound advice and assistance to implement the necessary changes in their operations. The League supports the requested increase of $151 million over fiscal year 2000 enacted levels and encourages the subcommittee to appropriate $325 million for EQIP.

—*Farmland Protection Program (FFP).*—Conversion of agricultural lands into commercial or residential developments is a significant and growing problem throughout the nation. The FPP is designed to arrest this problem by providing matching funds to state, local and tribal governments to permanently protect agricultural lands. We firmly believe that at least $65 million in fiscal year 2001 is needed to help preserve agricultural production capacity, open space, family farms and viable rural communities.

—*Wetlands Reserve Program (WRP).*—Wetlands are one of the most important ecosystem types that exist in the U.S., providing essential habitat to an incred-

ibly wide variety of fish and wildlife species. Unfortunately, half of the wetlands in the lower 48 states have been lost, much of it to conversion to cropland. WRP provides payments to landowners that voluntarily retire converted wetlands from production, restore wetland characteristics and protect it through long-term or permanent easements. The League urges the subcommittee to provide at least $286.1 million for WRP in fiscal year 2001 and supports eliminating the current enrollment cap of 975,000 acres in order to allow up to 210,000 additional acres to be enrolled in fiscal year 2001.

—*Conservation Reserve Program (CRP).*—The CRP is undoubtedly one of the most successful conservation programs ever conceived. By paying farmers to retire highly erodible or other environmentally sensitive land from production for 10 years, CRP has significantly reduced soil erosion, improved water quality and provided critical wildlife habitat to a variety of game and non-game species. The League fully supports the administration's requested funding level of $126.7 million for CRP and other reimbursements, as well as increasing the current enrollment cap by 3.6 million acres (40 million acres in total).

The stewardship of our natural resources, protection of environmental quality and the preservation of the family farming and ranching community within the fabric of American society not only provides incalculable benefits for the current generation, but also insures for the prosperous future of generations yet to come. We firmly believe that these funding levels are not only realistic, but also vital to the success of accomplishing these important objectives.

In closing, I wish to thank you for your thoughtful consideration of these views. As the appropriations process moves forward, the League looks forward to working with you and your staff to insure conservation of the nation's natural resources and preservation of our outdoor heritage. If you have any questions or require additional information, please contact me at (301) 548–0150, ext. 225.

PREPARED STATEMENT OF THE JOSLIN DIABETES CENTER

INTRODUCTION

Mr. Chairman, thank you for this opportunity to submit a statement for the public witness hearing record. The subject of this short statement is the continued funding in fiscal year 2001 for the Diabetes Project in the Extension Service of CREES. We have developed a plan for fiscal year 2001 that will require $975,000. This includes costs of Federal Administration, participation expenses of the states of Washington and Hawaii, and the personnel, equipment and associated costs of Joslin Diabetes Center within the total cost of the program.

Fiscal year 2000 background

I would like to express Joslin Diabetes Center's sincere appreciation to you and your colleagues for your leadership in the fiscal year 1999 and fiscal year 2000 appropriations process in providing $550,000 for each year toward the Diabetes Project. We know you faced difficult decisions concerning funding priorities. We feel that your allocation of these funds indicates that you share the vision of the growing community role and organizational flexibility of the Extension Service in the 21st Century.

Joslin and Extension personnel are implementing the fiscal year 1999 program. Extension Service officials characterized the concept as a "win-win" program during the first meeting. Extension Service officials continue to embrace the concept of utilizing components of Extension's national partnership infrastructure for a pilot program with Joslin. The National Diabetes Education Program (NDEP), a joint program of the Centers for Disease Control (CDC) and the National Institutes of Health (NIH), both part of the Department of Health and Human Services, are also involved as components of this project. Extension officials recognized that Joslin's non-invasive screening proposal, based on components of the Joslin Vision Network (JVN), brought an important new facet to the NDEP and services to the rural health population. The addition of the Joslin pilot program is of particular importance in providing this new technology to minority rural residents, who suffer a much higher incidence rate than the national average.

We have signed a Memorandum of Understanding with the Federal Extension Service upon which to base the full-scale program. We have submitted a plan of action for year two and are incorporating some alterations suggested by both States and the Federal Extension personnel. When the revised plan is completed and approved by Washington Federal Extension, we will deploy the equipment for screening for diabetic retinopathy.

Fiscal year 2001 plan

For fiscal year 2001, the mission and objectives for the state pilot program remain the same as for fiscal year 1999 and fiscal year 2000. We are just now implementing the first year of activities, due to the relatively late obligation dates of the USDA/Extension grant process. We did not receive fiscal year 1999 funding until October 1999. We are planning to process fiscal year 2000 funds shortly, and accomplish all tasks before October 1, 2000.

The following will be accomplished by October 1, 2000:

—Training of Washington and Hawaii Extension personnel in equipment use will have taken place;

—deployment of the diabetes non-invasive screening portion of the project will be completed;

—educational materials will have been circulated for the specific target populations of Washington and Hawaii;

—coordination with the NDEP and local and State health officials to handle referrals will have been established; and

—preliminary baseline comparisons will have been completed for the first year's operational phase.

The evaluation of the two-year performance, compared with baseline data, will yield the results of the introduction of the advanced technology and the advanced medical care and prevention techniques that are the subject of this project. When similar testimony is provided to the Committee next year, we hope to have preliminary findings to report to you on this investment in American rural health and the cooperative partnership between the Extension Service and Joslin Diabetes Center.

Mr. Chairman, this concludes my brief statement. We are submitting a detailed budget for the fiscal year 2001 funds of $975,000 we are seeking to the Extension Service for their review. If you or the Committee have any questions concerning this project, we would be pleased to meet and discuss the details.

Mr. Chairman, thank you again for your efforts in fiscal year 2000. The Extension Service and Joslin Diabetes Center appreciate your confidence in our capabilities and your focus on the improvement of the quality of life in rural America. We respectfully request continued funding of $975,000 in fiscal year 2001 to fully demonstrate the benefits and potential national returns that can be derived from this pilot project.

PREPARED STATEMENT OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Metropolitan Water District of Southern California (MWD) appreciates the opportunity to submit testimony regarding the U.S. Department of Agriculture's (USDA) fiscal year 2001 budget, for the Hearing on Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations. MWD is a public agency created in 1928 to meet supplemental water demands of those people living in what is now portions of a six-county region of southern California. Today, the region served by MWD includes 16 million people living on the coastal plain between Ventura and the international boundary with Mexico. It is an area larger than the State of Connecticut and, if it were a separate nation, would rank in the top ten economies of the world.

Included in our region are more than 225 cities and unincorporated areas in the counties of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura. We provide more than half the water consumed in our 5,200-square-mile service area. MWD's water supplies come from the Colorado River via the district's Colorado River Aqueduct and from northern California via the State Water Project's California Aqueduct.

INTRODUCTION

MWD continues to favor USDA implementation of conservation programs, and is especially encouraged by the new actions identified in the recently released Clean Water Action Plan. The Clean Water Action Plan fosters integration of efforts by USDA, the U.S. Environmental Protection Agency, and other federal agencies to improve water quality. MWD firmly believes that inter-agency coordination along with cooperative conservation programs, that are incentive-based and facilitate the development of partnerships are critical to addressing natural resources concerns, such as water quality degradation, wetlands loss and wildlife habitat destruction. It is vital that Congress provide USDA with the funding necessary to successfully carry out its commitment to natural resources conservation.

Our testimony focuses on USDA's conservation programs that are of major importance to MWD. In particular, MWD urges your full support for funding for USDA's Environmental Quality Incentives Program (EQIP). Full funding for this program is essential for achieving Colorado River Basin salinity control objectives through the implementation of salinity control measures as part of EQIP. In addition, MWD requests your full support for the Wildlife Habitat Incentives Program, Conservation Reserve Program, and Wetlands Reserve Program. Sufficient federal funding for these USDA programs is necessary to achieve wildlife habitat restoration and source water quality protection objectives in the Colorado River Basin and in California's Sacramento/San Joaquin Bay-Delta (Bay-Delta) estuary.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

The Environmental Quality Incentives Program provides cost-sharing and incentive payments, technical assistance and educational assistance to farmers and ranchers for the implementation of structural practices (e.g., animal waste management facilities, filterstrips) and land management practices (e.g., nutrient management, grazing management) that address the most serious threats to soil, water and related natural resources. EQIP is to be carried out in a manner that maximizes environmental benefits per dollar expended. This assistance is focused in conservation priority areas identified by the Natural Resources Conservation Service's State Conservationists, in conjunction with state technical committees and Farm Service Agency personnel. MWD does have some concern with respect to this aspect of EQIP. Beginning with the first full year of EQIP funding in 1997, USDA's participation in the Colorado River Salinity Control Program has significantly diminished. The mechanism by which funding has been allocated by USDA to date inherently overlooks projects for which benefits are interstate and international in nature. Clearly, Colorado River salinity control has benefits that are not merely local in nature, but continue downstream and EQIP as it is currently administered by USDA does not adequately fund national priorities. MWD supports the recommendation of the Colorado River Basin Salinity Control Forum as a way to remedy this situation. In Public Law 104–127, Congress amended the Colorado River Basin Salinity Control Act to direct the Secretary of Agriculture to carry out salinity control measures in the Colorado River Basin as part of EQIP. Sufficient federal funding for implementation of EQIP is critical in order to achieve Colorado River Basin salinity control objectives as well as source water quality protection and ecosystem restoration objectives in the Bay-Delta estuary and watersheds tributary to the Bay-Delta.

The Colorado River is a large component of Southern California's regional water supply and its relatively high salinity causes significant economic impacts on water customers in MWD's service area, as well as throughout the Lower Colorado River Basin. MWD and the Bureau of Reclamation completed a Salinity Management Study for Southern California in June 1999. The first phase of the study (completed in February 1997) concluded that the high salinity from the Colorado River causes significant impacts to residential, industrial and agricultural water users. Furthermore, high salinity adversely affects the region's progressive water recycling programs, and is contributing to an adverse salt buildup through infiltration into Southern California's irreplaceable groundwater basins. In April 1999, Metropolitan's Board of Directors authorized implementation of a comprehensive Action Plan to carry out Metropolitan's policy for management of salinity. The Action Plan focuses on reducing salinity concentrations in Southern California's water supplies through collaborative actions with pertinent agencies, recognizing that an effective solution requires a regional commitment. Metropolitan, the Association of Groundwater Agencies, the Southern California Association of Publicly Owned Treatment Works, and the WateReuse Association of California have executed a Memorandum of Understanding agreeing to the formation of a Salinity Management Coalition. Based on a 1988 study, Reclamation estimated that water users in the Lower Basin were experiencing in excess of $750 million in annual impacts from salinity levels in the river in 1995, and that impacts would progressively increase with continued agricultural and urban development upstream of California's points of diversion. As part of the Salinity Management Study, the economic impacts have been refined for MWD's service area and have been submitted to Reclamation for its use in updating its Lower Basin estimate. Droughts will cause spikes in salinity levels that will be highly disruptive to Southern California water management and commerce. The Salinity Control Program has proven to be a very cost-effective approach to help to mitigate the impacts of higher salinity. Adequate federal funding of the program is essential.

The Colorado River Basin Salinity Control Forum (Forum), the interstate organization responsible for coordinating the Basin states' salinity control efforts, issued

its 1999 Review, Water Quality Standards for Salinity, Colorado River System (1999 Review) in June of 1999. The 1999 Review found that additional salinity control was necessary with normal water supply conditions beginning in 1994 to meet the numeric criteria in the water quality standards adopted by the seven Colorado River Basin states and the U.S. Environmental Protection Agency. For the last seven years (1994–2000), funding for USDA's salinity control program has not equaled the Forum-identified funding need for the portion of the program the Federal Government has the responsibility to implement. It is essential that implementation of Colorado River Basin salinity control efforts through EQIP be accelerated to permit the numeric criteria to be met again under average annual long-term water supply conditions, making up the shortfall. The Basin states and farmers stand ready to pay their share of the implementation costs of EQIP.

The President's proposed fiscal year 2001 budget contains program funding of $350 million for implementation of EQIP through financing provided by the Commodity Credit Corporation. MWD supports this level of EQIP funding. The Forum has determined that allocation of $12 million in EQIP funds in fiscal year 2001 is needed for on-farm measures to control Colorado River salinity. This level of funding is necessary to meet the salinity control activities schedule to maintain the state adopted and federally approved water quality standards.

MWD also supports the proposed level of funding for Conservation Technical Assistance (CTA) included within the Natural Resources Conservation Service's (NRCS) Conservation Operations Program. Conservation technical assistance provides the foundation for implementation of EQIP and other conservation programs. We are pleased that the CTA budget includes $87 million in funding to assist Animal Feeding Operations (AFO) in reducing their water quality impacts. AFOs are a potential source of Cryptosporidium, a pathogen that is only partially removed by conventional drinking water treatment technology. Minimizing loadings at the source is important to ensure safe and healthy drinking water supplies.

MWD urges you and your Subcommittee to support full funding for EQIP and NRCS CTA as requested in the President's fiscal year 2001 budget for USDA, with the specific designation of EQIP funds to the Salinity Control Program. MWD also recommends that the Colorado River Basin be designated as a national priority area for salinity control.

WILDLIFE HABITAT INCENTIVES PROGRAM

The Wildlife Habitat Incentives Program (WHIP) is a voluntary program, providing technical assistance and cost-sharing, to help landowners develop habitat on their properties that will support wetland wildlife, upland wildlife, threatened and endangered species, fisheries, and other types of wildlife. WHIP offers an opportunity to encourage development of improved wildlife habitat on eligible lands by providing assistance to landowners who wish to integrate wildlife considerations into the overall management of their operations.

WHIP cost-sharing assistance could be utilized to support ongoing interim conservation efforts both in the Bay-Delta estuary and for the Lower Colorado River Multi-Species Conservation Program. The CALFED Bay-Delta Program is a cooperative effort among state and federal agencies and the public to develop a long-term, comprehensive solution to ecosystem and water supply problems in the Bay-Delta. One of the main objectives of the CALFED Bay-Delta Program is to improve and increase aquatic, wetland and riparian habitats so that they can support sustainable populations of wildlife species, by implementing a system-wide ecosystem restoration approach. WHIP could benefit this program by providing cost-share assistance for the development of wildlife habitat on private lands in the Bay-Delta watershed.

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) is a broad-based partnership of state, federal and private entities in Arizona, California, and Nevada. Participants include water, hydroelectric power and wildlife resource management agencies, Tribal governments, and environmental organizations with interests in the Lower Colorado River. The LCR MSCP is focusing on the conservation of over 70 threatened, endangered and sensitive species and their habitats. WHIP would allow the combination of federal cost-sharing dollars and voluntary agricultural land-use practices to enhance habitat for listed and sensitive species of interest in the Lower Colorado River. This could be a valuable vehicle for gaining further agricultural support for conservation efforts and the goals of the LCR MSCP.

The President's budget requests $50 million for WHIP for fiscal year 2001. MWD recommends that you and your Subcommittee support continued funding of WHIP at the level requested in the President's fiscal year 2001 budget for USDA.

CONSERVATION RESERVE PROGRAM

Continued support for the Conservation Reserve Program (CRP) is necessary in order to build on the past successes of this USDA conservation program. Under the CRP, incentive payments are provided to producers to remove highly erodible and other environmentally sensitive land from production. This program helps protect the quality of drinking water supplies and facilitates ecosystem restoration efforts by reducing soil erosion, improving water quality, protecting wildlife habitats, and achieving other natural resource conservation measures. The Conservation Reserve Enhancement Program and National Conservation Buffer Initiative will further encourage enrollment of high environmental-value acreage. We are pleased that the fiscal year 2001 budget provides financial incentives of up to $125 million annually for producers who enroll in CRP continuous signup programs such as these.

Enrollment of eligible agricultural lands that are located in the Bay-Delta estuary and tributary watersheds in the CRP, could provide water quality improvement benefits for this important source of drinking water. We note, however, that the method which determines the rental rate for CRP enrollments effectively precludes the enrollment of much irrigated agricultural land and land with high value crops. As a result, states in the arid west do not benefit from the CRP in proportion to their contribution to agricultural production. While MWD urges you and your Subcommittee to support the President's budget request for the CRP of $1.742 billion for fiscal year 2001, we also strongly request that you review the method for rental rate determination.

WETLANDS RESERVE PROGRAM

The Wetlands Reserve Program (WRP), first authorized in 1990, is a voluntary program providing incentives to landowners for the restoration and protection of wetlands with long-term or permanent easements. Wetlands restoration provides important water quality improvement and wildlife habitat restoration benefits that are important to the Bay-Delta estuary. MWD urges you and your Subcommittee to support appropriation of $286 million for the WRP in fiscal year 2001, as requested in the President's budget. We further support the removal of the acreage cap and the proposal to enroll 250,000 acres annually.

CONCLUSION

Thank you for your consideration of our testimony. We believe our comments emphasize the importance of continued funding for USDA's agricultural conservation programs. The USDA's conservation programs are critical for achieving Colorado River Basin salinity control objectives, as well as broader wildlife habitat restoration and source water quality protection objectives in the Colorado River Basin and the Bay-Delta estuary.

PREPARED STATEMENT OF THE MINOR CROP FARMER ALLIANCE

The Minor Crop Farmer Alliance (MCFA) is a coalition of individual firms and organizations representing agricultural producers who grow and market minor-use agricultural commodities or utilize minor-use materials. MCFA was organized in 1991 to address industry concerns about pesticide manufacturers' voluntary cancellation of agricultural pesticides and the accelerating loss of important crop protection tools. MCFA's primary focus today is implementation of the Food Quality Protection Act (FQPA). Over 100 organizations representing the majority of our nation's fruit and vegetable producers support MCFA's efforts.

INTRODUCTION

The U.S. Environmental Protection Agency's (EPA) implementation of FQPA may result in the phase-out of many of the most important pesticides used in the minor-use industry. Those industries provide the majority of fruits and vegetables consumed in the United States. The minor-use industry is gravely concerned that EPA will unnecessarily cancel pesticides that are essential for the production of those crops. It is imperative that adequate research and pest management programs be made available to lessen the potential devastating impact of FQPA implementation.

USDA has a critical role in the implementation of FQPA. It provides input to EPA in the development of policies, the conduct of risk assessments, and the impact of EPA's decisions on agriculture, including the minor-use community. It is vital to the long-term well-being of this nation's agricultural industry that USDA meet the chal-

lenges presented by FQPA, and that it fully participate in the FQPA implementation program.

MCFA appreciates the opportunity to comment on the U.S. Department of Agriculture's (USDA) appropriations for fiscal year 2001. Our testimony focuses on USDA programs that are involved in the FQPA implementation process, including, but not limited to, providing critical data for fair and reasonable assessment of pesticides and conducting important research that is needed to develop alternative pest management strategies.

SPECIFIC FUNDING REQUEST

MCFA strongly supports full funding for the following programs intended to facilitate fair FQPA implementation, and to offset its anticipated negative impact on minor-use industries.

—$14 million for the Pesticide Data Program (PDP) administered by the Agricultural Marketing Service;

—$3.2 million for the National Agricultural Statistics Service pesticide-usage surveys;

—$2.6 million for the Office of Pest Management Policy administered by the Agricultural Research Service;

—$12.2 million for the Integrated Pest Management Research Grant Program administered by the Cooperative State Research, Extension and Education Service (CSREES); and

—$18 million for the Pesticide Impact Assessment Program, Crops at Risk and Risk Avoidance and Mitigation Program also administered by CSREES.

Members of the Minor Crop Farmer Alliance include the following organizations and firms:

A Duda & Sons, Alger Farms, American Dehydrated Onion & Garlic, American Farm Bureau Federation, American Mosquito Control Association, American Nursery and Landscape Association, American Seed Association, Atlantic County Board of Agriculture, Brewster Heights Packing, California Ag Issues Forum, California Avocado Commission, California Canning Peach Association, California Cherry Advisory Board, California Citrus Mutual, California Citrus Quality Council, California Cut Flower Commission, California Farm Bureau Federation, California Fig Advisory Board, California Grape & Tree Fruit League, California Pistachio Commission, California Prune Board, California Seed Association, California Strawberry Commission, California Tree Fruit Agreement, Cherry Marketing Institute, Consumer Produce Company, Cranberry Institute, D'Arrigo Brothers, DeBruyn Produce Company, Del Monte Foods, Diamond Produce, Dried Fruit Association of California, Florida Citrus Mutual, Florida Citrus Packers, Florida Farm Bureau Federation, Florida Nurserymen & Growers Association, Florida Fruit & Vegetable Association, Frank Capurra & Sons, Fresh Produce & Floral Council, Grower Shipper Vegetable Association of Central California, Hillsborough County Farm Bureau (Florida), Holden Wallace, Inc., Idaho Potato Commission, Interstate Fruit & Vegetable Company, Lee County Mosquito Control District, Major Farms, McManus-Wyatt-Hidalgo Produce Marketing Company, Merrill Farms, Michigan Asparagus and Plum Advisory Board, Michigan Celery Promotion Cooperative, Inc., Michigan Farm Bureau, Michigan Onion Committee, Michigan Vegetable Council, National Christmas Tree Association, National Council of Farmer Cooperatives, National Food Processors Association, National Onion Association, National Potato Council, National Watermelon Association, New York State Vegetable Growers Association, North American Strawberry Growers Association, North Central Washington Fieldman's Association, Northwest Food Processors Association, Northwest Horticultural Council, Ocean Mist Farms, Ocean Spray, Ohio Fruit Growers Society, Ohio Vegetable & Potato Growers Association, Oregon Raspberry & Blackberry Commission, Ostrom Farms, Pacific Coast Canned Pear Service, Pacific Seedmen's Association, Processed Tomato Foundation, Pear Advisory Board, Pear Bureau Northwest, Produce Marketing Association, R.C. Farms, Rio Grande Okra Sales, Inc., Rio Queen, Inc., Robert Ruiz, Inc., Roses Inc., Society of American Florists, SoilServ, Inc., South Carolina Tomato Growers Association, Starr Produce Company, Tanimura & Antle, Inc., Texas Citrus Mutual, Texas Nursery & Landscape Association, Texas Produce Association, Texas Vegetable Association, Tree Top, Inc., U.S. Apple Association, U.S. Canola Association, U.S. Hop Industry Plant Protection Committee, United Fresh Fruit and Vegetable Association. USA Dry Pea & Lentil Council, Val Verde Vegetable Company, Valley Fruit & Vegetable Company, Virginia Farm Bureau Federation, Washington Hop Commission, Washington State Horticultural Association, Washington State Potato Commission, Western Growers Association, Western Washington Farm

Crops, Wiesehan Farms, Inc., Wild Blueberry Commission of Maine, Wisconsin Ginseng Growers Association, and Yakima Pomological Club.

PREPARED STATEMENT OF MISSISSIPPI STATE UNIVERSITY

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to submit this testimony on behalf of the Coalition of EPSCoR States[1] regarding the U.S. Department of Agriculture Experimental Program to Stimulate Competitive Research (USDA EPSCoR). USDA EPSCoR is extremely important to agricultural research in the state of Mississippi and in our nation. I appreciate the opportunity to submit this testimony.

I would also like to extend my appreciation to you, Mr. Chairman, for your strong support of USDA EPSCoR. This important program is having a significant impact in Mississippi and in the other USDA EPSCoR states. Your support and the support of this Subcommittee have been absolutely crucial in establishing and maintaining this important program. Mr. Chairman, those of us committed to improving Mississippi's research and development capability deeply appreciate your support and your effort. Thank you for your fine work representing Mississippi in the United States Senate.

Seven federal agencies have EPSCoR or EPSCoR-like programs, including USDA. EPSCoR works to improve our country's science and technology capability by funding activities of talented researchers in states that have historically not received significant federal R&D funding. USDA EPSCoR was established in fiscal year 1992 with a goal of increasing the amount of agricultural research at academic institutions within states that have received limited competitive funding from USDA.

The Mississippi EPSCoR program began in 1988 with the naming of the state EPSCoR Committee by the Governor. Mississippi EPSCoR obtained its first funding in 1989 from USDA EPSCoR's sister program in the National Science Foundation. Since that time, EPSCoR has had an enormously positive impact within the state and at the four research institutions and their affiliates.

Because of the multi-institutional framework of EPSCoR and of the commitment of the state EPSCoR Committee to creating a critical mass of scientists and engineers around specific issues as well as a more fully developed statewide infrastructure, Mississippi EPSCoR has produced a stronger, more competitive research community and closer working relationships among the institutions that participate in the federal EPSCoR programs: Jackson State University, Mississippi State University, the University of Mississippi, the University of Southern Mississippi, and the University of Mississippi Medical Center.

Mr. Chairman, USDA EPSCoR is helping to improve the quality and competitiveness of agriculture research in Mississippi. Since the program was established in 1992, a number of Mississippi researchers have received USDA EPSCoR Strengthening Awards. These investigators have been located at Mississippi State University, the University of Mississippi Medical Center, and the University of Southern Mississippi.

Important examples of Mississippi's research include studies in such areas as: kenaf processing, which is a potential economic opportunity for rural states; rapid detection of E coli, an important factor in food safety; and disease mechanisms in channel catfish, which impacts a significant cash crop across the southern part of the country. These projects and many, many others address issues important to rural states and to the rest of the nation. USDA EPSCoR allows researchers across our country to contribute to our economy and our agricultural research knowledge base.

USDA EPSCoR states are those whose funding ranks no higher than the 40th percentile of all states, based on a three year rolling average, but excluding strengthening set-aside funds. For fiscal year 2000, the following states are eligible: Alaska, Arkansas, Connecticut, Delaware, Hawaii, Idaho, Kentucky, Maine, Mississippi, Montana, Nevada, New Hampshire, New Mexico, North Dakota, Rhode Island, South Carolina, South Dakota, Vermont, West Virginia, Wyoming, and the Commonwealth of Puerto Rico. Let me stress that EPSCoR relies on rigorous merit review in order to ensure that it funds only high-quality research.

USDA makes four types of competitive awards through USDA EPSCoR: Research Career Enhancement Awards, Equipment Grants, Seed Grants, and Strengthening Standard Research Project Awards. Proposals must be related to the program prior-

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[1] Alabama, Alaska, Arkansas, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, North Dakota, Oklahoma, Puerto Rico, South Carolina, South Dakota, Vermont, West Virginia, and Wyoming.

ities of the National Research Initiative Competitive Grants Program, which address critical issues facing agriculture today.

—Research Career Enhancement Awards help faculty enhance their research capabilities by funding sabbatical leaves. Applicants may not have received a NRICGP competitive research grant within the past five years.

—Equipment Grants strengthen the research capacity of institutions in USDA EPSCoR states. The grant cannot exceed 50 percent of the cost of the equipment, or $50,000, whichever is less. The principal investigator for this grant is responsible for securing non-Federal matching funds.

—Seed Grants enable researchers to collect preliminary data in preparation for applying for a standard research grant. Seed Grant awards are limited to a total cost of $75,000, including indirect costs, for two years and are non-renewable. Applicants must indicate how the research will enhance future competitiveness in applying for standard research grants.

—Strengthening Standard Research Project Awards fund standard research projects of investigators who have not received a NRICGP grant within the past five years.

Through USDA EPSCoR, Mississippi and the other USDA EPSCoR States contribute more effectively to our nation's science and technology capability, and help provide our country with needed, high-quality, peer-reviewed research. This program allows all regions of our country to contribute to our nation's science and technology capability while allowing flexibility to meet regional research needs. USDA EPSCoR is a sound investment of taxpayer dollars.

Mr. Chairman, the Subcommittee has for several years directed USDA to set aside 10 percent of USDA NRICGP funds for USDA EPSCoR. Those funds have provided significant opportunity and significant success in Mississippi and the other EPSCoR states. I request that the Subcommittee once again include report language directing USDA to set aside 10 percent of its NRI competitive grant funds in fiscal year 2001 for an EPSCoR program. These funds will allow the EPSCoR states to continue providing for the agricultural research needs of rural America and of our nation.

I thank the Subcommittee for the opportunity to submit this testimony.

PREPARED STATEMENT OF THE NATIONAL AGRICULTURAL AVIATION ASSOCIATION

The National Agricultural Aviation Association requests that the Subcommittee on Agriculture, Rural Development, Food and Drug Administration and Related Agencies of the Senate Appropriations Committee include a line item of $1.3 million in its fiscal year 2001 Agricultural Spending Bill for the USDA—Agricultural Research Service's (ARS) Aerial Application Technology Program in College Station, Texas. This program is of tremendous value to agriculture and the environment.

Aerial application is a vital service for America's farmers enabling them to produce a safe, abundant and affordable supply of food and fiber for the nation and the world. Aerial application accounts for about 25 percent of crop protection spray applications and nearly 100 percent of forest protection applications. It also is used to protect human health from the spread of airborne viruses and disease. Furthermore, aerial application permits large areas to be covered rapidly, thus ensuring timely and effective applications. When soil conditions and crop foliage prohibit the use of ground machines, aerial application is the only feasible method of treating crops.

The Aerial Application Technology Program at College Station Texas is nationally recognized for conducting innovative research to make aerial application more efficient, effective and precise. Technologies have been developed at the facility that significantly mitigates spray drift and enables less crop protection product to be used more effectively. The continued implementation of environmental safeguards in which the agricultural industry must comply, coupled with the necessity of aerial application for American agriculture, underscores the need to augment the efforts of the USDA—ARS Aerial Application Technology Program where research supporting this balance is conducted. The $1.3 million line-item in the fiscal year 2001 Agricultural Spending Bill will ensure that valuable aerial application technology research continue at the ARS College Station, Texas facility.

Increased research funding for the Aerial Application Technology Program is supported by a large and diverse coalition of agricultural groups that recognize the important role the Program plays in safely and effectively contributing to our nation's agricultural producers. These groups include the Agricultural Retailers Association, the American Crop Protection Association, the American Farm Bureau Federation, the American Sugarbeet Growers Association, the National Association of Wheat

Growers, the National Corn Growers Association, the United Fresh Fruit and Vegetable Association, and the U.S.A. Rice Federation.

We appreciate your consideration of this important issue.

PREPARED STATEMENT OF THE NATIONAL ALLIANCE FOR FOOD SAFETY

Thank you, Chairman Cochran and members of the Agriculture Appropriations Subcommittee for the opportunity to share with you information about the National Alliance for Food Safety. My name is Lonnie King and I am the chairman of the NAFS.

Food safety issues present us with complex and difficult challenges—shifting demographics, growing susceptible populations, changing production systems, new emerging pathogens, changes in the nature of foods, increasing importation of foods, and shifting dietary preferences. All these challenges have combined to inextricably change the landscape for both our food system and our food safety system.

In an effort to address the difficult and complex issues of ensuring a safe food supply, different strategies, alliances and essentially different ways of working will be needed to produce sustainable progress and useful results. Based on this national need, the concept of a broad-based, integrated partnership for research and education arose in the form of the NAFS.

The National Alliance for Food Safety—A Partnership for the Science of Safe Food—was established for the purpose of creating research and education programs that address issues and problems in food safety. The activities of the NAFS are oriented toward enhancement of public health and prevention of foodborne illness in response to the emergence of food safety as a prominent area of concern for the American public in recent years.

Twenty-five universities have joined with the Agricultural Research Service to comprise NAFS so that the organization may make the most efficient use of available resources. The work of the NAFS pursues this mission: to continually improve the safety of our food supply to ensure the public's health and to enhance our national and international food systems.

The NAFS represents a collective of over 500 researchers and scientists who offer an unprecedented portfolio of products, services, and expertise in research and educational programs. The NAFS also represents a new operative built on the philosophy of creative collaboration. This collaboration is enhanced through the many disciplines and areas of expertise of the scientists. In addition, the diversity of the Alliance's member institutions is a unique and compelling strength. This diversity enables researchers to compare and contrast a wide variety of production systems and climatic and environmental conditions across the U.S.

The partnering institutions strongly believe that together we will: help formulate and focus on the top research priorities; prevent duplication of effort; form synergies through multidisciplinary and cross-university food safety teams and centers of expertise; and, align our outstanding and substantial resources, facilities, and intellect toward a national, integrated research and educational blueprint directed at the assurance of a safe food supply. Finally, the NAFS will also assure the highest applicability of its activities to resolving critical food safety problems of greatest national need and delivering products, services, and information of the highest scientific merit

The NAFS membership stretches from coast to coast. Its member universities are Clemson University, Cornell University, Georgetown University, Iowa State University, Kansas State University, Michigan State University, Mississippi State University, North Carolina State University, North Dakota State University, Pennsylvania State University, Purdue University, Texas A&M University, University of Arkansas, University of California-Davis, University of Florida, University of Georgia, University of Idaho, University of Illinois, University of Maryland-College Park, University of Maryland-Eastern Shore, University of Nebraska, University of Tennessee, University of Wisconsin, Virginia Tech University and Washington State University. These universities have bound themselves together with the Agricultural Research Service around the common goal of ensuring the safest possible food supply for the consumer.

The member universities bring to the NAFS a strong base of scientific expertise in food safety with several components. The members use their respective components to form the basis for collaborations with their counterparts at other universities and at ARS. The geographical diversity of the NAFS members provides for a mix of climatic conditions, soil and vegetation types and farm and handling practices representative of the whole nation.

The role of the NAFS is to use its capacity to foster strong working partnerships to deal with food safety issues. No single research and education establishment in the nation has the intellectual capacity nor the infrastructure to address the problem in its entirety. Working as partners, the members of NAFS can bring sophisticated problem-solving research activity to food safety questions unmatched by any other entity.

The NAFS has begun its work with the recent request for proposals from its members. The Agricultural Research Service received a fiscal year 2000 appropriation increase for cooperative research with NAFS member institutions for food safety research on E. coli O157:H7 and Listeria monocytogenes. Collaboration among NAFS and ARS scientists was a requirement for all successful proposals. Strong encouragement was given toward the submission of proposals of collaborations among multiple NAFS members and ARS scientists.

The NAFS looks to the long term for opportunities to use its capabilities. Its research strengths center on several commodities: muscle foods, minimally processed foods, fruits, vegetables, dairy products, cereals and grains, aquaculture, seafood and egg products. NAFS members' expertise is in disciplines including epidemiology, toxicology, risk assessment, microbiology, virology, medicine, clinical research and health outcomes.

Research priorities for NAFS include isolation and detection methodology, surveillance, emerging pathogens, traceback of hazards, risk analysis and modeling, rapid methods of pathogen detection, antimicrobial resistance, methods of pathogen reduction, intervention strategies, mechanisms of pathogenicity and food toxicology.

The goal of NAFS is to initiate food safety projects assuring the highest applicability to food safety problems and being of the highest scientific merit. The specific goals and objectives of the NAFS are to:

—Meet the emerging food safety needs of industry in the areas of food production, processing, transportation, retail and food service;

—Address global issues in food safety related to the international marketing of U.S. agricultural products and enhance the safety of foods imported into the United States;

—Develop prevention and intervention strategies that will facilitate the continued production of healthy animals and safe plant-derived foodstuffs;

—Conduct research to enhance the safety of food products in the food service and retail environment, including market distribution;

—Communicate with the public regarding food safety research and implementation of technology for food products from production through the marketing chain to the consumer;

—Develop a framework for improving risk assessment and risk management information communication through a combination of resources including health, medical and epidemiological research programs;

—Increase our understanding of pathogens in the environment and food, including their prevalence, survival and adaptability under various conditions, and emergence of virulent strains;

—Address issues such as the role of food animals in the development of antibiotic resistant human pathogens.

NAFS is now functioning with the support of funds made available last year through ARS. Collaborators from several NAFS universities and ARS are responding to calls for new research initiatives. This support from Congress has been a vital first step in the life of NAFS. NAFS respectfully requests continued support from Congress so that it may expand its work to cover the many areas listed above.

The National Alliance for Food Safety requests $5 million for fiscal year 2001. We strongly urge the Congress to approve this step toward the maturity of NAFS as a research organization as NAFS pursues its mission.

The NAFS contains the necessary elements to avoid duplications of effort and to encourage well-organized teamwork. The Agricultural Research Service, working as a full partner, promises to be a valuable asset toward the success of NAFS. The members believe that their collaborations will result in a credible response to the congressional call for greater cooperation and elimination of redundancy in scientific research. The NAFS, with one of the most potent arrays of research institutions assembled toward achievement of a common goal, pledges continued careful and credible use of food-safety research funds allocated to the academic and government agency sectors.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF STATE UNIVERSITY AND LAND-GRANT COLLEGES

INTRODUCTION

From Alaska to Puerto Rico, scientists, educators and extension personnel in 106 Land-Grant colleges and universities across America have a unique partnership with the Department of Agriculture's Cooperative State Research, Education and Extension Service (USDA/CSREES). This partnership makes it possible to address critical national issues at the local level. We are requesting an increase of $191 million over fiscal year 2000. Below is a table highlight the increased areas.

[In millions of dollars]

Funding highlights	
Base formula funds (Research and Extension)	50
National Extension Priorities	20
Native American and Hispanic Serving Institution funding	9
1890 Institution Facilities Improvements	3
National Research Initiative	30
Integrated Research, Extension, Education	43
International Science and Education Grant Program	8
Extension and Research Initiatives	13
Investment in Students	15
Total proposed increases over fiscal year 2000	191

With this investment, Land-Grant Institutions will be given the foundation to continue to make great strides in research and deliver important information from this research to the public. The following is divided into three sections. First, I describe the initiatives the Land-Grant System would like to continued from fiscal year 2000 not included in the above table. Second, I detail our goals within USDA/CSREES as reflected in the table. Finally, I explain the issue areas that cross across two or more federal agencies that the land-grant community needs funding in order to become full partners in ongoing projects which are also reflected in the above table.

INITIATIVES

Initiative For Future Agriculture And Food Systems

We envision a dynamic future agricultural science program to grow from the seed of this "New Initiative" into an exciting new "National Institutes of Agricultural Science model." This new approach will focus the nation's important scientific research, education and outreach into a unified architecture, similar to that performed by the NIH for the important human medical and other health related sciences. Currently, this funding is being used for research, extension or education grants to address critical emerging agricultural issues related to future food production, environmental protection, farm income and for activities carried out under the Alternative Agricultural Research and Commercialization Act of 1990. Priority is given to projects that are multi-state, multi-institutional, or multidisciplinary and to projects that integrate agricultural research, extension and education. Funds are awarded competitively to address priority mission areas related to food genome, food safety, food technology, human nutrition, new alternative uses and production of agricultural commodities and products, agricultural biotechnology, and natural resource management, including precision agriculture. We support continuation of this program in fiscal year 2001 at last year's level.

Fund For Rural America

No one can ignore the economic realities found in rural America today. The Fund for Rural America includes a component that provides for integrated research, education and extension to address the most pressing issues of rural America. The fund unites the many rural development efforts of the department into one strategy aimed at addressing the most pressing needs in rural America and improving the quality of life for these citizens. This research and extension component of the program helps communities use science to solve real world rural challenges—from conservation to hunger to farm profitability. We support continuation of this program in fiscal year 2001 at last year's level.

Investing in farmers and ranchers

As discussed in the earlier section on "Supporting partnerships to address national issues at the local level," there is a great need to invest in research and extension to assist all farmers and ranchers as they struggle through difficult economic times. Small and medium size farmers are facing some special challenges. Currently about 92 percent of American farms and ranches are classified as small or mid-sized with gross annual sales of less than $250,000. These operations account for approximately 34 percent of agricultural production. Small and mid-sized operations support small communities, local businesses, and produce innovations for agricultural enterprises. We cannot allow these operations to fail. There is a real need for risk management education and options as decision-making tools for farmers, ranchers, and their families. Annual one-time support payments must be replaced with programs to develop longer-term planning and management skills. Efforts are underway to strengthen Extension's ability to provide risk management education to farmers and ranchers searching for answers during this farm crisis. In addition, we propose the Food and Agricultural Policy Research Institute (FAPRI) and its consortium of related universities, be established as a Policy Research Center as envisioned under Section 224 of the Agricultural Research, Extension, and Education Reform Act of 1998 and Section 807 of the FAIR Act. FAPRI delivers a product, which is used regularly on a national basis and provides Congress and other decision makers with high quality, carefully reviewed, objective policy analysis.

Investing in Food Safety

In the U.S., 6.5 million cases of food-borne illness are reported each year, but the government estimates that there may be more than 33 million actual cases. The annual domestic cost of food-borne illness is estimated at $23 billion. Safe food depends upon broad-based understanding of the causes of food-borne illness, paths to prevention, and commitment to preventive practices employed by producers, processors, handlers and consumers. Better methods for analyzing available data and addressing any uncertainty among the public is critically needed. Research examining risk assessment, new emerging diseases, safety of food imports, new processing techniques, research on the actual causes and prevention of food-borne illnesses as well as education on how to handle food will not only save lives, but also save money. We support sustained funding to identify the critical points of food contamination through targeted research, extension, and education programs.

Investing in Nutrition

Capacity to learn and to contribute to society is traced directly to the quality of health and nutrition from prenatal status through adulthood. Assuring a healthy, well-nourished population required continuing efforts toward development of quality research information on nutrient function for maintenance of optimal health, understanding the availability and bio-availability of food for all population groups, especially those at greater risk for nutrition-related diseases, e.g., infants, elderly, new immigrant groups. Using foods to treat diseases is a major component of an active and progressive nutrition research program. Nutrition education incorporating this research is also needed. This education should include knowledge of how to secure foods to provide adequate nutrition to families with a commitment to dietary guidelines. Therefore, we support sustained funding for the Expanded Food and Nutrition Education Program.

Investing in the Environment

EPA and USDA have recently developed a draft, "Unified National Strategy for Animal Feeding Operations." In addition, federal legislation such as the Clean Water Act, state legislation and other administrative actions have addressed the issue of agricultural waste. There is an urgency to develop science-based practices and educational programs that address waste management challenges. Funding that allows universities to identify alternative technologies and practices for pesticide management, address water quality and soil nutrient management, and develop models of improved livestock waste management is vital and allows the Land-Grant University System, working with USDA and EPA, to make significant contributions.

Investing in Renewable Resources

Between five million and ten million private timberland owners turn to the Land-Grant University System as their main source for education information. With the loss of cutting rights in the West, private forest landowners will be under tremendous pressure to produce forest products for houses, furniture, paper, ect. These are products Americans use daily and the demand increases steadily. Today, ten percent

more timber is cut than grown. Education is needed to get landowners, particularly private landowners, to replant and protect their timber. The number of forest landowners increases each year; thus, the need for educational services increases. In order to protect our land and timber supply, we support significant increases to the Renewable Resources Extension Act.

Also, research and extension education is needed on grazing and pasturelands to fully utilize their renewable resources. Each year we rely on over 600 million acres of grazing and pastureland to provide 57 percent of the feed energy for the nation's single largest agricultural economic sector, livestock. Reduced cost of production is imperative for this industry to survive and compete. Fragmentation of once contiguous tracts of grazing and pasturelands, especially near urban and suburban settings, has increased the level of human disturbance; thus, amplifying the need for scientific solutions to biological, physical, and social issues.

Investing in Children, Youth and Families

The strength of much of American agriculture depends upon the family and associated community life. Major changes in the structure of agriculture (including consolidations of concentration) are threatening the community systems that support families and make rural life attractive. The viability of American agriculture requires investment in those systems that sustain quality family life. These systems include viable communities, schools, medical services, childcare, technology and jobs, to name a few. The Cooperative Extension Service programs in Land-Grant Universities deliver community-based programs that are designed to help children and their families solve many of their own problems. Highly successful programs address parenting skills, building family strengths, community leadership development, health and nutrition education, workforce education, positive youth development and more. Strong continuing support of successful programs as well as new innovations are needed.

Investing in New Markets and Quality Communities

Many Americans in both rural and urban communities continue to be significantly poorer, less healthy, and much more likely to suffer from the multiple challenges inherent in persistent economic, social, institutional, and equity capital in most rural communities and many urban centers. CSREES research, education and extension programs seek to enhance the quality of life in under-served communities through education and training (Quality Knowledge), research and development (Quality Information) and extension and outreach (Quality Place-Based Solutions to Local Real-World Challenges). Our goal is to build a bridge between rural and urban citizens and bring all Americans into the economic mainstream. To further the rural mission, the Land-Grant System proposes that the Rural Policy Research Institute (RUPRI) be funded as the National Rural Policy Research Institute through a new CSREES budget line item. This would provide RUPRI with the ongoing infrastructure to sustain and expand core operations and rural policy research capabilities. In addition, we propose an increase in funding to the four Regional Rural Development Centers throughout the country. These centers provide much needed research and education to decision makers in rural communities. Their services can address the changing economic infrastructure in rural America and facilitate leadership development programs for community leaders and elected officials that will help these public leaders address the difficult issues facing rural communities. Similarly, a major new investment is needed to address the economic and social infrastructure issues specific to impoverished urban and suburban populations to empower them to enter the mainstream of American life. Model research and extension programs currently addressing these urban problems need enhancement and replication across the nation.

CROSSCUTTING ISSUES

Investing in the 1890 and 1994 Land-Grant Institutions and other minority serving colleges

The 1890 and 1994 Land-Grant Universities, together with the Hispanic-Serving Institutions, comprise a unique and rich asset. These institutions with their multicultural depth enrich the research, extension and education programs of the Department. The focus on these institutions at this time is crucial. A primary goal of the Department is to improve minority access to USDA programs. Strengthening minority serving institutions and making them equal partners in the Land-Grant System are the key elements to accomplishing this goal. These universities need a significant boost in infrastructure investment to fully participate and compete for research, extension and education funding. Therefore, we are proposing a significant

increase in the appropriate funding mechanisms relevant to each group of these institutions.

Supporting partnerships to address national issues at the local level

The research, education and outreach that the Land-Grand System provides, should be an essential part of our response to the farm crisis. Emergency relief can help farmers in the short run, but in the long run, the diversity of our farm sector cannot survive without strong and unbiased research and development, produced and disseminated in a way that is accessible to producers on an unbiased basis. There are five areas in which the Land-Grant System can help farmers, ranchers and forest land owners succeed globally in the new century. These areas are: small farm competitiveness; marketing skills and technology; new product development; risk management education; and natural resource management. We strongly support increases in base funding for the Land-Grant System to continue and expand efforts to support farmers and ranchers.

Investing in students

The changing structure of American agriculture in a global economy, the major and rapid advances in genomics and biotechnology, shortages of skilled labor, and the growing economic gap between small and mid-sized farms and large corporate entities require important changes in education for those who produce and process food and fiber. Funding must be available to enable universities to broaden their curricula; promote faculty development; strengthen student research projects; and increase the number of new scholars, including minority graduate students, recruited in the food and agricultural sciences. Investing in higher education allows universities to build the human capacity to carry agricultural science in the next century.

Globalizing U.S. university agricultural teaching, research, and extension programs

Global forces are rapidly transforming U.S. agriculture. Several evident forms of this transformation are: (1) regional and world trade agreements which broaden access to U.S. food and fiber products to emerging and developing markets and which broaden access of agricultural products from other nations to U.S. markets; (2) global environmental changes which impact directly on production processes in the U.S.; (3) multinational investments in agricultural production in the U.S. and other nations; (4) the growing U.S. international agricultural labor force; and (5) the need to research and insure the safety of food, both domestic and imported. U.S. universities must teach agribusiness and producers of today and tomorrow to adjust to rapidly changing product, financial, and labor markets. They must access the best of new technologies and practices whatever their origin. This will require continued updating of international dimensions of teaching, research and extension programming.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF UNIVERSITY FISHERIES AND WILDLIFE PROGRAMS

The National Association of University Fisheries And Wildlife Programs (NAUFWP) provides this statement on the proposed fiscal year 2001 appropriations for the Cooperative State Research, Education and Extension Service (CSREES), U.S. Department of Agriculture.

Fifty-four universities dealing with natural resources share membership in the NAUFWP. They seek to advance the science and practice of fisheries and wildlife ecology and management, and enhance public understanding and multiple benefits from natural resources.

The NAUFWP recognizes that the research, education and extension programs of CSREES and its Land Grant University partners initiate positive changes in attitudes, and stimulate constructive actions to implement new technologies and ecologically sound approaches and practices by private landowners, resource managers, community decision-makers, and other members of the public. Accumulated experiences show that investments of funds and time yield significant benefits to individuals, the States and the nation by building and sustaining a more viable and productive natural resource base, and a competitive and profitable agriculture.

The pressing challenge is to have the CSREES/Land Grant System, with its credibility and delivery system, reach a larger portion of the 10 million or more private landowners and managers who control more than two-thirds of the U.S. lands, or approximately 1.35 billion acres. Regrettably the proposed fiscal year 2001 budget for CSREES is far from adequate to help landowners and managers move toward achieving sustainable uses of the resource base. Only about 4 percent of the pro-

posed fiscal year 2001 budget of $972,395,000 supports research and extension activities pertaining to forests, rangelands, fish and wildlife. This funding level is inadequate to respond to the public's concerns and demands to enhance stewardship and management of natural resources. Much greater investments and emphasis on proper uses of natural resources are needed to achieve a more sustainable society, thereby avoiding costly restoration.

To strengthen essential efforts of CSREES, the NAUFWP strongly recommends that the following three priority adjustments and four additional adjustments be made in the proposed fiscal year 2001 budget.

Priority 1.—That the Renewable Resources Extension Act (RREA) be funded at $15.0 million in fiscal year 2001. Demands for outreach services exceed currently funded capabilities (about $3.1 million). RREA funds, apportioned to the State Extension Services, effectively leverage cooperating partnerships at four to one. This proposed increase to $15.0 million would permit the Extension System to respond to more informational needs of private landowners, and thereby accomplish the goals and objectives outlined in its 1991–1995 Report To The Congress. Needs for expanded outreach services are greater than ever, as landownersbips become increasingly fragmented, as new and established landowners request more information, and as the general public demands natural resources be managed more carefully. The proposed increase to $15.0 million would enable the Extension Service to build its capabilities to assist more than 500,000 private landowners yearly to improve decision making and management on an additional estimated 35 million acres. Among the landowners and managers requiring assistance are the more than 10 million private, county and tribal landowners holding forestlands. Currently only a small percentage have a forest management plan.

Priority 2.—That Smith-Lever 3 (b) & (c) funding be increased by 5 percent to a level of $290,000,000, with the increase allocated to strengthening the Natural Resources And Environmental Management (NREM) base program. NAUFWP appreciates that 3 (b) & (c) base programs provide block grant type funds for Land Grant Universities to provide essential educational outreach based on local assessments of needs. The proposed increase in funds would enable NREM programs to develop a more realistic level of expertise at State and local levels to address resource and environmental issues directly affecting farmers, as well as other landowners, in rural and urban communities nationwide. Expressed needs for program expansion include such issues as forest management, wetlands maintenance and restoration, responses for declining and endangered species, and human/wildlife interactions. Likewise, urban and community forestry and other natural resource education efforts need strengthening, as called for in the 1990 FACT Act, to achieve sustainability of these critical resources. The proposed increase, targeted appropriately, would also help producers better understand and implement conservation provisions of the Farm Acts. It could also help strengthen the limited natural resources staff in CSREES, as well as at the Land Grant Universities, including the Black and Tribal institutions.

The Congress should direct the State Cooperative Extension Services to partner with the State Fish And Wildlife Agencies, and other appropriate State and Federal agencies, conservation organizations and relevant private groups to meet demands for services. Extension 4–H Youth natural resource programs and projects continue to expand, with more than 1,350,000 young people presently enrolled, and needs are increasing for additional technical assistance nationwide.

Priority 3.—That the water quality integrated activity be given at least 10 percent more funds than proposed for fiscal year 2001 ($16,204,000) to help correct the numerous and serious water quality situations in the U.S. and assist in preventing additional situations from developing. Only through the CSREES integrated research and extension water quality program can connections between agricultural practices and outbreaks of harmful algal blooms be understood and managed more effectively. Approaches are required to correct and prevent massive fish kills, human health problems and significant economic losses to the seafood industry.

Priority 4.—That the Rangeland Research Grants (RRG) be restored to $500,000 in the fiscal year 2001 budget. No funds were provided in budgets for fiscal year 1998, 1999, 2000 and 2001. This is a major weakness in CSREES's budget. More than one-half of the U.S. land area is rangeland. Elimination of the only Federal competitive grants program for rangelands has serious implications for wildlife, watersheds, and other natural resources. Modest appropriations for RRG in the past have supported some of the most important rangeland research conducted in the past decade. Continued funding is needed to focus on wildlife issues on rangelands. They will be some of the more critical rangeland research problems in the next decade. This would help increase the interdisciplinary capacity of research and educational programs to help landowners accelerate adoption of habitat conservation

and management recommendations for rangelands and forests. Only through such efforts can degraded rangelands and associated riparian areas be restored.

Priority 5.—That an appropriate portion of the total proposed increased appropriation for Pest Management be dedicated to educational programs to prevent and control vertebrate pests in urban and rural communities. Agricultural producers and other private landowners and managers in many States have identified their needs to respond to their most significant problems, frequently involving vertebrate pests. Information and technical assistance are required. Targeting Pest Management funds for vertebrate pest research and educational programs would effectively advance the knowledge and capability of landowners and managers to significantly reduce the losses in these problem situations.

Priority 6.—That Hatch funds be increased 11 percent to $200,000,000 and McIntire-Stennis funds be increased 14 percent to $25,000,000. Flat funding, as proposed for fiscal year 2001 for both Hatch and McIntire-Stennis, will not permit CSREES and the Land Grant Universities to provide services to the more than 10 million private landowners and managers. This assistance is needed to help them address their natural resource issues, which frequently also are concerns expressed by the general public. Greater cooperative research and extension efforts are required to address the erosion and degradation of the nation's natural resource base. The natural resource base and all of its functions and services must be conserved if agriculture productivity is to be sustained.

Priority 7.—That the proposed increase in funds for the National Research Initiative competitive grants, especially those for natural resources and the environment, be granted. As stated above, greater efforts are required to address the erosion and degradation of the nation's resource base.

In summary, the NAUFWP recommends that the following actions be taken on CSREES's proposed fiscal year 2001 budget:

—Fund the RREA program at $15.0 million.
—Increase the Smith-Lever 3 (b) & (c) base funds to $290,000,000.
—Provide at least a 10 percent increase for the water quality integrated activity.
—Restore $500,000 for Rangeland Research Grants.
—Designate an appropriate portion of the increased funds for Pest Management to bolster research and education to address vertebrate pest control and prevention in urban and rural communities.
—Increase Hatch funds to $200,000,000 and McIntire-Stennis funds to $25,000,000.
—Provide the proposed increase in funds for the National Research Initiative competitive grants, especially those for natural resources and the environment.

Please include this statement in the official record on the fiscal year 2001 appropriations for CSREES, Department of Agriculture. Your positive response will be appreciated.

PREPARED STATEMENT OF THE NATIONAL CONGRESS OF AMERICAN INDIANS

INTRODUCTION

Good morning Chairman Cochran, Vice-Chairman Bumpers and distinguished members of the Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies. Thank you for the opportunity to present testimony regarding the President's Budget Request for fiscal year 2001 Indian programs and services. My name is Susan Masten. I am President of the National Congress of American Indians (NCAI) and Chair of the Yurok Tribe of Northern California.

The member tribal governments of NCAI are encouraged about this year's budget process. For the first time in a generation, the President has proposed a significant increase in the budget for programs that assist Indian people and Indian tribes. If preserved through the appropriations process, more than $1.2 billion more will be provided to Indian programs. This commitment will better serve Indian communities and take a big step toward honoring the Federal Government's treaty and trust obligations to Indian nations. The news is out in Indian Country: this year the President is committed to meeting the acute needs in our communities. We are going to work very hard to ensure that Congress shares that commitment.

The last time the Federal Government enacted an increase of a similar scope to the President's fiscal year 2001 proposal, was in the mid-1970's, as a part of President Nixon's Tribal Self-Determination policy. Self-Determination has been and continues to be the most successful Federal policy toward Indian Nations ever in the history of the country. Under this policy, tribal governments have local control over programs and decision making on their reservations and have been able to fulfill

needs and solve problems far more quickly and efficiently than through "top-down" Federal programs. Through experience with Self-Determination, a generation of financially astute and fiscally responsible tribal government leadership has learned to function as better managers and service providers in all manner of tribal government functioning and tribal business development.

NCAI urges Congress to increase the investment in Indian programs and tribal government infrastructure. We believe that the President's fiscal year 2001 budget request has taken a positive step in that direction. The following testimony provides NCAI's viewpoint on sections of the budget that are most critical to tribal governments in the Department of Agriculture.

DEPARTMENT OF AGRICULTURE

Being the most rural of any minority group, American Indians residing on reservations are for the most part, geographically isolated, resource-limited, and the least likely of any farm group to receive loans from the United States. Of the some 55 million acres of Indian lands, 47 million acres are used for the production of crops, livestock, or both. Those individual operators and farming tribes who produce these resources are in need of capital, more efficient administration of existing Federal programs, and technical assistance. This need extends to every farming tribe, even those who may have an abundance of other natural resources.

Programs Assisting Native Americans

While the President's proposed fiscal year 2001 budget request for the Department of Agriculture is decreased overall by eight percent from fiscal year 2000, the President's funding request for Native American programs is increased by $90 million from fiscal year 2000, for a total of $784 million. NCAI greatly supports this request for increased funding, as it would: further the success of the numerous American Indian tribes engaged in cultivation of agricultural and community development; assure economic stability on Indian lands; and, facilitate the development of agri-business to help overcome economic, infrastructure, resource and geographic challenges, characteristic of Indian reservations.

The commitment of the USDA to adequately fund line item programs that apply specifically to tribes and to programs that benefit tribes indirectly are both essential in order to enhance economic self-sufficiency through rural development and rural based economies, and is further strengthened and safeguarded by the specific education initiatives of tribal colleges.

Native American Specific Programs

Extension Indian Reservations Program

Since 1990, the Extension Indian Reservation Program, authorized under the Food, Agriculture, Conservation and Trade Act, has been providing many services to Indian Country on issues ranging from crop and animal production practices to farm business management. It also has provided extension agents, employees of the State Cooperative Extension System, to work with tribal advisory committees in developing educational programs in agriculture or agriculture-related youth programs that respond to tribal priorities. Unfortunately, since funding began in 1990, the Extension Indian Reservation program has remained at $1.7 million, allowing support for about 26 projects in 15 States. For fiscal year 2001, the President has requested $5 million, an increase of $3.3 million from the fiscal year 2000 level. NCAI strongly supports this increase for fiscal year 2001 in order for the program to hire additional extension agents on Indian reservations and to assist tribal governments in promoting productive and efficient land use on their reservations.

Rural Development Native American Programs

For fiscal year 2001, the President has requested $48.7 million, an increase of $36.7 million over the fiscal year 2000 enacted level for the Rural Development Native American Programs. Included in this request is funding specifically earmarked for: Water and Waste Disposal Direct Loans and Grants; Community Facility Loans and Grants; Rural Business Enterprise Grants; Rural Business Opportunity Grants; and, Intermediary Relending Program Loans.

NCAI supports the funding request to the Rural Development Native American programs as it would provide more loans and grants to tribal governments to construct and improve their water and wastewater systems, construct community facilities such as health clinics and child care centers, and diversify and expand economic opportunities within their communities. These funds would also provide an appropriate step in advancing tribal economic development and the achievement of stable and self-sustaining reservation economies.

Specifically, NCAI supports the following:

—Water and Waste Disposal Direct Loans and Grants—the fiscal year 2001 budget request is $29.7 million, an increase of $17.7 million from fiscal year 2000. These loans and grants will assist tribes in meeting the substantial need to improve the quality of drinking water systems and waste water disposal facilities on their reservations.
—Community Facility Loans and Grants—for fiscal year 2001, the President has requested $8 million for this new initiative which would provide grants to tribes for infrastructure development.
—Rural Business Enterprise Grants—for fiscal year 2001, the President has requested $6 million that would provide grants for reservation small business.
—Rural Business Opportunity Grants—for fiscal year 2001, the President has requested $1 million for Rural Business Enterprise Grants, as seed monies for start-up businesses on reservations.
—Intermediary Relending Program Loans—for fiscal year 2001, the President has requested $4 million for this new program which will provide loans for small business start up and expansion at considerably lower interest rates than market rate.

Food Distribution Program on Indian Reservations

The Food Distribution Program on Indian Reservations (FDPIR) greatly benefits many Native Americans who live on and off Indian reservations. This program is administered by the Food & Nutrition Service (FNS), an agency of the U.S. Department of Agriculture, in cooperation with 98 Indian tribal organizations and six State agencies. The fiscal year 2001 budget for the FDPIR is $76.5 million, an increase of $1.5 million over the fiscal year 2000 enacted level. Although insignificant, this increase is crucial in order to provide commodity foods to low-income households, including the elderly Native American, living on reservations, and to Native American families residing in designated areas near reservations. Many Native Americans actually participate in the FDPIR, rather than the Food Stamp Program because of rural isolation and the lack of easy access to food stores. NCAI supports the appropriate funding increases to the FNS budget.

Proposed Expansion of Empowerment Zones

The proposed expansion of Empowerment Zones (EZs) will expand the wage credits and tax incentives, as well as facilitate a new round of urban EZs. These EZs will extend and improve economic growth in the thirty-one existing urban and rural EZs that are administered by the Department of Housing and Urban Development (HUD) and USDA, and support the proposed third round of ten new EZs to be designated in 2001. The total cost of these proposals will be $4.4 billion over ten years. NCAI supports the much needed expansion of EZs as it will provide economically depressed rural areas and communities, such as Indian communities, with real opportunities to create jobs, develop and enhance their communities, and diversify markets.

CONCLUSION

Mr. Chairman, we urge the Congress to fulfill its fiduciary duty to American Indians and Alaska Natives and to uphold the trust responsibility, as well as preserve the Government-to-Government relationship with tribal governments, which includes the fulfillment of health, education and welfare needs of all Indian tribes in the United States. This responsibility should never be compromised or diminished because of any Congressional agenda or party platform. Tribes throughout the nation relinquished their lands as well as their rights to liberty and property in exchange for this trust responsibility. The President's fiscal year 2001 budget request acknowledges the fiduciary duty owed to tribes. We ask that the Congress maintain the Federal trust responsibility to Indian Country and continue to aid tribes on our journey toward self-sufficiency. Thank you for allowing me to present for the record the National Congress of American Indians' comments regarding the President's fiscal year 2001 budget request for the Department of Agriculture.

PREPARED STATEMENT OF THE NATIONAL CONSORTIUM FOR RURAL GEOSPATIAL INNOVATIONS

As your subcommittee prepares the fiscal year 2000 Agriculture, Rural Development and Related Agencies appropriations, we are requesting that you provide $2 million to support the Geographic System Information Program (GISP). We appreciate the support your subcommittee has provided our Program in the past. This

Program has received funding from the Research and Education account of USDA's Cooperative State, Research, Education, and Extension Service (CSREES).

The National Consortium for Rural Geospatial Innovations (RGIS) is a group of eight university and non-profit sites distributed across the U.S. With the support of the Geographic System Information Program, RGIS sites assist state, tribal, regional and local governments and non-and-for-profit organizations in implementing advanced geospatial information technologies. The last decade has seen an explosion of computer-based technologies for the creation and management and distribution of information about natural resources, property records, infrastructure, transportation, and other land use arenas. These technologies include geographic information systems (GIS), remote sensing image processing, global positioning systems (GPS) and other related information technologies. RGIS uses a variety of approaches to make these technologies understandable, affordable and useful.

The mission of RGIS is to eliminate the digital divide facing rural America by promoting the transfer of geospatial technologies by:

—Providing geospatial tools, technologies, and training to empower local governments, organizations, and citizens to understand and participate in decisions that affect their economy, quality of life, and environment;

—Educating and training a cadre of people to apply geospatial technologies to rural issues;

—Supporting the development of appropriate local land information systems, as well as linkage to and cooperation with regional, state, and national land information systems.

—The goal of the program is to improve the quality of life, environmental health, and economic competitiveness in rural communities.

RGIS members have proved that geospatial technologies are efficient and cost-effective tools to improve local decision-making and local governmental processes. RGIS members have enabled local communities to develop better information, which has allowed local communities to make better decisions on a variety of issues including farmland preservation, emergency services, watershed management, land records modernization, and environmental protection. Continued funding of the Program will allow the organization to continue these benefits and leverage other resources to improve the quality of life in rural America and insure these communities have access to cutting-edge technologies.

This past year two new Chesapeake sites were added and supported by the Program. These sites brought the following strengths to the Consortium:

—Wilkes University and Kings College in Pennsylvania brings expertise in how to implement geospatial technologies among rural local governments and engineering mapping skills for comprehensive watershed planning.

—Pennsylvania State University brings expertise in how to apply geospatial technologies to assess agricultural quality for rural land use planning and management and spatial analytic methods for assessing the environment.

This past year the other existing six sites contributed the following outcomes:

—University of Wisconsin-Madison continues its extensive set of geospatial outreach training programs, including hands-on land use planning and management program for county and town level planners. Selection by the Federal Geographic Data Committee (FGDC) Community Demonstration Program has provided an opportunity to assist local citizen planners access new land use planning and management tools.

—University of North Dakota continues to respond to the expanding interest in geospatial technology by local governments. One of the most rewarding developments has been the assistance provided to the City of Grand Forks in the aftermath of the 1997 devastating flooding of the Red River.

—University of Arkansas continues to provide local, state and national leadership. Examples include providing geospatial expertise to the Arkansas Land Records Modernization Board, GIS training camps for local high schools, and assisting the NRCS develop the capacity to transfer soils and orthophotography information over the Web.

—Central Washington University continues to support the modernization of irrigation records used by water management boards to insure equitable distribution of hydraulic resources and continues to assist tribal and local rural communities assess the role and use of geospatial technologies.

—South Georgia Regional Development Center continues to assist local governments modernize land record systems such as parcel records for various applications including economic development and infrastructure management.

—Southwestern Indian Polytechnic Institute (SIPI) in its inaugural Program year started a program to assist tribal communities utilize GIS and GPS technologies for agricultural and local land management applications. Also SIPI hosted a sat-

ellite distance education geospatial program for 29 tribal colleges across the U.S. Each RGIS Program Site participated by providing a 15 minute technical segment to the 2 hr. satellite program.

Thank you for your consideration of this request. If you have any questions, please contact us at your convenience.

PREPARED STATEMENT OF THE NATIONAL COOPERATIVE BUSINESS ASSOCIATION

USDA RURAL COOPERATIVE DEVELOPMENT GRANTS

Mr. Chairman, members of the committee, we appreciate the opportunity to present testimony as you prepare to consider appropriations for the Department of Agriculture for fiscal year 2001. I would like to discuss the Rural Cooperative Development Grants program. I urge you to appropriate $10 million for this valuable program that is offering real solutions to the daunting challenges being faced in rural America.

The National Cooperative Business Association (NCBA) is proud of its role in assisting the creation of a network of rural cooperative development centers across the country. We know that Congress is equally as proud of its role in fostering a cooperative business development support network throughout rural America. Congress and this Administration recognize the vital role that cooperatives play in providing jobs, increasing incomes and reducing expenses for millions of rural Americans. NCBA is now also proud to be a member of CooperationWorks, a network of cooperative development centers and national partners dedicated to enhancing the capacity of centers and promoting co-op solutions to rural America's economic challenges.

The Grants for Rural Cooperative Development program was originally authorized by section 2347 of the 1990 farm bill as a program of Grants for Technology Transfer and Cooperative Development. In fiscal year 1993, this committee began to provide funding for the program, and report language over the years has indicated your strong support for the concept of using this funding for the purpose of creating a network of centers for rural cooperative business development. While the centers offer technical assistance, information and other resources for cooperative business formation, their network provides a vital support system for the centers to continue operating.

NCBA's members, along with other supporters of cooperatives around the nation, joined together as the National Rural Cooperative Development Task Force to advocate for support for a national network of centers and to develop the linkages among the centers and between the centers and local partners to sustain the network's development. NCBA is now working with these regional centers that provide vital technical assistance and support for the development of cooperative enterprises in rural America.

In 1996, Congress demonstrated its strong commitment to the centers approach when it passed the FAIR Act, also known as the 1996 farm bill. The program is now called Grants for Rural Cooperative Development in section 747(c)(4) of Public Law 104–127. The program focuses on supporting "nonprofit institutions for the purpose of enabling the institutions to establish and operate centers for rural cooperative development." It is authorized to provide funding at $50 million per year. The revised statutory language defines the goals of these centers as "facilitat[ing] the creation of jobs in rural areas through the development of new rural cooperatives, value added processing, and rural businesses."

With the support of funding received from the program over the past few years, the rural cooperative development centers have demonstrated quantifiable results. CooperationWorks centers have established more than 50 value-added cooperatives serving in excess of 5,000 members. These centers have created or saved 16,500 jobs in the communities they serve. They have assisted more than 400 local communities and organizations. The centers have raised the quality of technical assistance being provided on cooperative development, they have developed significant information-sharing capability among their network and created the first report of best practices in the field of cooperative development.

This coming year, centers will be involved in replicating successes they have achieved and breaking new ground in areas where cooperative development is needed. As the farm crisis continues into another year, centers are working with farmers to get more of the consumer dollar and diversify their sources of revenue. Co-op development centers provide the necessary technical assistance to help farmers form value-added cooperatives. These cooperatives allow, as USDA Secretary Glickman has said, the tomato farmers to own the ketchup plant. Centers are helping farmers diversify their sources of revenue by assisting in the formation of forestry coopera-

tives. These co-ops are enabling farmers to turn unproductive woodlots on their property into another crop that provide income year after year.

Other cooperative development projects include the formation of new consumer-owned energy purchasing cooperatives, child care cooperatives, and cooperative housing projects. New energy cooperatives are giving consumers the power to negotiate better prices on a broad range of energy products and services. Child care cooperatives provide former welfare recipients and other low-income people the opportunity to reduce the cost of child care and give them control over how their child care facilities are operated. Cooperative housing gives seniors and others in rural areas the chance to save money on their housing and live in safe communities.

The President's budget includes $6 million for this program. This is a significant increase in funding from prior years, demonstrating the Administration's acknowledgement of the value of this program. USDA's National Commission on Small Farms recently recommended that this program be funded at $20 million annually. The Commission's report calls the program "one of the few that supports rural cooperative development at the grassroots level." The program is authorized to be funded at $50 million annually.

We urge this committee to do what over 130 organizations from around the country are urging Congress and the Administration to do: increase funding for this valuable program. Mr. Chairman, I ask that the letter signed by those organizations be included in the record of this hearing along with my testimony.

NCBA is a national membership association representing cooperatives—over 120 million Americans and 47,000 businesses ranging in size from small buying clubs to businesses included in the Fortune 500. NCBA's membership includes cooperatives in the fields of housing, health care, finance, insurance, child care, agricultural marketing and supply, rural utilities and consumer goods and services. NCBA brings its members together to create business opportunities and to develop, advance and to protect cooperative enterprise.

INCREASE FUNDING FOR RURAL COOPERATIVE DEVELOPMENT GRANTS

We, the undersigned organizations, urge Congress and the Administration to increase funding for the Rural Cooperative Development Grants program at USDA. The program has helped build capacity in a few rural cooperative development centers at its annual funding level. This program could be a driving force in federal efforts to spark an economic revitalization in rural America, but only if further funds are provided to meet the need. The program is authorized to be funded at $50 million annually.

USDA's National Commission on Small Farms recommended that this program "be increased by $10 million annually up to $20 million." The Commission's report calls the program "one of the few that supports rural cooperative development at the grassroots level."

While dramatically changing economic forces are challenging rural Americans, this type of program is giving them the tools to shape their own future. We ask for your commitment to growing this program to serve all of rural America.

Ag Processing, Inc., Omaha, NE; AgriBank, St. Paul, MN; Agri-Business Institute at Mississippi State University, Mississippi State, MS; Agri-Mark, Inc., Lawrence, MA; Agricultural Council of California; Alaska Village Initiatives, Anchorage, AK; Alcorn State University Cooperative Extension Program, Alcorn, MS; Amalgamated Bank of New York, New York, NY; Antigo Co-op Credit Union, Antigo, WI; Appalbanc, Berea, KY; Arkansas Wood Manufacturers Association; Basin Electric Power Cooperative, Bismarck, ND; Blooming Prairie Cooperative Warehouse, Iowa City, IA; California Association of Cooperatives; Cass County Electric Cooperative, Fargo, ND; Cattlemen's Texas Longhorn Registry, Animas, NM; Center for Rural Affairs, Walthill, NE; Center for Rural Pennsylvania, Harrisburg, PA; Central Appalachian Peoples Federal Credit Union, Berea, KY; Chicot County Governor's Collaborative, Lake Village, AR; CoBank, Denver, CO; Colorado Cooperative Council; Commodity Growers Cooperative, Lexington, KY; Consumer Federation of America; Co/op Optical, Detroit, MI; Cooperative Council of North Carolina; Cooperative Development Foundation, Washington, DC; Cooperative Development Institute, Greenfield, MA; Cooperative Development Services, Madison, WI; The Cooperative Foundation, St. Paul, MN; Cooperative Resources International, Shawano, WI; Co-opportunity, Inc., Hartford, CT; Coordinated Housing Services, New York, NY; Coordinating Council of Cooperatives, New York, NY; Countrymark Cooperative, Indianapolis, IN; Credit Union National Association; Darby Enterprises, Inc., Alexandria, VA; Denver Buffalo Company, Denver, CO; East Kentucky Power Cooperative, Winchester, KY; Economic Development Center of Henderson State University, Arkadelphia, AR; Equity Cooperative, Amery, WI; Farm Credit Council; Farmland Industries, Inc., Kan-

sas City, MO; Federation of Ohio River Cooperatives, Columbus, OH; Federation of New York Housing Cooperatives, New York, NY; Federation of Southern Cooperatives, Atlanta, GA; First Rochdale Group, New York, NY; FoodService Purchasing Cooperative, Louisville, KY; Freeh Enterprises, St. Paul, MN; Frenkel & Company, Inc., New York, NY; Grassroots Citizens Awareness Network, New Haven, CT; Group Health Cooperative of Puget Sound, Seattle, WA; Hamilton Farm Bureau Cooperative, Hamilton, MI; Homestead Housing Center, Inver Grove Heights, MN; Humane Society of the United States; Intertribal Agriculture Council, Billings, MT; Iowa Institute for Cooperatives; Kansas Cooperative Council; Kansas Farmers Service Association, Hutchinson, KS; Keystone Cooperative Development Center (Pennsylvania); Land O'Lakes, Arden Hills, MN; Michigan Alliance of Cooperatives; Minnesota Association of Cooperatives; Mississippi Association of Cooperatives; Mountain View Harvest Cooperative, Longmont, CO; MultiPlan, Inc., New York, NY; Mutual Service Insurance, St. Paul, MN; National Association of Development Organizations; National Association of Federal Credit Unions; National Association of Housing Cooperatives; National Catholic Rural Life Conference, Des Moines, IA; National Center for Appropriate Technology, Butte, MT and Fayetteville, AR; National Congress for Community Economic Development; National Cooperative Bank; National Cooperative Business Association; National Family Farm Coalition; National Farmers Union; National Federation of Community Development Credit Unions; National Grange; National Grape Co-operative Association (Welch's), Westfield, NY; National Network of Centers for Cooperative Development; National Rural Electric Cooperative Association; National Rural Telecommunications Cooperative, Herndon, VA; National Rural Utilities Cooperative Finance Corporation; National Telephone Cooperative Association; Nationwide Insurance Enterprise, Columbus, OH; Nebraska Cooperative Council; New Hampshire Electric Cooperative, Plymouth, NH; New Pioneer Cooperative Society, Iowa City, IA; North American Bison Cooperative, New Rockford, ND; North American Students of Cooperation, Ann Arbor, MI; Northcountry Cooperative Development Fund, Minneapolis, MN; North Dakota Association of Rural Electric Cooperatives; North Dakota Farm Bureau, Bismarck, ND; North Dakota State Department of Agriculture; Northeast Cooperative Council, Ithaca, NY; Northeast Cooperatives, Brattleboro, VT; North Farm Cooperative, Madison, WI; Northwest Cooperative Federation, Seattle, WA; Ocean Beach People's Food Co-op, San Diego, CA; Ohio Council of Cooperatives; Oneota Community Co-op, Decorah, IA; Ozark Cooperative Warehouse, Fayetteville, AR; Park Forest Cooperative Area J, Park Forest, IL; Peer Marketing Associates, Inc., Ramsey, NJ; Pennsylvania Association for Sustainable Agriculture; Pennsylvania Council of Cooperatives; Pennsylvania Credit Union League; Pennsylvania Farmers Union; People's Food Co-op, La Crosse, WI; Public Voice for Food and Health Policy; Puget Consumers Cooperative, Seattle, WA; Puget Sound Development Foundation, Seattle, WA; QuipNet, Inc., Blue Springs, MO; Ranchers Choice Cooperative, Antonitos, CO; Rocky Mountain Farmers Union, Aurora, CO; Rural Coalition; Rural Wisconsin Health Cooperative, Sauk City, WI; St. Mary's Bank, Manchester, NH; St. Paul Bank for Cooperatives, St. Paul, MN; Skagit Valley Food Co-op, Mt. Vernon, WA; Sustainable Agriculture Coalition; Texas Agricultural Cooperative Council; Tucson Cooperative Warehouse, Tucson, AZ; United Housing Foundation, New York, NY; United Methodist Church, General Board of Church & Society; University of California Center for Cooperatives, Davis, CA; University of Texas Inter-Cooperative Council, Austin, TX; University of Wisconsin Center for Cooperatives, Madison, WI; Washington State Council of Farmer Cooperatives; Washington State Rural Electric Cooperative Association; Washington Electric Cooperative, East Montpelier, VT; Wheatsville Food Cooperative, Austin, TX; Whole Foods Cooperative Association, Erie, PA; Wildcat Creek Farms, Inc., Payne, OH; Williamson Street Grocery Cooperative, Madison, WI; Winrock International, Morrilton, AR; Wisconsin Federation of Cooperatives; Wisconsin Federation of Farm Credit Services, Appleton, WI and Wit & Company, Ltd., Decatur, IL

PREPARED STATEMENT OF THE NATIONAL CORN GROWERS ASSOCIATION

The National Corn Growers Association (NCGA) appreciates the opportunity to provide the Subcommittee with our recommendations for fiscal year 2001 appropriations for key programs administered by the U.S. Department of Agriculture. The NCGA represents 30,000 corn growers in 48 states and the association's mission is to create and increase opportunities for corn growers in a changing world and to enhance corn utilization and profitability.

The NCGA, strongly, urges the Subcommittee to:

—Increase the ARS plant, animal, and microbial genomics programs by, at least, the $4.7 million requested in the Administration's budget;
—Increase funding for the National Plant Germplasm System by $20 million; and
—Provide funding for the Initiative for Future Agriculture and Food Systems.

While many federal agricultural programs are important to the nation's corn growers, NCGA believes that the future of the corn industry is written in corn's genetic code and that plant genomics will give us the fundamental information necessary to revolutionize American agriculture. Plant genomics research advances our understanding of the structure, organization and function of plant genomes.

Since 1996, funding for plant genomics has been the number one appropriations issue for the NCGA. The Plant Genome Initiative (PGI), a multi-agency program focused on structural and functional genomics, will help scientists, geneticists, and plant breeders identify and utilize genes (from corn and other plants) that control important traits, such as nutritional value, stress tolerance, and resistance to pests. In a recently published report, the Interagency Working Group on Plant Genomes, estimated that $500 million, over three years (fiscal year 2000–2002) was needed for the National PGI. While the NSF will provide a significant level of funding for the PGI, USDA must increase its plant genomics funding, substantially, if we are to meet the minimum level of need. Further, USDA must begin a concerted effort in animal and microbial genomics.

For the fiscal year 2001 agricultural appropriations bill, the NCGA supports the Administration's budget request for an increase of $4.7 million for plant, animal, microbial, and insect genomics at the Agricultural Research Service (ARS). We believe, however, that this amount should be increased, substantially, to ensure that the ARS has sufficient resources to participate fully in the advances in genomics research. The NCGA, also, urges the Subcommittee to provide funding for the Initiative for Future Agriculture and Food Systems so that a major portion of the funds will be used for a comprehensive plant, animal, and microbial genomics competitive grants program that is coordinated with the ARS, NSF, and DOE.

To take full advantage of the plant genomics revolution, diverse plant germplasm must be available for crop breeders to develop the varieties necessary to meet the changing circumstances and needs of the future. The USDA National Plant Germplasm System (NPGS)—

—Acquires germplasm;
—Develops and documents information on the germplasm;
—Preserves and distributes germplasm upon request; and
—Maintains quarantine facilities for testing imported germplasm.

Funding for the NPGS has declined by more than 14 percent, in constant dollars, since 1992, while demands on the system have increased. The NSF-funded plant genome research program will increase, tremendously, the amount of genetic stocks for the NPGS to manage. For example, one maize grant will generate, at least, 50,000 new maize genetic stocks, doubling the size of the NPGS maize stock center. Comparable situations will exist for several other economically important crops as well. Without a significant increase in funding, the NPGS will not be able to manage current stocks, much less the increased stocks that are being generated through genomics research.

The NPGS must obtain a significant increase in funding over the next few years to ensure that diverse genetic resources are available to provide growers with hybrids and varieties that will address the challenges of the future. It is critical that these resources be maintained at the public level for continued accessibility to all scientists and breeders. The NCGA believes that the NPGS is a fundamental, strategic resource. The NCGA urges the Subcommittee to provide a $20 million increase for the National Plant Germplasm System.

Advances in basic plant science that result from a vigorous plant genomics program and a strong, viable National Plant Germplasm System will allow us to create new hybrids and varieties that will—

—Improve human and animal health;
—Reduce medical costs due to more nutritious, healthier, food for individuals;
—Reduce worldwide malnutrition through higher yielding and more nutritious crops;
—Reduce environmental problems for crop and livestock growers;
—Expand plant-based renewable resources for chemicals and energy; and
—Allow growers to get more income from the market and reduce grower reliance on Federal farm programs.

The National Plant Genome Initiative and the National Plant Germplasm System are critical to the long-term viability of U.S. agriculture. The NCGA, strongly, urges Congress to provide increased funding for plant, animal, and microbial genomics research and to provide an increase of $20 million for the National Plant Germplasm

System to ensure that our growers have the tools to meet the challenges and demands of the 21st century.

Thank you for your consideration of our views.

PREPARED STATEMENT OF THE NATIONAL COUNCIL OF FARMER COOPERATIVES

The National Council of Farmer Cooperatives (NCFC) appreciates this opportunity to share its views regarding the fiscal year 2001 agriculture appropriations bill, and respectfully requests this statement be made a part of the official hearing record.

OVERVIEW OF NCFC

NCFC is a national trade association representing nearly 100 regional marketing, supply and credit cooperatives, and state councils. Included among these regional cooperatives are over 3,500 local cooperatives whose farmer-owners represent a majority of America's nearly 2 million individual farmers. These farmer-owned cooperative businesses are engaged in virtually every facet of agriculture. This includes handling, processing, marketing and exporting of U.S.-produced agricultural commodities and related products; the manufacture, distribution and sale of farm supplies; and the providing of credit and related financial services, including export financing for and on behalf of their farmer owners.

IMPORTANCE OF FARMER COOPERATIVES

For farmers, such cooperative self-help efforts provide the opportunity to reduce risks, capitalize on market opportunities and earn a greater return on their productivity and investment. Earnings derived from such business are returned to the cooperative's farmer owners on a patronage basis, which also helps contribute to local and regional economic activity as well as the national economy. Another important contribution is reflected in the fact these farmer-owned cooperative businesses also employ nearly 300,000 people (full and part-time) with a combined payroll of approximately $6.8 billion. Many of these jobs are in rural areas where employment opportunities are sometimes limited.

NEED FOR PUBLIC POLICIES THAT PROMOTE COOPERATIVE SELF-HELP EFFORTS

Current economic conditions, together with the rapid changes taking place throughout the global economy, underscore the need for policies and programs to strengthen the ability of farmers to join together in cooperative self-help efforts to: (1) better manage the risks and uncertainty inherent in production agriculture; (2) capitalize on new market opportunities, including moving more into value-added production and processing; and (3) compete more successfully in a global marketplace still characterized by subsidized foreign competition. Such initiatives would help maintain and create needed jobs in communities throughout rural America.

SUPPORT FOR USDA'S RURAL BUSINESS-COOPERATIVE SERVICE

We urge that funding and staffing be strengthened for USDA's Cooperative Services unit within the Rural Business-Cooperative Service (RBS) to ensure that it is fully able to carry out its historical mission as mandated by Congress in support of farmer cooperatives. It should be noted that funding for such programs is currently included in amounts made available for salaries and expenses in the RBS mission area. Providing specific funding for programs administered by Cooperative Services for research, education and technical assistance in support of farmer cooperatives would enhance program continuity and promote longer term planning.

Specifically, we recommend that not less than $5 million be made available to RBS's Cooperative Services unit for carrying out such programs relating to farmer cooperatives. Funding for cooperative research agreements should also be strengthened with the objective of further assisting farmers in joining together in cooperative self-help efforts. Such action would encourage and promote research, education and technical assistance that would benefit farmers and their cooperatives.

COMMODITY PURCHASE PROGRAMS AND FARMER COOPERATIVES

We also want to express our strong support for maintaining both the statutory provisions and report language included in the fiscal year 2000 agriculture appropriations bill to ensure that farmer cooperatives are fully eligible to participate in USDA's commodity purchase programs. Such programs serve two important purposes. One, they help meet the food and nutrition needs of consumers. Two, they

provide an important market outlet for farmers, especially during periods of surplus production, thereby helping strengthen farm income and promoting orderly marketing.

However, under previous guidelines established by USDA, this important market was eliminated for many farmers choosing to cooperatively market their products. The provision in the fiscal year 2000 agriculture appropriations bill addresses this by clearly providing that farmer cooperatives are fully eligible to participate in such programs for and on behalf of their farmer owners.

In doing so, it preserves an important market outlet for many farmers, promotes orderly marketing, encourages cooperative self-help efforts, and helps maintain and strengthen farm income—since proceeds from the sale of commodities and related products are returned to the cooperatives' farmer owners as patronage income. It also serves to increase the potential quantity and quality of commodities and related products available for purchase and use under such programs, and provides for more competitive bidding among participants. Finally, it helps contribute to stronger rural communities where farmer cooperatives and their farmer owners are located.

CROP INSURANCE/RISK MANAGEMENT

We continue to urge support for policies and programs that provide an expanded role and opportunity for farmers through their cooperatives and associations to join together to purchase or obtain crop insurance on a more affordable and competitive basis. We believe such action would also help encourage program participation, improve the current delivery system, strengthen private sector involvement, and further encourage cooperative self-help efforts. In support of such action, we believe USDA should be encouraged to provide for full and effective participation by farmer cooperatives for the benefit of their farmer members.

EXPORT PROGRAMS

We strongly urge support for USDA's export programs, including the Market Access Program (MAP) and Foreign Market Development (FMD) Cooperator Program, and we endorse the recommendations of the Coalition to Promote U.S. Agricultural Exports of which NCFC is a member. Such programs have been tremendously successful and extremely cost-effective in helping maintain and expand U.S. agricultural exports, countering subsidized foreign competition, protecting American jobs and strengthening farm income.

Programs such as MAP and FMD have also helped encourage and strengthen the ability of farmers to join together in cooperative efforts to promote their products in overseas markets and improve their income. Administered on a cost-share basis, they remain one of the few tools specifically allowed under the Uruguay Round Agreement to help American agriculture and American workers remain competitive in a global marketplace still characterized by subsidized foreign competition.

According to a USDA study, the European Union (EU) and other foreign competitors are now outspending the U.S. by a factor of 20 to 1 with regard to the use of export subsidies and other expenditures for export promotion. The same study shows that such countries are spending over $100 million just to promote sales of their products in the United States. In other words, they are spending more to promote agricultural exports to the United States, than the U.S. is currently spending ($90 million) to promote American agricultural exports worldwide! Equally alarming, USDA now reports that based on 1999 figures, the U.S. for the first time has become a net importer of agriculture products with regard to the European Union.

Clearly, aggressive action is needed. We urge support for increased funding for MAP and other export programs, and ensuring that such programs are fully and aggressively utilized. Since MAP was originally authorized, funding has been gradually reduced from a high of $200 million to its current level of $90 million—a reduction of more than 50 percent. Again, given what our foreign trade competitors are doing, we believe it's time to restore funding for this vitally important program up to its original level.

We also urge continued funding for other related USDA export programs, including the Export Enhancement Program (EEP), Dairy Export Incentive Program (DEIP), GSM Export Credit Guarantee Program, and Public Law 480. All of these programs continue to be essential to help encourage U.S. agriculture exports, counter subsidized foreign competition, protect American jobs, and strengthen farm income.

AGRICULTURAL RESEARCH

Another important area of emphasis when it comes to enhancing the global competitiveness of farmer cooperatives and American agriculture is research. It is equally important to help ensure that farmer cooperatives and American agriculture can continue to help provide consumers at home and abroad with a dependable supply of safe, high quality food and fiber at reasonable prices, while meeting important environmental and food safety objectives.

This includes recognition of the need to help farmers, their cooperatives, and others engaged in agriculture meet the goals and requirements of such statutes as the Food Quality Protection Act (FQPA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA) and the Clean Air Act (CAA), among others. To help meet these challenges, we believe every effort should be made to maintain and strengthen the highly successful public-private partnership involving USDA, the land grant universities and colleges, and the private sector. This includes providing needed funding at the federal level through USDA and ensuring that such funding helps achieve the important objectives outlined above.

CONSERVATION/EQIP

We strongly support continued funding for the Conservation Reserve Program (CRP), as well as restoring funding for the Environmental Quality Incentives Program (EQIP), as recommended in the Administration's budget. Such programs are necessary to help achieve and maximize water quality and other environmental benefits.

The CRP and EQIP programs in particular are critical to empowering farmers to continue voluntary efforts to respond to societal expectations and demands with regard to water quality and help protect our natural resource base.

Adequate funding for the Natural Resource Conservation Service (NRCS) technical assistance capability is critical to farmers and cooperatives working to address water quality and other conservation and environmental challenges.

CROP PROTECTION/PESTICIDE PROGRAMS

The Administration's budget request includes funds for Integrated Pest Management (IPM) programs and IR–4 program to collect and analyze data on pesticide residues through the Pesticide Data Program (PDP). We endorse the views of: (1) the Food Quality Protection Act-Implementation Working Group (FQPA–IWG) of which NCFC is a steering committee member, and (2) the Minor Crop Farmer Alliance (MCFA) of which NCFC is an executive committee member. USDA's role in this process is critical if FQPA is to be implemented as intended by Congress.

We believe USDA is uniquely qualified to (a) gather and provide data to the EPA regarding pesticide use and dietary consumption patterns, and (b) to provide information about crop protection needs and efficacious and affordable alternatives. USDA has statutory obligations to carry out regarding minor use pesticides pursuant to FQPA, including establishment of a minor use office to facilitate grower efforts to provide information needed to maintain or develop label uses.

Clearly, USDA has an essential role to play in working with EPA regarding implementation of FQPA to ensure that food and agricultural policy considerations are taken into account. For these reasons, we strongly urge that adequate funding be provided to ensure that it has the necessary resources to carry out such responsibilities.

MEAT INSPECTION/USER FEES

We continue to be opposed to user fees relating to Food Safety and Inspection Service (FSIS) for meat inspection. Such inspection programs provide important public benefits relating to food safety and quality and should continue to be publicly funded. The imposition of new user fees, to the extent that such fees could not be passed on to consumers, would impose an additional cost burden on farmer cooperatives and their farmer members, and reduce farm income. Again, in recognition of the public benefits of such programs and the need to maintain confidence in the safety and quality of such products, the federal government should maintain its historic role.

CONCLUSION

Mr. Chairman, on behalf of NCFC and its members, we want to again thank you for the opportunity to share our views with regard to the fiscal year 2001 agriculture appropriations bill. We also wish to take this opportunity to express our ap-

preciation to you and the members of the Subcommittee for your interest and support of farmer cooperatives and American agriculture.

PREPARED STATEMENT OF THE NATIONAL COMMODITY SUPPLEMENTAL FOOD PROGRAM ASSOCIATION

Mr. Chairman and subcommittee members, I am Barb Packett, President of the National Commodity Supplemental Food Program (CSFP) Association. Our Association of state and local CSFP operators work diligently with the Department of Agriculture Food, Nutrition, and Consumer Service to insure a quality supplemental nutrition assistance commodity food package program for senior men and women, and mothers, infants, and children. The program, which was authorized in 1969, serves 436,000 individuals every month in 24 states and the District of Columbia.

This 30 year old CSFP program stands as testimony to the power of partnerships between community-based organizations, private industry and government agencies. The CSFP offers a unique combination of advantages unparalleled by any other food assistance program:

—The CSFP specifically targets our nation's most vulnerable populations: the very young and the very old.

—The CSFP provides a monthly selection of foods specifically tailored to the nutritional needs of the population we serve. Each eligible participant in the program is guaranteed [by law] a certain level of nutritional assistance every month.

—The CSFP purchases foods at wholesale prices, which amounts to one-third the cost it would be to provide the same supplemental nutrients at retail voucher cost. The average food package cost for fiscal year 2000 is $15.71 and retail would be at least $55.

—The CSFP involves the entire community in the problems of hunger and poverty. Thousands of volunteers as well as many private companies donate money, equipment, and most importantly time to deliver food to homebound seniors. These volunteers not only bring food but companionship and other assistance to seniors who might have no other source of support.

—For these historical reasons I would like to submit the National CSFP Association legislative issues and a report of our 1999 survey of monthly volunteer labor hours to support our requests.

Chairman Cochran, the committee has consistently been helpful with funding support for our very prudent way of providing nutritional supplements to the seniors and mothers and children. Please help us continue.

COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP) LEGISLATIVE ISSUES FISCAL YEAR 2001

Position.—The CSFP Association recommends an appropriation of $110 million for FFY 2001. This would increase the budget figure of $93.3 million. The increase is necessary for:

—Additional caseload requests

—Adjustment for state/local funding

Justification.—CSFP is a very effective food delivery system. According to USDA–FNS the average cost of a food package is $16. The average retail value of those foods distributed by grassroots community organizations is $50–$60. Our 1999 survey of monthly volunteer labor hours shows we have at least $641,312 a month donated to stretch support funding for the program.

—Expansion requests and restoration requests for caseload total 37,488 more than fiscal year 2000. This will support existing programs and the five new states of Mississippi, Montana, Ohio, Texas and Vermont.

—The President's budget includes $7 million in food inventory for program support. The mix of food inventory and funds would effectively reduce state/local support funds by $1.4 million (−7 percent) due to computation on funds not total program assets.

Position.—With the aging of America, CSFP should be an integral part of USDA Senior Nutrition Policy. This is the most cost-effective way to provide the nutrient rich foods low-income seniors are lacking.

Justification.—The advantages of CSFP include:

—The food package for seniors is nutritionally balanced.

—Supplemental nutrition is proven to reduce public health care costs.

—Nutrition education and health referrals are provided.

—Food is distributed through community and faith based organizations, familiar to many seniors.

—Seniors resist participation in programs such as food stamps, but readily access commodity programs.
—CSFP requires a means test that assures participants are truly needy.
—Actual food is provided to those who need it most.
—CSFP supports United States farmers.
—Program operators utilize volunteers and other in-kind donations to reach homebound seniors.
—The retail value of each food package is approximately $55.00 while the USDA blended cost per food package is $15.71.

NATIONAL COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP) SURVEY—1999 MONTHLY VOLUNTEER LABOR DATA

State	Fixed Sites	Participants	Mobile Sites	Participants	Volunteer Sites	Participants	Volunteer Hours	Dollar Value	Square Miles
New Hampshire	3	2,084	83	4,586	37	790	4,078	$58,315	9,304
New York	8	41,066	99	5,594	.....	.....	142	2,031	3,300
Wash. D.C	5	7,089	5	723	17	2,396	739	10,568	63
Kentucky	1	4,800	.....	.....	16	850	600	8,580	750
North Carolina	1	1,087	8	239	.....	.....	75	1,073	500
Tennessee [1]	4	14,324	3	4,400	.....	.....	.....	.....	1,850
Illinois	13	12,417	.....	.....	75	3,801	940	13,442	956
Michigan [1]	61	45,943	267	49,611	417	12,525	10,160	145,288	58,527
Red Lake, MN [1]	1	325	.....	.....	.....	.....	.....	.....	([2])
Minnesota [1]	2	2,822	83	5,994	.....	.....	504	7,207	84,068
Louisiana	10	10,754	35	25,797	251	37,197	5,352	76,534	27,928
New Mexico	3	10,402	38	5,640	20	845	1,014	14,500	42,181
Colorado	10	18,022	431	4,872	15	699	9,107	130,230	28,040
Iowa	1	2,669	44	1,039	79	667	390	5,577	3,590
Kansas	12	3,474	75	2,225	56	884	1,570	22,451	11,975
Nebraska	24	8,918	56	2,835	89	2,461	2,079	29,730	74,866
South Dakota	2	470	5	140	.....	.....	.....	.....	([2])
Arizona	98	17,705	6	800	1	95	3,576	51,137	80,000
California	.....	.....	36	26,341	81	4,980	4,400	62,920	1,007
Oregon	1	852	3	96	.....	.....	121	1,730	435
TOTALS	260	205,223	1,277	140,932	1,154	68,190	44,847	641,312	429,340

[1] Figures are approximate; taken from Spring/Summer 1999, in a survey conducted by the National CSFP Association. (figures are from 1998).
[2] Reservation.

FIXED SITE: Foods are warehoused and participants travel to the site and take food packages back to their homes. Distributed to participants by paid staff.
MOBILE SITE: Distribution where foods are transported to a facility (not warehoused) and distributed to participants by paid staff.
VOLUNTEER SITE: Location where distribution of prepacked foods is performed by volunteer groups or individuals.

PREPARED STATEMENT OF THE NATIONAL FISHERIES INSTITUTE

As the subcommittee begins it consideration of the Administration's budget submission and fiscal year 2001 appropriations, the National Fisheries Institute (NFI) would like to take this opportunity to share with you our priorities and concerns regarding the budget proposal for the Food and Drug Administration (FDA). The NFI is the nation's leading trade association for the fish and seafood industry. Our members represent all aspects of the fish and seafood industry: harvesters, aquaculturalists, processors, importers, exporters, food service operators, and restaurants. The NFI appreciates your consideration of these requests.

FOOD AND DRUG ADMINISTRATION

Consolidating Seafood Inspections

The fiscal year 2001 FDA budget proposes for the second year in a row that $13 million in user fees be collected by transferring the Department of Commerce (USDC) Voluntary Seafood Inspection Program to the FDA as a Performance-Based Organization. The NFI opposes this transfer. We feel it is inappropriate to combine the voluntary marketing and quality assurance program of the USDC with the mandatory seafood HACCP program at the FDA. As suggested by the National Academy of Sciences, such a combination could create conflicts of interest that would undermine the objectivity and credibility of FDA's seafood HACCP program. The NFI is particularly concerned about the proposal to "cross-deputize" voluntary inspectors as HACCP inspectors. If the FDA needs FTEs to adequately staff its mandatory inspection program, it should seek the funding for them. The NFI pioneered seafood HACCP and cannot support any proposal that would weaken this program. We urge you to oppose this proposal.

Improving FDA's Infrastructure

The NFI strongly supports the proposal for $43 million over two years (including $20 million in fiscal year 2001) to replace the dilapidated Los Angeles regional laboratory facility. Expected benefits from construction of the new Los Angeles laboratory include providing a much safer location and a vastly improved working environment for FDA and partnering state laboratory personnel, having a concentration of scientific talent available which will permit better management of the analytical workload and will provide significant improvement in operational efficiency. Also, better analytical coverage will be provided during emergencies. Additional benefits include a more efficient use of costly analytical equipment and better-equipped laboratories in a state-of-the-art facility, resulting in improved turn-around time and sampling efficiency. The existing facility which processes 23 percent of the FDA's food analyses each year, has exceeded its limitations and is currently unable to provide these services in a timely and efficient manner. The NFI urges the subcommittee to full fund this budget proposal.

At the same time, we are concerned about the ongoing degradation of services from the FDA's seafood laboratory in Seattle, WA. The FDA must have an adequate research capability to provide scientific data and information necessary to implement its inspection program based on sound science. This lab provides extremely valuable analytical services to the fish and seafood industry. Staff and funding cuts have undermined the capability of this facility to deliver scientific information on emerging food safety questions. We urge the subcommittee to direct the FDA to maintain the services of the Seattle seafood laboratory.

User Fees

The NFI strongly opposes the proposal to impose user fees on food additive petitions ($8.4 million) and food export certifications ($5.3 million). With regard to food additive petitions, these petitions are required in order to protect public health from potentially dangerous or otherwise inappropriate food additives. The primary beneficiary is the public. In addition, a perceived conflict of interest could arise if consumers thought the industry was paying the FDA to approve food additives. With regard to export certificates, our trading partners, most notably the European Union, rely on FDA's export certifications as an objective and credible verification of the safety of exported food products. Imposing a User Fee on this system could undermine their confidence in the independence of the certifications, hurting our fish and seafood exports that already trail seafood imports by $5 billion per year. We urge you to oppose these proposals.

Equivalency Agreements

More than 60 percent of the more than 4 billion pounds of seafood consumed by Americans is imported. Under the current FDA HACCP program, importers must

demonstrate HACCP compliance by their foreign suppliers. NFI member companies strive to acquire verification documentation and other assurances that their imports have been processed under HACCP systems. The FDA further assures compliance with port-of-entry sampling. However, this sampling and testing system is reactive and subject to resource limitations. One way to substantially improve our confidence in the food safety inspection systems of our foreign suppliers is throughout the establishment of agreements between the FDA and our major trading partners. The fiscal year 2000 FDA budget proposal indicated that the FDA was working to improve the safety and sanitation of imported seafood by establishing equivalency agreements to ensure that exporting countries have seafood inspection systems equivalent to those of the U.S. The FDA's equivalency program is consistent with provisions of the General Agreement on Tariffs and Trade (GATT) where participating countries agreed to accept products made under equivalent systems. In fiscal year 2000, the FDA was to have reviewed submissions from numerous countries and the European Union. In addition, the FDA was to visit 6 countries, including Australia, Canada, Chile, Iceland, New Zealand, and the E.U.

Despite the rhetorical commitment to equivalency agreements, not a single agreement has been signed. We urge the subcommittee to direct the FDA the prioritize equivalency agreements.

Compliance Visits

The FDA conducts HACCP compliance visits to key nations that supply fish and seafood to the United States. The visits allow the FDA to evaluate the capabilities of government inspection programs and individual processing plants to meet U.S. HACCP requirements. These visits augment the verification efforts of the U.S. seafood importing community and help ensure that overall safety of imported fish and seafood products. In addition, the information gathered during these visits can be used to improve port of entry inspection by targeting risk entries. Despite recent increases in the number of countries inspected by the FDA, we feel additional visits are warranted. We urge the subcommittee to direct the FDA to continue to increase the number of compliance visits it is conducting on an annual basis.

USDA—AGRICULTURAL RESEARCH SERVICE

The NFI is deeply concerned about a proposed $2.5 million cut to the aquaculture/fish farming research being conducted at ARS research stations in Alabama, Connecticut, Hawaii, Idaho, Mississippi, and West Virginia. The proposed cuts are in the areas of fish health management (such as vaccine development), registration of drugs and chemicals to combat serious diseases, least-cost fish feed formulations, genetic fish stock improvements, catfish, and cool and cold water fish production technology.

The ARS has done much to focus research programs over the last decade and provide needed research results to the aquaculture community. With world population continuing to grow, and wild harvest of fish and seafood reaching its maximum potential, aquaculture will play an increasingly important role in providing lost-cost, healthful protein to all peoples. Without a strong commitment to aquaculture research and development, the United States will find other nations taking the leadership role in aquaculture development. We urge the subcommittee to oppose these cuts. The NFI appreciates the opportunity to submit these requests with regard to the fiscal year 2001 FDA budget. Thank you for your consideration of these requests.

PREPARED STATEMENT OF THE NATIONAL FOOD PROCESSORS ASSOCIATION

Mr. Chairman, my name is John Cady, Chairman and CEO of the National Food Processors Association (NFPA), and today I am submitting testimony on behalf of NFPA. NFPA is the nation's largest food trade association representing a $460 billion industry that includes an estimated 20,000 manufacturing facilities and employees over 1.5 million Americans. With three laboratory centers, NFPA is the leading authority on scientific and public policy issues involving food science and safety for the food industry. For more than 90 years, the food industry has relied on NFPA for government and regulatory affairs representation, scientific research, technical services, education, communications, and crisis management.

NFPA was formed at a time when it was necessary to enhance public confidence in food safety, and we are proud of our contributions to further enhancing the safety of our nation's food supply. NFPA enjoys many partnerships with federal and state food safety regulatory authorities, and we are committed to ensuring that these

same authorities are well equipped to protect public health and instill confidence among consumers about the safety of the food products they consume.

NFPA is particularly supportive of providing an adequate level of funding for the Food and Drug Administration (FDA) and the Department of Agriculture's Food Safety and Inspection Service (FSIS). While several federal agencies have responsibility for food safety and quality programs, the FDA and FSIS share the primary responsibility for food regulation.

USER FEES

The President's fiscal year 2001 Budget proposes new user fees—more appropriately described as regulatory taxes—which require food companies to pay for the privilege of being regulated. The fiscal year 2001 request proposes nearly $550 million in such user fees—$530 million for the FSIS and $13 million for the FDA's food regulation program. NFPA appreciates that the Committee repeatedly has rejected these proposals in past Administration budget requests, and recommends again that funding of food safety and regulation programs should be borne through appropriated funds.

Proposed user fees on the food industry are hidden taxes whose costs would be borne both by producers and eventually consumers in higher food prices. Furthermore, funding regulatory programs through taxes raised from the industry would only serve to undermine public confidence in the independent judgment of either FDA or the FSIS. We urge the Committee to reject these user fee proposals.

FOOD SAFETY INITIATIVE

NFPA appreciates the continued emphasis that Congress has placed on food safety through its funding for the Food Safety Initiative for FDA, USDA, and the Centers for Disease Control (CDC) in fiscal years fiscal year 1998 through 2000. The fiscal year 2001 request represents the fourth year of the Initiative, and we endorse most aspects of the Initiative's request, particularly those areas that emphasize research, risk assessment, education and surveillance. We request, however, that the Committee remain vigilant in its oversight to ensure that appropriated funds for food safety programs are deployed in a manner commensurate with relative food safety risks.

FOOD AND DRUG ADMINISTRATION'S FOOD REGULATORY PROGRAMS

NFPA supports the requested level of funding for FDA's food regulation activities, but recommends, to the extent funds are provided that priority be given to those areas of research, risk assessment, education and surveillance. Such priority setting will ensure that limited resources will be targeted toward foodborne illness problems that pose the greatest risks. In addition, we support FDA's infrastructure request for funding to administer the transfer of the Center for Food Safety and Applied Nutrition (CFSAN) to College Park, Maryland and to construct a new regional laboratory in Los Angeles, California.

We also urge the Committee to protect funding for food science base activities at CFSAN. While CFSAN has benefited from funding increases in recent years, much of these increases have been absorbed by a combination of dedicated funding for regulatory initiatives, and staff salary increases and cost-of-living adjustments. This "crowding out" effect appears to have contributed to a slow, but steady, erosion in FDA's ability to preserve its food science base. The continued decline of FDA's scientific base can only imperil FDA's long-term capabilities to respond rapidly and authoritatively to emerging scientific and policy challenges that grow increasingly complex. We urge the Committee to explore with FDA opportunities to support the integrity of CFSAN's scientific capabilities.

FURTHER REFORMS NEEDED AT FOOD SAFETY AND INSPECTION SERVICE

NFPA supports adequate resources for the FSIS, but is concerned with reports of personnel management practices that have led to inspector shortages and resulting plant slowdowns or work stoppages in meat and poultry establishments. We urge the Committee to review this problem to ensure the availability of inspection personnel via either additional resources or management reforms, including alternative inspection procedures.

NFPA supports the transition to a HACCP-based inspection system, but notes that FSIS pledges to remove inspection regulations that are inconsistent with HACCP have not been fully realized. We urge the Committee to ensure that unnecessary layers of regulation are promptly removed to speed HACCP implementation.

NFPA notes with approval the announced plan of FSIS to move toward daily, unscheduled processing inspection in 2001. NFPA agrees that daily, unscheduled processing inspection can free up appropriated funds to address inspection shortages or other, greater relative food safety risks. NFPA believes, however, that without arbitrary requirements for frequency of inspection, unscheduled inspection in processing establishments could yield even greater benefits. NFPA urges the Committee to direct FSIS to explore methods of further maximizing this flexible approach.

NFPA also recognizes the lead role that FSIS plays in overseeing the work of the U.S. Manager for Codex Alimentarius. NFPA strongly supports the fiscal year 2001 requested increase of $1 million for FSIS Codex activities, and requests the Committee to providing an even higher level of funding for this important function. Codex remains a critically important forum for ensuring United States leadership in international food safety activities.

CONCLUSION

In conclusion, NFPA is grateful for the important funding oversight that the Committee provides to ensure the integrity of U.S. food safety regulation. The food industry endeavors to produce the safest and highest quality food products in the world. As a result, NFPA understands that adequate funding for our nation's food safety regulators through direct appropriations is fundamental to good public health, and to maintaining the confidence of consumers in the safety of the food supply. NFPA appreciates the opportunity to submit testimony on the President's fiscal year 2001 food safety budget request.

PREPARED STATEMENT OF THE NATIONAL GRAIN AND FEED ASSOCIATION

Chairman Cochran, Senator Kohl, and members of the subcommittee, the NGFA is grateful for this opportunity to submit testimony on Government aid to producers during this time of low commodity prices.

The National Grain and Feed Association (NGFA) consists of more than 1,000 grain, feed, processing and grain-related companies that operate 5,000 facilities that store, handle, merchandise, mill, process and export more than two-thirds of all U.S. grains and oilseeds. About 70 percent of NGFA members are small businesses—country elevators and feed mills. Also affiliated with the NGFA are 37 State and regional agribusiness associations.

PRICES ARE LOW, BUT NOW IS NOT THE TIME TO MOVE BACKWARDS

As everyone knows, prices for farm commodities are low, and according to recent baseline estimates released by the USDA and others, are likely to see only slow increases over the next two years, barring significant weather and crop production problems. This situation has resulted in calls for a return to the failed policies of the past as a way of artificially increasing crop prices. It is our opinion that the results of such a decision would be disruptive to the long-term prospects of the rural economy. Short-term blips in the market caused by recession or depression in large country economies or in major sections of the world can cause economic adjustment challenges, but should not form the basis for major shifts in policy direction. Instead of going backwards, and losing the progress the U.S. has made in recapturing its market share, Congress should search for new ways of increasing producer competitiveness and security through innovative, flexible farm policy.

AN EXPANDED CONSERVATION RESERVE PROGRAM IS COUNTER-PRODUCTIVE

On numerous occasions Government officials have told American producers that the key to future prosperity was through exports, and making inroads into rapidly developing overseas markets. The FAIR Act of 1996 was a strong step toward restructuring American agriculture to better compete in this new environment. One of the major changes the Act wrought was ending annual acreage-reduction programs such as the ARP, and shifting the focus of the Conservation Reserve Program (CRP) from supply control to conservation and environmental purposes. USDA leadership has been outspoken on this point, with Secretary Glickman stating on numerous occasions that the CRP would not be used by this administration for supply control purposes.

In its fiscal year 2001 budget request, however, the administration has reversed course by supporting an increase in the CRP's statutory acreage cap to 40 million acres. In addition, several bills are pending before the Agriculture Committees in Congress that would increase the cap. Unfortunately, the goal of this activity seems to be to once again use the CRP as a supply control tool in response to low com-

modity prices. We believe such a dramatic policy shift will result in longterm harm to the rural economy for the following reasons:

—Acreage idling in the U.S. has consistently failed to raise commodity prices for producers over any appreciable length of time;

—Acreage idling results in increased foreign production acreage; and

—Increased foreign production results in reduced market share for U.S. producers at a time when global consumption is increasing.

Thus, acreage idling tends to both diminish farm income prospects earned through commercial markets and increases farmers' dependence on Government for more subsidies.

World commodity consumption will continue to grow

There has been a sharp increase in global consumption of commodities over the past twenty years. The following table shows the percentage of growth in global grain and oilseed consumption:

Growth in Consumption, 1980–1999

	Percent
Rice	+40
Wheat	+32
Feed grains	+19
Oilseeds	+94

This trend is expected to continue. Most agricultural forecasts call for a steady growth in grain, oilseed and meat consumption. With world population expected to near 10 billion people by the year 2050, global expansion in food markets over the long term is readily predictable. Over the next ten years, global consumption of foodstuffs will rise as developing nations in Asia and Latin America experience strong economic growth. Improving personal income and affluence will result in increasing demands for more and better quality foods, markets that American producers can take full advantage of. They can't, however, compete for these markets if they are hamstrung by an artificial reduction in their production capacity.

Acreage idling fails to increase commodity prices

The following analysis uses a 5-year average of grains and oilseeds acreage in millions of hectares around the 1980 (1978–1992) and the 1990 (1988–1992) crop years. It was during the time between these crop years that the U.S. acreage-idling programs were at their peaks.

	U.S. hectares	Non-U.S. hectares	World hectares
1978–1982	106,691	741,011	847,702
1988–1992	92,027	757,375	849,202
Change	−14,664	+16,364	+1,700
Percent	(−14)	(+2.2)	.....

Acreage Idling Price Impact:

Corn	1980=$3.10 pb
	1990=$2.35 pb
Wheat	1980=$4.00 pb
	1990=$3.00 pb
Soybeans	1980=$7.60 pb
	1990=$5.90 pb

This is only one example of how the past policy of idling large tracts of productive farmland did nothing to increase prices. In fact, it cost U.S. farmers valuable revenue as foreign producers easily filled the void.

Acreage idling increases foreign production acres

Overall, world production acreage has increased to take advantage of the growth in consumption. Following the ineffective and misguided embargo of grain and food trade with the former Soviet Union, the U.S. chose a policy regime of high loan rates and heavy reliance on acreage idling. From 1980 to 1995, the period of heaviest idling, the U.S. shrank its production base while other nations more than replaced the acreage that the U.S. unilaterally gave up:

Grains and Oilseeds Acreage Changes, 1980–1995

[In millions of acres]

U.S.	−33
Foreign	+49

Foreign production of grains continued to grow; world consumption continued to grow; the only economic factor that shrank was U.S. acreage and our ability to compete for growing markets. Consequently, U.S. market share of global grains and oilseeds markets declined precipitously from nearly 27 percent to less than 21 percent. The U.S. gave up tremendous market share during this period of heavy acreage idling.

There is another adverse effect of increasing the CRP: the Government essentially becomes another competitor against farm operators for productive land. If land in a certain area is rented by the Government, the rate that the CRP payments for that land are set at become a de facto price floor for rent prices of non-CRP land in the area. As one producer from Washington State recently told Secretary Glickman, "Farmers, especially young farmers, cant compete with the CRP lease rate. You're forcing young farmers off the land!" An expansive CRP would further tighten already thin farming margins.

As stated above, one of the most important provisions of the FAIR Act was to shift the focus of the CRP toward environmental and conservation purposes. A return to expanded use of CRP for supply control purposes will have a predictable and disastrous effect on long-term market growth and farm income prospects.

CROP INSURANCE, RISK MANAGEMENT, AND GOVERNMENT'S ROLE

Instead of acreage idling, Congress should continue to examine alternative means of aiding producers during times of low prices. One alternative is crop insurance, and Congress has been debating this issue for over a year. While crop insurance is a vital piece of the risk management puzzle, we would urge Government to keep the following points in mind:

—Crop insurance, cash forward contracts, futures/options and agricultural trade options all are useful (or potentially useful) products. But none of these products, standing alone, is a "complete" risk-management tool; each should be evaluated by the farmer on its merits and whether it benefits individual operations. To encourage the private sector to make more risk-management tools available to farmers, Government should ensure that policies support all these tools. One policy change that should be pursued quickly is to establish a reasonable regulatory framework for agricultural trade options to permit that tool to come into more common usage.

—Government should carefully consider what practical limits should be placed on the subsidization of crop insurance. Excessive subsidies for crop insurance can lead to: (1) excessive commodity supplies causing depressed prices (a recent study indicates excess supplies of 3 percent may be created by the current subsidy structure); (2) disincentives for using other, more efficient, tools for risk management; (3) distortions in market signals guiding farmers' production/marketing decisions; and (4) programs favoring certain types of farmers and regions of the country. If properly limited and structured, crop insurance subsidies can lead to prudent use of production and yield risk-management tools that will also further encourage sound marketing and pricing strategies for crops. [See also item #5 of this section.]

—The Government should exercise extreme caution in subsidizing price-insurance tools particularly price insurance tools that replicate or offer similar features to existing futures-based or cash-based products. There is a substantial risk that Government subsidization of insurance-type products could "crowd out" non-subsidized market-based products, resulting in less efficient markets, excessive taxpayer expenses and ultimately rewarding poor management practices. Options traded on futures exchanges, by providing price protection for a fixed premium, function much like insurance and subsidization of competitive products is counter-productive.

—The Government should consider a more neutral system of incentives for risk management to enhance accessibility of risk-management alternatives to more farmers. There is no single set of risk-management tools that are "right" for the farmer. In some cases, crop insurance "works" for the farmer; in other cases the farmer is better off to self-insure. As for forward contracting, the farmer may be more comfortable using certain forms of contracts over others.

The role of Government should be to encourage farmers' use of tools that are of greatest value to his/her individual operation. To avoid creating distorted in-

centives in the marketplace directed at certain categories of risk-management tools, one policy concept would be to permit current crop insurance subsidies to be "portable." For example, if the producer evaluated the subsidized crop insurance product and decided it was not a prudent investment, a portability feature would permit the farmer to take the subsidy embedded in the insurance and apply it to the investment cost of other risk-management tools. Such portability could be applied to all or a portion of the embedded subsidy. The ultimate goal would be to enhance accessibility and make more affordable a wide variety of risk-management tools. In this regard, the NGFA is supportive of the concept of "multi-option" risk management incorporated in S. 1666.

—Government policies should be designed to encourage farmers to begin marketing earlier in the production cycle. The longer a producer delays selling or actively pursuing a marketing plan, the fewer days remain in which a favorable pricing opportunity may occur. Producers realistically can market a single crop over a span of two or more years, starting a year or more prior to harvest. Among policies that would encourage earlier marketing are: (1) Purchasing crop insurance that can provide the assurance of minimum yields; and (2) A viable program of agricultural trade options, which would provide an early pricing opportunity while permitting the farmer the option to "walk-away" (not deliver) on contract in the event of crop failure or another event. Examples of policies that discourage early marketing are: (1) subsidization of on-farm storage, which tends to lead to a "wait-and-see" marketing strategy; (2) extended loan programs, which provide a longer "tail" to the marketing period but also may take away from early season strategies because the producer knows he/she has the opportunity to extend the marketing period; and (3) farmer-owned reserve programs, which function largely like a long-term extended loan program. Such programs also tend to build overall stock levels that overhang the market and depress farm prices for long periods.

As the debate continues over how best to support producers during stressful economic times, we would urge Congress to craft policies that provide improved support without creating marketplace distortion.

PREPARED STATEMENT OF THE NATIONAL POTATO COUNCIL

My name is Todd Michael. I am a potato farmer from Ohio and current Vice President, Legislative/Government Affairs for the National Potato Council (NPC). On behalf of the NPC, we thank you for your attention to the needs of our potato growers.

The NPC is the only trade association representing commercial growers in 50 states. Our growers produce both seed potatoes and potatoes for consumption in a variety of forms. Annual production in 1997 was 465,800,000 cwt with a farm value of $2,402,000,000. Total value is substantially increased through processing. The potato crop clearly has a positive impact on the U.S. economy.

The potato is the most popular of all vegetables grown and consumed in the United States and one of the most popular in the world. Annual per capita consumption was 142.1 pounds in 1997 up from 107 pounds in 1962 and is increasing due to the advent of new products and heightened public awareness of the potato's excellent nutritional value. Potatoes are considered a stable consumer commodity and an integral, delicious component of the American diet.

The National Potato Council's fiscal year 2001 appropriations priorities are as follows:

Cooperative State Research Education and Extension Service (CSREES)

Special Grant Program.—The NPC urges that $1.5 million be appropriated for the special research grant program. The Congress increased the level in fiscal year 2000 by $50,000 to $1.35 million. However, that increase was lost due to the across-the-board cuts.

The NPC also urges that the Congress, once again, include report Committee language as follows:

> "*Potato research*.—The Committee expects the Department to ensure that funds provided to CSREES for potato research are utilized for varietal development testing. Further, these funds are to be awarded competitively after review by the Potato Industry Working Group."

Agricultural Research Service (ARS)—Facilities

Prosser, Washington.—Oppose the Administration's fiscal year 2001 budget request that $191,000 for potato research be terminated and assure that full amount appropriated by the Congress in fiscal year 2000 is utilized by the ARS at Prosser.

Orono, Maine.—Oppose the Administration's fiscal year 2001 budget request that $230,000 for potato research be terminated and assure that the full amount appropriated in fiscal year 2000 is utilized by the ARS at Orono. Support the Administration's fiscal year 2001 budget request for an increase of $300,000 for Integrated Sciences for Ecological Challenges.

Beltsville, Maryland.—Improving the nutritional value of potatoes is a high priority of the NPC. Research should be initiated at the Beltsville Vegetable Laboratory that combines traditional breeding and plant biotechnology to increase the nutritional value of the potato and add value to the crop. Estimated cost would be $300,000 for fiscal year 2001.

Albany, California.—Dr. William Belknap in Albany has been funded by ARS, with the support of the NPC, to develop genetic constructs for potato transformation that will be publicly available without patent restrictions on their use. His laboratory should serve as a source of reagents for use by ARS scientists and others who work in the public sector. Estimated cost of providing this service is an additional $100,000 in fiscal year 2001 for Dr. Belknap's base budget.

Fort Collins, Colorado.—Support the budget request for $300,000 for the Soil, Plant, Nutrient Research Program to conduct research to enhance water and soil quality with precision conservation farming.

Aberdeen, Idaho.—Appropriate $3 million for the construction of an advanced molecular genetics laboratory at the National Small Grains Germplasm Research Facility. This facility is needed to assure the continuation of advanced molecular genetics research for potatoes and small grains.

Committee Report Language.—The NPC urges that the Congress once again add Committee report language urging the ARS to work with the NPC on how overall research funds can best be utilized for grower priorities.

Yakima Agricultural Research Laboratory, Wapato, Washington: "Potato research at the Yakima Agricultural Research Laboratory. The Committee expects the Department to ensure that funds provided to the Yakima Agricultural Research Laboratory for potato research are fully utilized for potato research equivalent to 2.15 F.T.E. of Research Entomologist effort, as directed by the ARS National Program Staff. These 2.15 F.T.E. are to be distributed among a maximum of four Research Entomologists. Further, this research is to be conducted without dependence on, but may be supplemented by, local extramural financial support."

Plant Protection and Quarantine Service (APHIS–USDA)

The NPC urges that the Congress appropriate $580,000 for the Golden Nematode Quarantine Program, which amount is the fiscal year 2001 budget request. The National Potato Council also supports the appropriation of $100 million for the Agriculture Quarantine Inspection (AQI) user fee account, and the fiscal year 2001 budget request for AQI appropriated funds, for sanitary/phytosanitary (SPS) management and for pest surveillance and detection.

FQPA Funding

Finally, the NPC also supports the Administration's budget request for funds to meet the data requirements of the new Food Quality Protection Act, (FQPA). The NPC has devoted considerable time and resources to the evaluation of pesticides required by the FQPA. However, it is essential that the USDA have adequate resources to assist in this effort. Otherwise, given the tight time frame for these assessments, the EPA will rely on default assumptions in the absence of actual data.

PREPARED STATEMENT OF THE NATIONAL RURAL TELECOM ASSOCIATION

SUMMARY OF TESTIMONY REQUESTS

Project involved

—Telecommunications lending programs administered by the Rural Utilities Service of the U.S. Department of Agriculture

Actions proposed

—Supporting loan levels for fiscal year 2001 in the same amounts as those contained in the fiscal year 2000 Agriculture Appropriations Act which are the same levels as those requested in the President's budget for fiscal year 2001 for

hardship, cost-of-money, Rural Telephone Bank and guaranteed loan programs and the associated subsidy to fund those programs at the existing level.

—Supporting funding in the amount of $25 million in loan and grant authority designated for distance learning and telemedicine purposes and the $2 million in direct loans and grants for a pilot program to finance broadband transmission and local dial-up Internet service in rural areas as requested in the President's budget.

—Supporting an extension of the language removing the 7 percent interest rate ceiling on cost-of-money loans.

—Supporting continuation of the restriction on retirement of Rural Telephone Bank class A stock at the level contained in the fiscal year 2000 Agriculture Appropriations Act and an extension of the prohibition against the transfer of Rural Telephone Bank funds to the general fund.

—Opposing the proposal contained in the budget to transfer funds from the unobligated balances of the liquidating account of the Rural Telephone Bank for the bank's administrative expenses and loan subsidy costs.

Mr. Chairman, Members of the Committee: My name is John F. O'Neal. I am General Counsel of the National Rural Telecom Association. NRTA is comprised primarily of commercial telephone companies which borrow their capital needs from the Rural Utilities Service of the U.S. Department of Agriculture (RUS) to furnish and improve telephone service in rural areas. Approximately 1000, or 71 percent of the nation's local telephone systems borrow from RUS. About three-fourths of these are commercial telephone companies. RUS borrowers serve almost 6 million subscribers in 46 states and employ over 22,000 people. In accepting loan funds, borrowers assume an obligation under the act to serve the widest practical number of rural users within their service area.

PROGRAM BACKGROUND

Rural telephone systems have an ongoing need for long-term, fixed rate capital at affordable interest rates. Since 1949, that capital has been provided through telecommunications lending programs administered by the Rural Utilities Service and its predecessor, the Rural Electrification Administration (REA).

RUS loans are made exclusively for capital improvements and loan funds are segregated from borrower operating revenues. Loans are not made to fund operating revenues or profits of the borrower system. There is a proscription in the Act against loans which would duplicate existing facilities providing adequate service and state authority to regulate telephone service is expressly preserved under the Rural Electrification Act.

Rural telephone systems operate at a severe geographical handicap when compared with other telephone companies. While almost 6 million rural telephone subscribers receive telephone service from RUS borrower systems, they account for only four percent of total U.S. subscribers. On the other hand, borrower service territories total 37 percent of the land area—nearly 1½ million squares miles. RUS borrowers average about six subscribers per mile of telephone line and have an average of more than 1,000 route miles of lines in their systems.

Because of low-density and the inherent high cost of serving these areas, Congress made long-term, fixed rate loans available at reasonable rates of interest to assure that rural telephone subscribers, the ultimate beneficiaries of these programs, have comparable telephone service with their urban counterparts at affordable subscriber rates. This principle is especially valid today as the United States endeavors to deploy telecommunications "information superhighway" technology and as customers and regulators constantly demand improved and enhanced services.

At the same time, the underlying statutory authority which governs the current program has undergone significant change. In 1993, telecommunications lending was refocused toward facilities modernization. Much of the subsidy cost has been eliminated from the program. The subsidy that remains has been targeted to the highest cost, lowest density systems. Other loans are made at Treasury's cost-of-money or greater.

We are proud to state once again for the record that there has never been a default in the RUS/REA telephone program! All loans have been repaid in accordance with their terms with interest!

NEED FOR RUS TELECOMMUNICATIONS LENDING CONTINUES

The need for rural telecommunications lending is great today, possibly even greater than in the past. Technological advances make it imperative that rural telephone companies upgrade their systems to keep pace with improvements and provide the latest available technology to their subscribers.

These rapid technological changes and federal policies of competition and deregulation in the telephone industry, as evidenced by passage of the "Telecommunications Act of 1996", underscore the continuing need for targeted assistance to rural areas. The inherently higher costs to serve these areas have not abated. Regulatory trends encouraging competition among telephone systems increase pressures to shift more costs onto rural ratepayers. Interstate subscriber line charges continue to shift substantial costs to local exchange customers. Pressures to recover more and more of the higher costs of rural service from rural customers to foster urban competitive responses will further burden rural consumers.

1996 TELECOMMUNICATIONS ACT EFFECT ON RURAL AMERICA

Congress passed the Telecommunications Act of 1996 as the culmination of more than a decade of debating national telecommunications policy and balancing many diverse needs and interests. The 1996 Act responded to a number of rural needs and differences with a series of safeguards to ensure that rates, services and network development in rural America will be reasonably comparable to urban telecommunications opportunities.

The process of implementing the new law continues to raise troubling uncertainties and concerns about whether the FCC and the states will honor the balance Congress achieved in its policy, as regulators (a) radically revise the mechanisms for preserving and advancing "universal service," (b) adjust the cost recovery responsibilities and allocations of authority between federal and state regulation, (c) effectuate the Act's somewhat different urban and rural ground rules for how new companies and incumbent universal service providers connect their networks and compensate each other and (d) peel back layers of regulation developed over a century. So far, the FCC has been overzealous in expanding the Act's market-opening provisions to give new entrants a regulatory head start and advantage at the expense of the Act's rural development and universal service provisions. The FCC is trying to usurp the role of competition by dictating a whole new—and wholly inadequate—way to measure the costs of modern, nationwide telecommunications access to information. The FCC needs to reorder the sequence of its proceedings to ensure that rural Americans are not denied the ongoing network development and new services the Act requires. Rural telephone systems with universal service obligations must not be thwarted in their efforts to upgrade and provide rates and services reasonably comparable to urban offerings. The FCC must not falter in delivery on these national policies either during or after the difficult process of implementing the law. Congress and the courts must carefully supervise the FCC's implementation to achieve the rural access to information and an evolving modern public network intended by Congress, as well as the benefits of deregulation and genuine competition.

EXPANDED CONGRESSIONAL MANDATES FOR RURAL TELECOMMUNICATIONS

Considerable loan demand is being generated because of additional mandates for enhanced rural telecommunications standards contained in the authorizing legislation enacted in 1993 by Congress in Public Law 103–129.

These mandates coupled with the need for stable financing sources to meet the infrastructure demands envisioned for rural areas by the 1996 telecommunications act amply demonstrate the continuing need for this important program at the following levels:

5 percent Hardship Loans	$75,000,000
Cost-of-Money Loans	300,000,000
Guaranteed Loans	120,000,000
Rural Telephone Bank Loans	175,000,000
Total	670,000,000

These are the levels established in the fiscal year 2000 appropriations act for the hardship, cost-of-money, Rural Telephone Bank and guaranteed loan programs and are the same levels as those requested in the President's budget. We believe that the needs of this program balanced with the minimal cost to the taxpayer argue for its continuation at enacted levels given the fact that it provides funding for the neediest borrower systems serving the highest cost areas.

SPECIFIC ADDITIONAL REQUESTS

Continue the Removal of the 7 percent Cap on Cost-of-Money Loans

Again this year we are supporting removal of the 7 percent ceiling on cost-of-money loans even though long-term Treasury rates are currently below this level. This Committee included language in the fiscal year 1996 act to permit borrower

interest rates on cost-of-money loans to exceed the 7 percent per year interest rate ceiling contained in the authorizing act. The language has been continued in subsequent acts. We support an extension of this provision in the fiscal year 2001 bill.

Continue the Restriction on Retirement of Class A Government Stock in the Rural Telephone Bank (RTB) and also Continue the Prohibition Against Transfer of RTB Funds to the General Fund and Require the Payment of Interest

The Committee should continue the restriction on retirement of the amount of class A stock by the Rural Telephone Bank in fiscal year 2001. The Bank is currently in the process of retiring the government's stock as required under current law. We believe that this process which began in fiscal year 1996 should continue to be an orderly one as contemplated by the retirement schedule enacted five years ago and continued in last year's bill to retire no more than 5 percent of the total class A stock in one year. We also urge the Committee to continue the prohibition against the transfer of any unobligated balance in the bank's liquidating account which is in excess of current requirements to the general fund of the Treasury along with the requirement that the bank receive interest on those funds. The private Class B and C stockholders of the Rural Telephone Bank have a vested ownership interest in the assets of the bank including its funds and their rights should be protected. Previous appropriations acts (fiscal year 1997 through 2000) have recognized the ownership rights of the private class B and C stockholders of the bank by prohibiting a similar transfer of the bank's excess unobligated balances which otherwise would have been required under the federal credit reform act.

Reject Budget Proposal to Transfer Funds from RTB Liquidating Account for Subsidy and Administrative Costs

In this same vein, we are also opposed to the proposal contained in the President's budget again this year that the subsidy cost associated with Rural Telephone Bank loans be funded by a transfer from the unobligated balances of the bank's liquidating account rather than by a traditional appropriation from the general fund of the Treasury which has been the funding mechanism utilized for the bank since enactment of the federal credit reform act in 1990. Requiring the bank to fund the subsidy cost of its loans would dilute the interests of the bank's stockholders. By definition, the bank's unobligated balances are not exclusively federal funds but are subject to the respective ownership interests of all the stockholders of the bank. This cost is more properly funded through a regular appropriation from the general fund of the Treasury.

The President's budget also proposes that the bank assume responsibility for its administrative costs also by a transfer of funds from the unobligated balances of the bank's liquidating account rather than through an appropriation from the general fund of the Treasury. This recommendation is contrary to the specific language of Sec. 403(b) of the RTB enabling act.

The budget language acknowledges that neither proposal would result in budgetary savings. Both proposals were specifically rejected again last year by this Committee. No new justification for these recommendations is contained in the budget. Both proposals would require consideration by the authorizing committees and enactment of new authorizing legislation as a prerequisite to an appropriation. As of this date, no such legislation has been transmitted by the Administration or is under consideration before the authorizing committees.

Loans and Grants for Telemedicine, Distance Learning and Internet Access

The President's budget requests $25 million in loan and grant authority for fiscal year 2001 specifically devoted to telemedicine and distance learning purposes. Loans are made at the government's cost-of-money. The purpose is to accelerate deployment of telemedicine and distance learning technologies in rural areas through the use of telecommunications, computer networks, and related advanced technologies by students, teachers, medical professionals, and rural residents. We believe this program is particularly important. Continuing to target funds in this manner spurs deployment of this important new technology which is vital for the survival of rural schools, hospitals and the rural communities they serve. At the same time, we believe the level proposed strikes a cost effective balance for the taxpayer.

We are also supporting the $2 million requested in the President's budget for a pilot program of loans and grants to finance broadband transmission and local dial-up access to the Internet in rural areas.

CONCLUSION

Thank you for the opportunity to present the association's views concerning this vital program. The telecommunications lending programs of RUS continue to work

effectively and accomplish the objectives established by Congress at a minimal cost to the taxpayer.

PREPARED STATEMENT OF THE NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

SUMMARY

The information age continues to evolve at lightening speed, permeating every element of our existence. No longer a luxury at all, today, access to advanced, affordable, communications infrastructure and services, by every American, is an absolute necessity. Indeed, federal, state, and local executives, legislators, and regulators, as well as the general public, are demanding nothing less.

The small rural incumbent local exchange carrier (ILEC) segment of the communications industry has responded to these demands with outstanding vigor, providing perhaps the most exceptional telecommunications services of anywhere in the nation. It has done so through both a deep commitment to community and by having access to the affordable financing that is available via the Rural Utilities Service (RUS) Telecommunications Loan Program.

For over 50 years, NTCA's small rural ILEC members, in partnership with the RUS, have fulfilled the joint statutory mission of both providing and improving rural telecommunications service, with distinction. With the RUS appropriately funded, they will be able to continue that mission. Therefore, NTCA recommends full funding for all accounts of the RUS Telecommunications Loan Program and its related community development program. Additionally, NTCA recommends that language be included in the fiscal year 2001 appropriations package which will protect the program, and particularly the Rural Telephone Bank (RTB), from frivolous or premature actions intended to redirect their course.

BACKGROUND

NTCA is a national trade association representing more than 500 small, rural, cooperative and commercial incumbent local exchange carriers (ILECs) located throughout the nation. These locally owned and operated ILECs provide local exchange service to more than 5 million rural Americans. Through the 50 year history of the RUS Telecommunications Loan Program, more than 80 percent of NTCA's member systems have been able to utilize the federal program to one degree or another.

NTCA's members, like most of the country's independent ILEC's, evolved to serve high cost rural areas of the nation that were overlooked by the industry's giants as unprofitable. And there can be no doubt regarding the high cost of such markets. Consider that the combined service area's of these ILECs constitutes approximately 40 percent of the nation's geographic area, yet the more than 5 million subscribers served in this territory account for little more than 4 percent of the nation's total access lines. On average, RUS borrowers have approximately 6 subscribers per mile of infrastructure line, compared with 130 for the larger urban-oriented, non-RUS financed systems. This results in an average plant investment per subscriber that for RUS borrowers is 38 percent higher than for most other systems.

Congress recognized the unique financing dilemma confronting America's small rural ILECs as early as 1949. It was in that year that it amended the Rural Electrification Act (RE Act) to create the Rural Electrification Administration (REA) Telephone Loan Program, today known as the RUS Telecommunications Loan Program. Through the years Congress has periodically amended the RE Act to ensure that original mission—to furnish and improve rural telephone service—was met. In 1971, the Rural Telephone Bank (RTB) was created as a supplemental source of direct loan financing. In 1973, the RUS was provided with the ability to guarantee Federal Financing Bank (FFB) and private lender notes. In 1993, Congress established a fourth program lending facet, the Treasury Cost of Money account.

RUS HELPS MEET INFRASTRUCTURE DEMANDS

While the RUS has helped the subscribers of NTCA's member systems receive service that is comparable or superior to that available anywhere in the nation, their work is far from complete. As federal policies such as the Telecommunications Act of 1996 continue to evolve, the high costs associated with providing modern telecommunications services in rural areas will not diminish. Four years into the implementation of the1996 Act, the Federal Communications Commission's (FCC's) interpretation of the statute, and several court decisions, have held little regard for congressional intent particularly with respect to universal service which is so vital to

small rural ILECs. Consequently, the ongoing need for the well defined, understood, time-tested RUS Telecommunications Loan Program is even greater.

For example, RUS telecommunications lending has stimulated billions of dollars in private capital investment in rural communications infrastructure. In recent years, on average, less than $10 million in federal subsidy generated $670 million in federal loans and loan guarantees. For every $1 in federal funds that were invested in rural communications infrastructure, $4.50 in private funds were invested.

The RUS is also making a difference in our rural schools, libraries, and hospitals. Since 1993, the RUS Distance Learning and Telemedicine Grant and Loan program has funded approximately 350 projects throughout the nation for interactive technology in rural schools, libraries, hospitals, and health clinics. To date, approximately 704 rural schools and education centers have gained access to improved educational resources through the information superhighway by sharing limited teaching resources and gaining access to libraries, training centers, vocational schools and other institutions located throughout the country. This program has provided unprecedented educational opportunities for rural students and enhanced health care for rural residents.

In addition, two other RUS related programs are making a difference in rural America. Formerly under the RUS, and known as the Zero Interest Loan and Grant Program, the Rural Economic Development Grants Program and the Rural Economic Development Loans Program are now managed by the Rural Business Cooperative Service. The two programs provide funds for the purpose of promoting rural economic development and job creation projects, including funding for project feasibility studies, start-up costs, incubator projects and other expenses tied to rural development.

NTCA'S APPROPRIATIONS RECOMMENDATIONS

Fully Fund The RUS Telecommunications Loan Program.—Increasing demand for expanded telecommunications services and infrastructure upgrades indicates a continuing strong need for stable loan levels at the authorizations established by the Rural Electrification Loan Restructuring Act of 1993. NTCA is supporting loan levels for fiscal year 2001 in the same amounts as those contained in the fiscal year 2000 Agriculture Appropriations Act, which are the same levels as those requested in the President's budget for fiscal year 2001.

Hardship Account	$75,000,000
Treasury-rate Account	300,000,000
Guaranteed Account	120,000,000
Rural Telephone Bank Account	175,000,000
Total	670,000,000

Extend Removal Of The Interest Rate Cap On Treasury-Rate Loans.—NTCA is also requesting that Congress again include language removing the 7 percent interest rate cap on Treasury-rate loans. This provision has been included in recent appropriations measures to prevent the potential disruption of the program in the case where interest rates exceed 7 percent and insufficient subsidy cannot support authorized lending levels.

Prohibit The Transfer Of Unobligated Balances Of The RTB Liquidating Account.—NTCA also recommends that Congress continue the prohibition against the transfer of any unobligated balances of the Rural Telephone Bank liquidating account to the general fund of the Treasury. This language has routinely been included in annual appropriations measures since the enactment of the Federal Credit Reform Act (FCRA), Public Law 101–508, that allows such sweeping to potentially occur. Restatement of this language will again ensure that the RTB's private class B & class C stockholder are not stripped of the value of their statutorily mandated investment in the Bank.

Prohibit RTB From Self Funding Subsidy And Administrative Costs.—The Administration's fiscal year 2001 budget proposal suggests funding the RTB's loan subsidies and administrative expenses out of unobligated balances in the bank's liquidating account rather than out of the general fund of the Treasury as is required by the RE Act. NTCA urges Congress to reject this proposal, as it has in the past, for the following basic reasons: (1) such action would require amendment of the RE Act, (2) the proposal appears to be in conflict with the intent of the FCRA, (3) the proposal will not result in federal budgetary savings, (4) it is unnecessary to the determination of whether the bank could operate independently, and thus would amount to wasting the resources of the bank which could be put to better use upon its complete privatization.

Rural Telephone Bank Privatization.—Under the President's fiscal year 2001 budget proposal, the RTB is proposed to "become a Performance Based Organization (PBO) to establish its financial and operational independence prior to its being privatized within ten years." At this time, it is difficult to support, or evaluate any privatization proposal without first obtaining an answer to the critical question of who owns the assets of the bank at any given time during the privatization period, which is already underway at a minimal statutory pace. Without a definitive and official determination of this central issue, it is not possible to formulate an informed position regarding privatization of the bank.

NTCA believes any privatization plan should be well conceived before implementation. At the very least, privatization should proceed in an orderly fashion with a full accounting of the various financial and legal implications involved. Congress, RTB Stockholders, and the rural telecommunications industry deserve the benefit of having RTB privatization reviewed thoroughly, and not in the vacuum of the budgetary process. In addition to having a high concentration of RTB stockholders as members, NTCA itself is a RTB stockholder. The RTB's portfolio is currently valued at well over $2 billion and consequently it continues to play a critical role in the modernization of rural telecommunications infrastructure throughout the United States. For these reasons, the RTB's future will continue to be closely monitored, and protected, by NTCA and its members. Furthermore, NTCA urges Congress to refrain from commencing such deliberations without the asset question answered, or in an effort to simply respond to the administration's budget suggestion.

Continue RUS Distance Learning and Telemedicine Loan and Grant Program.—The RUS Distance Learning and Telemedicine Loan and Grant program has proven to be an indispensable tool for rural development. In this regard, NTCA urges Congress to provide adequate funding for this critical program. NTCA supports the recommendations for this program that are contained in the president's budget proposal. NTCA also supports the $2 million in direct loans and grants for a pilot program to finance broadband transmission and local dial-up Internet service in rural areas as requested in the President's budget.

Preserve RBCS Rural Development Grant and Loan Programs.—Likewise, NTCA has witnessed the good these programs have done for rural communities. NTCA requests adequate subsidy to support the current $15 million loan program.

Deploy NOAA Radio Weather Warning System in unserved or under-served Rural Areas.—Rural areas traditionally do not have the same access to reliable weather radio warning systems as more urban and populated cities. Too often, lives are unnecessarily lost due to the lack of knowledge and proper warning of an impending hurricane or tornado. Therefore, NTCA is requesting adequate subsidy to support a $5 million loan program to facilitate a partnership between rural utilities possessing commercial tower space and the national weather service.

CONCLUSION

The RUS Telecommunications Loan Program bears a proud 50-year record of commitment, service, and achievement to rural America. Never in its entire history has the program lost even a dollar to abuse or default—an unparalleled feat for any government-sponsored lending program. Clearly such a successful program should remain in place to guarantee rural Americans have the opportunity to play a leading role in the information age. After all, an operational and advanced rural segment of the nation's telecommunications infrastructure is critical to truly ensuring that the national objective of universal telecommunications service is fulfilled. Please help us accomplish that objective.

PREPARED STATEMENT OF THE NATIONAL TREASURY EMPLOYEES UNION

Chairman Cochran, Ranking Member Kohl, and distinguished Members of the Subcommittee, my name is Colleen Kelley, and I am the National President of the National Treasury Employees Union. The NTEU represents more than 155,000 Federal employees, including those who work at the Food and Drug Administration. I appreciate this opportunity to present testimony to you today on behalf of the men and women who help ensure our foods, drugs, cosmetics, medical devices, and thousands of other consumer products are safe. The actions of this subcommittee directly affect their lives and the livelihoods of every American.

American consumers rightfully depend on their food to be free of bacteria or other food borne diseases. They demand that we find cures for terminal cancer and other deadly diseases. And they expect that consumer products, such as mouthwash, toothpaste, or any other commonly used product imported into the U.S. will not prove to be fatal.

Day in and day out, FDA's scientists, doctors, veterinarians, and support personnel are working to ensure the safety of the American people. From the most basic, but very important, task of educating children about how to handle meats properly to avoid bacteria, to approving new drugs to treat diabetes or depression, FDA employees are working to protect and improve the health of the American people.

Let me share with you a couple of examples of the outstanding work of our FDA employees. One of the most important duties of the FDA field laboratories is to directly respond to local consumer complaints regarding FDA regulated products. Recently a chemist working at the FDA laboratory located in Denver, Colorado helped prevent the death of a man who had gotten violently ill while drinking a soda. This FDA chemist analyzed the soda and found it to be contaminated with barium nitrate. This deadly chemical came from a sparkler, which had been put into the soda. If this deadly chemical had not been accurately identified in a timely manner, the man probably would have died. However, thanks to the analysis and accurate identification of the poisoning by the FDA chemist in Denver, the patient's doctor was able to save the patient by knowing to treat him for barium poisoning.

At our laboratories in San Francisco, Los Angeles, Baltimore, and other laboratories located at or near our nation's ports, FDA microbiologists and investigators work with Customs officials to quickly test and identify harmful foods which are trying to be imported. When the FDA microbiologists determine that the foods pose a risk to American consumers the foods are sent back to where they originated.

In Rockville, Maryland, FDA chemists and scientists are quickly developing and approving safe and effective drugs to help find cures for cancer, AIDS, alzheimer's, and autism. They're working on drugs to help ease the pain of heart burn and treat depression.

On any given day at an FDA laboratory in Missouri or California, FDA scientists could be analyzing over-the-counter drugs for cyanide contamination, examining baby food products for added glass fragments, or analyzing wine for poisonous ethylene glycol contamination.

These are only a mere sampling of the day-to-day activities being performed by the dedicated men and women who work at the FDA. And these are only a few examples of why we need to increase the resources for this agency.

I am pleased that the President has requested a 14.5 percent increase in funding for the FDA for fiscal year 2001. We cannot expect the FDA to continue to carry out its mission and protect the public health, without the staffing and resources necessary to do the job. In particular, I support FDA's request for increased staffing in a number of critical areas, such as the food safety initiative, verifying the safety of domestic and imported products, cracking down on illegal Internet drug outlets, and improving the efficiency and timeliness of the user fee program. These programs, as well as countless others within FDA need additional staff to address the demands of protecting and improving the health of the American public.

The FDA needs increased staffing in order to increase surveillance and inspections of food: food that originates in this country, and food that is imported. And the FDA needs more staff to address the increasing demands to shorten the amount of time it takes to test drugs, ensure their safety, and make them available to patients.

I also want to bring to your attention some concerns I have about the FDA budget. As you know, the FDA is in the midst of a consolidation of its laboratories, which are currently located in key locations across the country. I share the agency's views that we need to significantly improve the quality of FDA's laboratory infrastructure. However, I do not believe that closing certain existing laboratories will necessarily improve FDA operations and capabilities. Our nation cannot afford to lose the knowledge and experience of these scientists who have worked for many years in the FDA field laboratories. However, if any laboratories are closed in the future, I would urge this subcommittee to work to ensure that the FDA minimizes the impact on the current FDA employees who would be affected, and the impact on FDA operations in general.

In addition, I have serious concerns about proposals that have been considered both in Congress and internally at the FDA which would contract out work currently being performed by FDA employees. There is an inherent conflict of interest when a company seeking approval for a drug or food product is the same company granting the approval. I do not believe the American public is prepared to entrust private companies, most of which are driven by profit, to ensure the safety and effectiveness of their drugs and food.

I believe that the FDA fiscal year 2001 budget request is a good first step, but I believe that the level of funding requested by the FDA should be viewed as a floor, not a ceiling. As the number and complexity of drugs, food products and other FDA

regulated goods in the marketplace continues to increase, it is critical that the Congress provide additional funding for staffing at the FDA. While I believe that funding should be used to make technological improvements to FDA laboratories and equipment, I am sure you will agree with me that technology alone cannot possibly address the demands the agency now faces.

I would like to thank the Subcommittee again for the opportunity for our Union to present its views on the budget for fiscal year 2001. As you continue your subcommittee's deliberations, I hope you will give special consideration to FDA's dedicated workforce, a team of public servants who have committed themselves to ensuring safe foods, drugs, and medical devices for the American people.

PREPARED STATEMENT OF THE NATIONAL UTILITY CONTRACTORS ASSOCIATION

Mr. Chairman and Members of the Subcommittee, my name is Angelo Di Paolo. I am President of the National Utility Contractors Association (NUCA) and President of Di Paolo Company in Glenview, Illinois. I see firsthand everyday the dire water and wastewater infrastructure needs our country faces, so I sincerely appreciate your interest in preventing public health and environmental disasters in rural communities by adequately funding the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) Water and Waste Disposal infrastructure program for fiscal 2001.

FISCAL 2001 RECOMMENDATION

On behalf of NUCA's nearly 2,000 members and the citizens of rural America who endure daily life without the basic wastewater infrastructure that ensures clean drinking water and appropriate disposal of waste, I respectfully request that the Subcommittee appropriate a minimum of $700 million in budget authority for the RUS Water and Waste Disposal Program. Further, I respectfully ask that Congress allow the RUS to determine the most appropriate allocation of the budget authority to loans and grants as it is in the best position to target the grants toward the very poor while providing loans for the relatively more well-healed communities.

RURAL WATER AND WASTE DISPOSAL NEEDS AND THE RUS CURE

Imagine waking up, sleepily walking into the bathroom, turning the shower faucet, and being greeted by stinky, murky water. Imagine being unable to quench your thirst because only unfiltered water comes to your house. Comparatively speaking, these are mild pictures of the horrible circumstances that almost a million rural residents endure daily. These Americans do not have potable water or effective waste disposal systems. Moreover, the citizens facing these problems are those least able to afford bottled water services. Generally, the affected families live below the poverty level, $16,700. So even if they aren't drinking contaminated water, they have no choice but to wash and cook with it. Ironically, in the town serving as the namesake for Deer Park bottled water, the locals were drinking unfiltered water from shallow wells until the RUS funded a $1.7 million water system in 1998. RUS Water and Waste Disposal loan and grant programs provide such funds for small communities with 10,000 or fewer residents that cannot secure reasonable financing for drinking water and wastewater infrastructure improvements. The majority of the residents are low-income and cannot afford even the smallest ratepayer increases, increases that would be certainties with other infrastructure funding sources. Currently, there is a $3.8 billion backlog of applications from needy communities that simply cannot afford to build their infrastructure through other funding sources. At this time last year, the backlog was only $3.2 billion. Today, communities must wait an average of approximately three years from the start of an application process to the time that RUS commits funds. During the three-year wait, children and the elderly continue to be exposed to waterborne diseases that have life-long or terminal effects on their health. No State is immune from this problem. According to the USDA's recent best estimates, at least 260,000 American homes still do not have complete plumbing. Another 715,000 homes have critical problems with drinking water quality, quantity, and availability. At least 1.1 million homes have inadequate wastewater disposal systems that threaten human and environmental health. The U.S. Environmental Protection Agency (EPA) estimated in 1997 that some 15 million households use private wells and another 1 million homes rely on untreated water sources that include cisterns and water hauled from springs, rivers, and lakes. In 1996, the EPA estimated that small communities with 10,000 or fewer residents face more than $13.8 billion in capital costs over the next two decades for sewage collection and treatment works. That figure does not include an es-

timation of septic system needs. These figures are considered by most within EPA to be conservative estimates. Regardless how you look at the needs, a $700 million investment would be worth every penny. Despite their inability to afford other funding sources, the communities historically do not default on RUS loans. Year after year, the USDA maintains an unrivaled loan delinquency rate of just over one percent and a long-term loss rate of one-tenth of one percent on the wastewater loan program.

CONCLUSION

We, the members of NUCA, urge you to fund the RUS Water and Waste Disposal loans and grants program at a minimum $700 million for fiscal 2001. Thank you for considering our recommendation.

PREPARED STATEMENT OF THE NATIONAL WATERSHED COALITION

Mr. Chairman and Members of the Subcommittee: The National Watershed Coalition (NWC) is pleased to present this testimony in support of some of the most beneficial water resource conservation programs ever developed in the United States. The Coalition recognizes full well the need to use our tax dollars wisely. That makes the work of this Subcommittee very important. It also makes it imperative that the federal programs that are continued are those that provide real benefit to society, and are not programs that would be nice to have if funds were unlimited. We believe that the Small Watershed Program (Public Law 83–566) and the Flood Prevention Operations Program (Public Law 78–534) are examples of those rare programs that address our nation's vital natural resources which are critical to our very survival, do so in a way that provide benefits in excess of costs, and are programs that serve as models for the way all federal programs should work.

The National Watershed Coalition is an alliance of national, regional, state and local organizations that have a common interest in advocating the use of the watershed when dealing with natural resource issues. We also support the use of total resource management principles in planning. We are advocates of both the Small Watershed Program and the Flood Prevention Operations Program administered by USDA's Natural Resources Conservation Service (NRCS). These resource protection programs deserve much higher priority than they have had in the recent past. Even in difficult financial times, and we keep hearing we are in a period of budget surpluses, their revitalization would pay dividends in monetary and other benefits, and jobs! The disastrous 1993 Midwest floods and the floods in Texas in the fall of 1998 should have taught us something. If one examines the Report of the 1994 Interagency Floodplain Management Review Committee that studied the 1993 Midwest flood event, we see that flood damages were significantly reduced in areas where Public Law 566 projects were installed. The requests for disaster assistance were also less.

The watershed as the logical unit for dealing with natural resource problems has long been recognized. Public Law 566 offers a complete watershed management approach, and should have a prominent place in our current federal policy emphasizing watersheds and total resource management based planning. Proper watershed management improves water quality. Why should the federal government be involved with these watershed programs?

—They are programs whose objectives are the sustaining of our nation's precious natural resources for generations to come.

—They are not federal, but federally assisted, locally sponsored and owned. They do not represent the continued growth of the federal government.

—They are locally initiated and driven. Decisions are made by people affected, and respect private property rights.

—They share costs between the federal government and local people. Local sponsors pay between 30–40 percent of the total costs of Public Law 566 projects.

—They produce net benefits to society. The most recent program evaluation demonstrated the actual ratio of benefits to costs was approximately 2.2:1. The actual adjusted economic benefits exceeded the planned benefits by 34 percent. How many other federal programs do so well?

—They consider and enhance environmental values. Projects are subject to the discipline of being planned following the National Environmental Policy Act (NEPA), and the federal "Principles and Guidelines" for land and water projects. That is public scrutiny!

—They are flexible programs that can adapt to changing needs and priorities. Objectives that can be addressed are flood damage reduction, watershed protection (erosion and sediment control), water quality improvement, rural water supply,

water conservation, fish and wildlife habitat improvement, recreation, irrigation and water management, etc. That is flexibility emphasizing multiple use.

—They are programs that encourage all citizens to participate.

—They can address the needs of low income and minority communities.

—And best of all—they are programs the people like!

The National Watershed Coalition is concerned with the recent Congressional lack of support for these watershed programs, with the exception of the recent watershed rehabilitation efforts, and we hope the outcome of the fiscal year 2001 appropriations process will enable this vital work to continue and expand as we seek to preserve, protect and better manage our nation's water and land resources. Every State in the United States has benefited from the Small Watershed Program.

In order to continue this high priority work in partnership with states and local governments, the Coalition recommends a fiscal year 2001 funding level of $250 million for Watersheds and Flood Prevention Operations, Public Law 83–566 and Public Law 78–534. We recommend that $30 million of this amount be for Public Law 78–534 projects. For some years now, the federal budget has eliminated the separate line items for the Public Law 534 and Public Law 566 watershed projects, and just lumped a total figure under Public Law 566 with a note that some amount "may be available" for Public Law 534 projects. This is an entirely unsatisfactory way of doing business. Public Law 534 still exists in law; it has not been repealed. It should be funded as a separate program. The current situation really penalizes both Public Law 534 and 566, as 534 has no funds at the outset, and in order to provide a little something to the Public Law 534 watershed projects, NRCS has to take some money from the Public Law 566 accounts which are already very underfunded. Please restore funding for Public Law 534 watershed projects to $30 million in fiscal year 2001. We also recommend that watershed surveys and planning be funded at $25 million, which represents the true need.

We would also suggest that $55 million be used for structural rehabilitation and replacement, in accordance with H.R. 728 recently introduced in the 106th Congress by Representatives Frank Lucas and Wes Watkins of Oklahoma, and S. 1762 introduced in the Senate by Senators Paul Coverdell of GA, and Blanche Lincoln of AR, and that another $5 million be available for a thorough assessment of rehabilitation needs. The recognition of watershed rehabilitation as a national priority is gaining support throughout the countryside.

We recognize that Congress may be thinking of lesser amounts for these programs, but we believe we are not doing our job of helping you recognize the true need if we continually recommend the federal share of these needed funds be less. We would hope that everyone understand that these funds are only a part of the total that are committed to this vital purpose. The local project sponsors in these "federally assisted" endeavors have a tremendous investment also. We also suggest that the Emergency Watershed Program (EWP) be provided with $20 million to allow the NRCS to provide rapid response in time of natural disaster. Our recommendations are considerably different from those proposed by the Administration for the fiscal year 2001 budget. Congress increasingly talks of wanting to fund those investments in our nation's infrastructure that will sustain us in the future. Yet this and past Administration's budgets have regularly cut funding for some of the best of these programs. This makes absolutely no sense! We continue to read that we are in a period of budget surpluses, almost as if the federal coffers were overflowing with cash, yet there is next to nothing for watershed protection and improvement. Our Gross Domestic Product has risen for over 93 straight months, unemployment is low, the stock market has risen to new highs, and we can't seem to invest and re-invest in our vital watershed infrastructure. That is simply unconscionable. Isn't water quality and watershed management a priority?

The issue of the current condition of those improvements constructed over the last fifty years with these watershed programs is a matter of great concern. Many of the nearly 10,500 dams that NRCS assisted sponsors build throughout the United States no longer meet current dam safety standards largely as a result of development, and need to be upgraded to current standards. A USDA study published in 1991 estimated that in the next ten years, $590 million would be needed to protect the installed works. Of that amount, $100 million would come from local sponsors as their operation and maintenance contributions. NRCS also conducted a more recent survey, which indicated the current national needs were about $540 million. That is the reason we are recommending starting with $60 million ($55 million for rehabilitation work and $5 million to start a more precise assessment of needs) for the work necessary to protect these installed structures, and commend Oklahoma Representatives Lucas and Watkins for their leadership in introducing H.R. 728, the Small Watershed Rehabilitation Amendments of 1999, and Sens. Coverdell and Lincoln for introducing S. 1762, the Small Watershed Rehabilitation Act in the Senate.

Watershed project sponsors throughout the U.S. appreciate their leadership on this vital issue. If we don't start to pay attention to our rural infrastructure needs, the ultimate cost to society will only increase, and project benefits will be lost. This is a serious national issue.

In addition to offering our thoughts on needed conservation program budget levels, we would like to express our great concern with the way in which the Administration's budget proposes to change the watershed program funding in fiscal year 2001. We will address each "account" in some detail as to the adverse impacts we see.

WATERSHED AND FLOOD PREVENTION OPERATIONS

The Administration proposes $83,423,000, a decrease of $16,010,000 from the grossly inadequate funding of fiscal year 1999. They talk of their concern for the environment, but it is not reflected in their budget proposals. This account needs $250 million!

Of the funds proposed under the Public Law 566 authority, no funds are specifically suggested for the Public Law 534 projects, only $8 million is available from the Public Law 566 account for Public Law 534 projects, a decrease of $7 million—or 47 percent—from fiscal year 1999. This is unacceptable.

No funding is proposed to address the aging watershed infrastructure problem which poses great risk to human health, safety and quality of life, and which we discussed earlier. We suggest $60 million is needed in fiscal year 2001. Pass H.R. 728 & S. 1762!

The Administration's budget mentions that "up to $4,170,000" of their proposed watershed and flood prevention budget amounts might be used for "the cost of loans for rehabilitation of upstream watershed dams." This is entirely unsatisfactory! Rehabilitation needs and a way to approach them are adequately addressed in the two bills working their way through Congress (H.R. 728 and S. 1762). They should be cost-share programs as the Bills propose, and not loan programs. Watershed project sponsors do not need federal loans; they need their federal partner to pay their agreed-to share of the work put on the landscape by the partnership. The Administrations budget proposal would again penalize the ongoing national watershed programs by taking away money sorely needed to complete ongoing projects.

WATERSHED SURVEYS AND PLANNING

The Administration proposes $10,368,000 for these vital planning activities, and we believe $25 million is a more realistic figure considering the need. There are many potential projects and project sponsors in every state wanting watershed planning assistance, and that assistance is not available. And this at a time when our federal government is encouraging the watershed approach and local leadership. Here we have the ideal partnership cost-share program that encourages local leadership, and the federal share of the funds is not there.

EMERGENCY WATERSHED PROTECTION PROGRAM.

The Administration proposes no funds to maintain readiness to deal with emergencies caused by natural disasters, or maintain any technical staff capacity. This makes no sense! We suggest that $20 million be put into this account to provide rapid early response, and then deal with total disaster needs for each incident with supplemental appropriations as in the past.

The Administration's budget also uses language that appears a bit deceiving. They say that "$2 million is proposed to provide technical assistance to communities for disaster mitigation planning," and "$3 million is proposed to provide technical and financial assistance to communities to implement disaster mitigation plans." None of this is new and the NRCS has been providing this assistance from their various budget accounts for years.

There are a number of suggestions we would like to make concerning this very important legislation, that we will be making to other committees and they have budget implications. We believe the objectives of this legislation should be expanded to include more non-structural water quality practices, allow the law to provide assistance in developing rural water supplies (without water there is no rural development) and eliminate the current requirement that mandates that twenty percent (20 percent) of the total projects benefits be "directly related to agriculture" which can be very subjective and has the unintended effect of penalizing poor, small, rural communities, many of which are minority communities.

The Coalition appreciates the opportunity to offer these comments regarding fiscal year 2001 funding for the water resource programs administered by the Natural Resources Conservation Service. With the "downsizing" the NRCS has experienced, we

would be remiss if we did not again express some concern as to their ability to provide adequate technical support in these watershed program areas. NRCS technical staff has been significantly reduced and budget constraints have not allowed that expertise to be replaced. Traditional fields of engineering and economics are but two examples. We see many states where the capability to support their responsibilities in these program areas is seriously diminished. This is a disturbing trend that needs to be halted. This downsizing has a very serious effect on state and local conservation programs. Local Watershed and Conservation Districts and the NRCS combine to make a very effective delivery system for providing the technical assistance to local people—farmers, ranchers and rural communities—in applying needed conservation practices. But that delivery system is currently very strained! Many states and local units of government also have complementary programs that provide financial assistance to land owners and operators for installing measures that reduce erosion, improve water quality, and maintain environmental quality. The NRCS provides, through agreement with the USDA Secretary of Agriculture, "on the land" technical assistance for applying these measures. The delivery system currently is in place, and by downsizing NRCS we are eroding the most effective and efficient coordinated means of working with local people to solve environmental problems ever developed. Our system and its ability to produce food and fiber is the envy of the entire world. In our view, these programs are the most important in terms of national priorities.

We are also disappointed that the subcommittee has a practice of not accepting oral testimony from organizations such as the National Watershed Coalition. When we were allowed to make an oral presentation in the House, we were able to talk to subcommittee members who could ask us questions. It was a chance for them to actually talk with people doing the work on the land. That personal contact in both houses is now missing, and it would be easy to think that our written testimony may not be seriously considered. We hope you will reconsider this practice in future years, and again allow oral testimony.

The Coalition pledges its full support to you as you continue your most important work. Our Executive Director/Watershed Programs Specialist Mr. John W. Peterson, who has over forty years experience in natural resource watershed conservation, is located in the Washington, DC area, and would be pleased to serve as a resource as needed. John's email address is jwpeterson@erols.com.

Thank you for allowing the National Watershed Coalition (NWC) this opportunity.

PREPARED STATEMENT OF THE NATURE CONSERVANCY

Mr. Chairman, and members of the Committee, I appreciate the opportunity to submit this testimony for the record on fiscal year 2001 appropriations for the Natural Resources Conservation Service (NRCS) and for the Animal and Plant Health Inspection Service (APHIS).

The Nature Conservancy is an international, non-profit organization dedicated to the conservation of biological diversity. Our mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Conservancy has over a million individual members and over 1,500 corporate sponsors. We currently have programs in all 50 states and in 20 nations. To date our organization has protected more than 11 million acres in the 50 states and Canada, and has helped local partner organizations preserve millions of acres overseas. The Conservancy itself owns more than 1,600 preserves—the largest private system of nature sanctuaries in the world. Three concepts have been fundamental to our success: sound science; strong partnerships with public and private landowners; and tangible results at local places.

The Conservancy is deeply committed to working with agricultural producers to conserve biodiversity on private lands. We currently work with local landowners at approximately 75 sites across the country to implement conservation on the ground, and plan to increase this number to 500 sites within the next decade. Conservation programs administered by NRCS are highly popular with producers because they provide voluntary tools to manage landscapes and reduce the need for regulatory compliance. The programs also serve as an important additional source of income for economically distressed producers.

RECOMMENDATIONS

The Conservancy recommends:

—The appropriations committee to fund the enrollment of a total of 150,000 acres in the Wetland Reserve Program (WRP) for fiscal year 2001, should the author-

izing committee not approve new acres for enrollment in the program. We also urge the committee not to target WRP to offset other expenditures.

—EQIP funding of $300 million for fiscal year 2001. We also urge the committee not to target EQIP to offset other expenditures.

—Full support of the President's budget request for $747 million in appropriations to the conservation operations account for NRCS. This appropriation principally supports the agency's basic conservation program, called conservation technical assistance.

—Full support of the President's budget request for $10.5 million for APHIS to enhance its capability to fight invasive species as called for by the recently signed Executive Order.

WETLAND RESERVE PROGRAM (WRP)

The agriculture conservation program most important to the Conservancy is the WRP. This program makes a sizeable amount of money available to producers who enroll in the program after having concluded that the best economic return on their land would be from the receipt of program dollars rather than from crop or livestock production. Because wetlands provide excellent habitat for wildlife, the program serves the Conservancy's mission of habitat conservation, and at the same time provides farmers who elect to enroll in the WRP with the opportunity to generate income by renting WRP acres to hunting groups.

The Conservancy strongly supports WRP because it is the only program administered by the U.S. Department of Agriculture that at least in part buys permanent protection for resource values on private lands. These values include: (1) conservation of wildlife habitat, (2) purification of groundwater runoff and, (3) regulation of the flow of water in watershed systems by storing surface and groundwater. Permanent protection of environmentally significant resources is the best investment of public conservation dollars. In these times of economic distress for many producers, making financial options available for producers that also results in conservation benefits for the general public is good public policy.

The 1996 Farm Bill authorized the enrollment of 975,000 acres for WRP. Only 40,000 of these acres remain to be enrolled in fiscal year 2001. The Conservancy recommends that the appropriations committee fund a WRP enrollment level of 150,000 acres in fiscal year 2001, should the authorizing committee not approve new acres for the program. Should the authorizing committee approve additional acres, we ask the appropriations committee not to use the WRP account to offset other expenditures.

ENVIRONMENTAL QUALITY INCENTIVE PROGRAM (EQIP)

The Conservancy seeks a $100 million increase in funding for EQIP for fiscal year 2001, for a total of $300 million. In addition, we urge the committee not to target EQIP to offset other expenditures. The agricultural conservation community recognizes the significant contribution made by farm runoff to the impairment of our nation's watersheds. An important strategy for addressing this problem must be voluntary farm runoff abatement measures, such as that provided by the EQIP program. The increased funding recommended will begin to help animal feeding operators in financial distress deal with regulatory pressure to keep water clean.

CONSERVATION TECHNICAL ASSISTANCE

Agricultural production depends on the conservation of the soil and water resource base. NRCS and the Conservancy both know that conservation will succeed ultimately only to the extent that it also serves the need of producers to engage in economically viable farming. NRCS has a relationship of trust with private landowners that is unusual among federal agencies. It takes a non-regulatory, voluntary approach to conservation. The voluntary conservation programs administered by NRCS, along and the Conservation Reserve Program administered by the Farm Service Agency, provide farmers with highly effective tools for conserving soil and water resources.

NRCS provides conservation technical assistance through their district conservationists, who give free advice to producers interested in managing the natural resources on their land. In addition, district conservationists provide a number of products requested by producers. These include conservation management systems for a variety of land types, irrigation water management plans, animal waste management plans, program eligibility determinations, wetland creation or restoration plans, conservation education, and long-term strategic resource planning to individuals and communities.

Congress appropriated $661 million for the agency in fiscal year 2000. The current demand for these services approximately doubles NRCS' ability to provide them. The Conservancy believes that if NRCS is not funded at a level sufficient to provide these services, the resource base on private lands will be impaired and biodiversity will be put at greater risk. In particular, NRCS will have difficulty providing technical assistance in support of the Wetland Reserve Program (WRP) and the Conservation Reserve Program (CRP) in the absence of full funding of the conservation technical assistance account.

A comprehensive clean water policy at the federal level must include funding for the tools that enable producers to implement voluntarily conservation practices and regulatory activities. An increase in appropriations for conservation technical assistance is needed this year in particular because of the increased requirements for animal feeding operators to change practices that affect water quality. For all of these reasons, we ask the Committee to give full support to the President's request of $747 million for NRCS conservation operations.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

The President signed an executive order in February 1999 that directs the federal government to make a concentrated and coordinated effort to fight invasive species. The 2001 budget request for APHIS reflects this heightened attention in two accounts which are of greatest importance to the Conservancy. First, the President requested an increase of $1.7 million for the noxious weed account within the area of pest and disease management. This amount would be used by APHIS to begin developing a national rapid assessment and response system for invasive plants. Rapid detection of new invasions may be the most effective means for managing the presence of invasive plants on our lands.

Second, the President requested $8.8 million to fund a new account for invasive species. These funds would be used to gain a better understanding of the pathways through which invasive plants spread through the United States; to collect baseline data on the presence of invasive plants, and to further develop eradication and/or management programs; and, to conduct public education. These activities are critical to successfully fighting the invasive species that are destroying the biological and economic value of our natural and grazing lands.

We appreciate the support that you have shown for agriculture conservation through the years, and appreciate this opportunity to present a written statement to your committee. The Conservancy looks forward to working with you on these issues in this and future agriculture appropriations bills.

PREPARE STATEMENT OF THE NEW MEXICO INTERSTATE STREAM COMMISSION

SUMMARY

This Statement is submitted in support of appropriations for the Department of Agriculture's Colorado River Basin salinity control program. The salinity control program has not been funded at the level necessary to control salinity with respect to water quality standards of the basin states. Also, this failure to provide adequate funding negatively impacts the quality of water delivered to Mexico pursuant to Minute 242 of the International Boundary and Water Commission. Funding for the Environmental Quality Incentives Program (EQIP), from which the Department of Agriculture funds the salinity program, has been insufficient to fund needed salinity control measures. I urge that the administration's recommended funding of $325,000,000 be appropriated for EQIP, with at least $12,000,000 designated to the Colorado River Basin salinity control program.

STATEMENT

The Colorado River Basin salinity control program was authorized by Congress in the Colorado River Basin Salinity Control Act of 1974. The Act was amended by Congress in 1984 to give new responsibilities to the Department of Agriculture. The seven Colorado River Basin states, in response to the Clean Water Act of 1972, formed the Colorado River Basin Salinity Control Forum. Comprised of gubernatorial appointees from the seven Basin states, the Forum was created to provide for interstate cooperation in response to the Clean Water Act, and to provide the states with information necessary to comply with Sections 303 (a) and (b) of the Act. The Forum has become the primary means for the seven Basin states to coordinate with federal agencies and Congress to support the implementation of the salinity control program.

Many of the most cost-effective projects undertaken by the salinity control program have occurred since implementation of Department of Agriculture's authorization for the program. The Bureau of Reclamation is currently completing studies on the economic impacts of the salinity of the Colorado River in the United States. Reclamation's study indicates that damages in the United States may soon be approaching $1 billion per year. It is essential to the cost-effectiveness of the salinity control program that Department of Agriculture salinity control projects be funded for timely implementation to protect the quality of Colorado River Basin water delivered to the Lower Basin States and Mexico.

However, with the enactment of the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA), the Congress concluded that the salinity control program could be most effectively implemented as one of the components of the Environmental Quality Incentives Program. Since the enactment of FAIRA, the salinity control program has not been funded at a level adequate to ensure that water quality standards in the Colorado River, with respect to total dissolved solids (salinity), will be honored, nor is the funding sufficient to prevent salt loading from irrigated agriculture in the Upper Colorado River Basin from impacting the quality of water delivered to Mexico under Minute No. 242 of the International Boundary and Water Commission, United States and Mexico.

The salinity control program has been subsumed by the EQIP program without the Secretary of Agriculture giving adequate recognition to the requirement in Section 202 (c) in the Colorado River Basin Salinity Control Act to carry out salinity control measures. Water users hundreds of miles downstream are the beneficiaries of this water quality protection and improvement program. Irrigated agriculture in the Upper Basin sees local benefits as well as the downstream benefits and have submitted cost-effective proposals to the State Conservationists in Utah, Wyoming and Colorado. Priority Area proposals for EQIP funding are ranked in each state under the direction of the NRCS State Conservationist. Existing ranking criteria, however, does not consider downstream benefits (particularly out of state benefits) when proposals are being evaluated.

The Department of Agriculture, following protracted urging by the Basin states, has concluded as a result that the salinity control program is different than the small watershed approach of the EQIP program. The watershed for the salinity control program stretches almost 1200 miles, from the headwaters of the river through the salt-laden soils of the Upper Basin to the river's termination at the Gulf of California in Mexico.

The Basin states were led to believe by Congressional staff that when the EQIP program was created, the $200,000,000 annual Commodity Credit Corporation (CCC) borrowing authority given to the Secretary would ensure that through the year 2002 at least the requested amount of funding would be expended for the EQIP program. The Basin states, including New Mexico, have been very dismayed that funding for EQIP was reduced to $174,000,000 last year. This level of funding is not adequate for this most important nationwide program and the Administration does not believe that it provides sufficient funds to implement National Priority Areas as allowed by Congress under FAIRA. The Forum urges that the funding for EQIP for fiscal year 2001 total $325,000,000.

The Natural Resources Conservation Service (NRCS) earmarked funds to use in areas of special interest in the amount of about $5.3 million last year. The states added about $2 million in up-front cost-sharing and local farms contributed about $2.3 million. The plan for salinity control of the water quality of the river, prepared and adopted by the Basin states, shows that the USDA portion of the effort must be funded at $12 million per year in order to comply with water quality standards and offset significant salinity damages in the United States.

State and local cost-sharing is triggered by the federal appropriation. The entire effort last year was funded at only about 44 percent of program needs. The requested funding of $12 million for fiscal year 2001 will continue to be needed each year for at least the next few fiscal years. The Department of Agriculture indicated that a more adequately funded EQIP program would result in more funds being allocated to the salinity program. The Basin states have cost sharing dollars available to participate in on-farm salinity control efforts in the cost-sharing fashion provided by the Congress. The agricultural producers in the Upper Basin are waiting for their applications to be considered so that they might also cost share in the program. The Department of Agriculture projects have proven to be the most cost-effective component of the salinity control program. However, Administration and Congressional funding support has dramatically declined despite increasing damages from the salinity of the Colorado River.

I urge the Congress to appropriate $325,000,000 from the CCC in fiscal year 2001 for EQIP. Also, I request that Congress advise the Administration that $12,000,000

of the appropriation is to be designated for the Colorado River Basin salinity control program.

Finally, I request that adequate funds as requested by the Administration be appropriated for technical assistance and education activities at the local level, rather than requiring the NRCS to borrow funds from CCC for the direly needed support functions.

PREPARED STATEMENT OF THE NORTHWEST INDIAN FISHERIES COMMISSION

Mr. Chairman and Members of the Committee, I am Billy Frank, Jr., Chairman of the Northwest Indian Fisheries Commission (NWIFC), and on behalf of the twenty-Western Washington member Tribes, I submit this request for appropriations to support the research, sanitation and marketing of Tribal shellfish products. We request the following:

—$500,000 to support commercial harvests costs which will assist the tribes in fulfilling the demands for their shellfish products in both domestically and abroad;

—$1,000,000 to support water and pollution sampling, sampling and research for paralytic shellfish poisoning and coordination of research projects with State agencies; and,

—1,000,000 to support data gathering at the reservation level for the conduct of shellfish population surveys and estimates.

TREATY SHELLFISH RIGHTS

As with salmon, the tribes' guarantees to harvest shellfish lie within a series of treaties signed with representatives of the Federal Government in the mid-1850s. In exchange for the peaceful settlement of what is today most of Western Washington, the tribes reserved the right to continue to harvest finfish and shellfish at their usual and accustomed grounds and stations. The tribes were specifically excluded from harvesting shellfish from areas "staked or cultivated" by non-Indian citizens. Soon after they were signed, the treaties were forgotten or ignored.

The declining salmon resource in the Pacific Northwest negates the legacy Indian people in Western Washington have lived by for thousands of years. We were taught to care for the land and take from it only what we needed and to use all that we took.

We depended on the gifts of nature for food, trade, culture and survival. We knew when the tide was out, it was time to set the table because we live in the land of plenty; a paradise complete. Yet, because of the loss of salmon habitat which is attributable to overwhelming growth in human population, a major pacific coastal salmon recovery effort ensues. Our Shellfish resource is our major remaining fishery.

At least ninety types of shellfish have been traditionally harvested by the Tribes in Western Washington and across the continent Indian people have called us the fishing Tribes because of our rich history of harvesting and caring for finfish and shellfish. Our shellfish was abundant and constituted a principal resource of export, as well as provided food to the Indians and the settlers which greatly reduced the living expenses. Shellfish harvesting subsidized our income when we were unable to support our families from the finfish revenues only.

Then came civilization, Tribal beaches were sold by the State to non-Indians, and the waters were polluted and contaminated which greatly impacted the resource. And today, at a time when efforts are underway to restore the Pacific Coastal Salmon, Western Washington Tribal fishers are unemployed because there are no salmon. We ask this Committee to help us to restore our shellfish harvesting which will enable us to participate in the shellfish trade industry once again.

Assist the tribes in fulfilling the demands for their shellfish products, $500,000

Shellfish harvested by members of Western Washington's Indian tribes is highly sought after throughout the United States and the Far East. We request $500,000 which will assist Tribes in promoting our shellfish products, in both domestic and international markets. We are now at a point in time when telecommunicating is both cost effective and timely when marketing products. Tribal fishers are not capable of supporting such an effort individually, but, could collectively benefit if such a network could be developed through the Northwest Indian Fisheries Commission and the Northwest Indian College in Bellingham, Washington. This institution is capable of providing the technology needed to implement such a marketing program for Tribal shellfish products.

Water and Pollution Sampling, Sampling and Research for paralytic shellfish poisoning and coordination of research projects with State agencies, $1,000,000

Shellfish growing areas are routinely surveyed for current or potential pollution impacts and are classified based on the results of frequent survey information. No shellfish harvest is conducted on beaches that have not been certified by the tribes and the Washington Department of Health. Growing areas are regularly monitored for water quality status and naturally-occurring biotoxins to protect the public health.

However, both Tribal and non-Indian fisheries have been threatened due to the lack of understanding about the nature of biotoxins, especially in subtidal geoduck clams. Research targeted to better understand the nature of biotoxins could prevent unnecessary illness and death that may result from consuming toxic shellfish, and could prevent unnecessary closure of tribal and non-Indian fisheries.

Data gathering at the reservation level for the conduct of shellfish population surveys and estimates, $1,000,000

Very little data and technical information exists for many of the Tribal fisheries now being jointly managed by State and Tribal managers. This is particularly true for many free-swimming and deep-water species. This lack of information can not only impact fisheries and the resource as a whole, but makes it difficult to assess 50/50 treaty sharing arrangements. Additionally, intertidal assessment methodologies differ between State and tribal programs, and can lead to conflicts in management planning.

Existing data systems must be enhanced for catch reporting, population assessment and to assist enhancement efforts. Research on methodology for population assessment and techniques also is critical to effective management.

Onsite beach surveys are required to identify harvestable populations of shellfish. Regular monitoring of beaches also is necessary to ensure the beaches remain safe for harvest. Additional and more accurate population survey and health certification data is needed to maintain these fisheries and open new harvest areas. This information will help protect current and future resources and provide additional harvest opportunities.

TRIBAL SHELLFISH RESOURCE

Shellfish have been a mainstay of western Washington's Indian tribes for thousand of years. Clams, crab, oysters, shrimp, and many other species were readily available year 'round. The relative ease with which large amount could be harvested, cured, and stored for later consumption made shellfish an important source of nutrition—second only in importance to salmon.

Shellfish remain important for subsistence, economic, and ceremonial purposes. With the rapid decline of many salmon stocks, due to habitat loss from western Washington's unrelenting growth in the human population, shellfish harvesting has become a major factor in tribal economies.

The tribes have used shellfish in trade with the non-Indian population since the first white settlers came into the region a century and a half ago. Newspaper accounts from the earliest days of the Washington Territory tell of Indians selling or trading fresh shellfish with settlers. Shellfish harvested by members of western Washington's Indian tribes is highly sought after throughout the United States and the Far East. Tribal representatives have gone on trade missions to China and other Pacific Rim nations where Pacific Northwest shellfish—particularly geoduck—is in great demand. Trade with the Far East is growing in importance as the tribes struggle to achieve financial security through a natural resources-based economy.

As with salmon, the tribes' guarantees to harvest shellfish lie within a series of treaties signed with representatives of the Federal Government in the mid-1850s. Language pertaining to tribal shellfish harvesting included this section:

"The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians, in common with all citizens of the United States; and of erecting temporary houses for the purposes of curing; together with the privilege of hunting and gathering roots and berries on open and unclaimed lands. Provided, however, that they not take shell-fish from any beds staked or cultivated by citizens."

Treaty With the S'Klallam, Jan. 26, 1855

In exchange for the peaceful settlement of what is today most of western Washington, the tribes reserved the right to continue to harvest finfish and shellfish at all of their usual and accustomed grounds and stations. The tribes were specifically excluded from harvesting shellfish from areas "staked or cultivated" by non-Indian citizens.

Soon after they were signed, the treaties were forgotten or ignored. The influx of non-Indian settlers into western Washington continued to grow with each passing year, and the tribes were slowly excluded from their traditional shellfish and finfish harvest areas.

Tribal efforts to have the Federal Government's treaty promises kept began in the first years of the 20th Century when the United States Supreme Court ruled in U.S. v. Winans that where a treaty reserves the right to fish at all usual and accustomed places, a State may not preclude tribal access to those places.

Sixty years later, the tribes were again preparing for battle in court. After many years of harassment, beatings and arrests for exercising their treaty-reserved rights, western Washington tribes took the State of Washington to Federal court to have their rights legally re-affirmed. In 1974, U.S. District Court Judge George Boldt ruled that the tribes had reserved the right to half of the harvestable salmon and steelhead in western Washington.

The "Boldt Decision," which was upheld by the U.S. Supreme Court, also re-established the tribes as co-managers of the salmon and steelhead resources in western Washington.

As a result of this ruling, the tribes became responsible for establishing fishing seasons, setting harvest limits, and enforcing tribal fishing regulations. Professional biological staffs, enforcement officers, and managerial staff were assembled to ensure orderly, biologically-sound fisheries.

Beginning in the late 1970s, tribal and State staff have worked together to develop comprehensive fisheries that ensure harvest opportunity for Indian and non-Indian like, and also preserve the resource for generations to come.

It was within this new atmosphere of cooperative management that the tribes sought to restore their treaty-reserved rights to manage and harvest shellfish from all usual and accustomed areas. Talks with their State counterparts began in the mid-1980s, but were unsuccessful. The tribes filed suit in Federal court in May 1989 to have their shellfish harvest rights restored.

The filing of the lawsuit brought about years of additional negotiations between the tribes and the State. Despite many serious attempts at reaching a negotiated settlement, the issue went to trial in May 1994.

In 1994, district court Judge Edward Rafeedie upheld the right of the treaty tribes to harvest 50 percent of all shellfish species in their Usual and Accustomed fishing areas. Judge Rafeedie also ordered a shellfish Management Implementation Plan that governs tribal/state co-management activities.

After a number of appeals, the U.S. 9th Circuit Court of Appeals let stand Rafeedie's ruling in 1998. Finally, June 1999, the U.S. Supreme Court denied review of the District court ruling, effectively confirming the treaty shellfish harvest right.

Thank you.

PREPARED STATEMENT OF THE OCEANIC INSTITUTE

ARS AQUACULTURE FEEDS AND NUTRITION PROGRAM

The overall goal of the program is to advance feeds technologies to enhance global competitiveness of U.S. feeds, agricultural ingredients used in feeds, and aquaculture products. The program is managed by the Oceanic Institute (OI), a world leader in feeds and nutrition technology. It technically supports and assists the aquaculture and aquafeed manufacturing sector and associated industries, including feed ingredient suppliers and exporters. The program conducts basic as well as applied research that focuses on developing and disseminating new and improved aquatic feeds and associated feeding technologies. These strategies are designed to be economically viable and environmentally compatible with the sustainable development of the aquaculture sector.

Aquatic feeds and feeding generally represent the largest single operating cost item (typically between 25 to 50 percent) of the total running expenses of most intensive and semi-intensive finfish and crustacean farming operations. Although the U.S. currently ranks first in terms of the global production of industrially manufactured animal feeds, its domestic aquaculture sector is still emerging and modest compared to the terrestrial livestock production sector, with the total compound aquafeed production accounting for about 4 percent of total global aquafeed production in 1998. However, the global production of aquaculture feeds depends heavily on agricultural exports from the U.S. With the aquaculture sector currently representing the fastest growing segment of U.S. and global agriculture (surpassing in value most domestic fruit, vegetable, and nut crops), the potential for increased

aquaculture and therefore aquafeed production in the U.S. and globally using U.S. agricultural ingredients is considerable.

The program's recent achievements include the following: (1) demonstrating the technical feasibility of using lower cost shrimp aquafeeds in advanced biosecure, zero-water exchange culture systems; (2) improved processing methods for overall improvement in growth rates, feed conversion efficiencies and water quality; (3) development of improved shrimp feed formulations which take into account the dietary nutrient requirements of the cultured shrimp and that of the living microbial community within warmwater aquaculture systems; (4) development of improved feed processing techniques, including ingredient particle size reduction, mixing, pelleting, and extrusion processing, for increasing feed nutrient digestibility and availability, with consequent improvements in shrimp growth and reduced feed wastage and pollution; (5) development of improved analytical techniques for the measurement of nutrients in feed ingredients and finished feeds, including the successful publication of an analytical procedures manual for aquaculture feeds and feed ingredients for the American Feed Industry Association; and (6) increased use of U.S. feed ingredient sources (i.e., such as soybean meal, corn gluten meal, animal byproduct meals from the animal rendering industry, grains—wheat, corn) as sources of high grade dietary protein and energy for use within aquafeeds, and thereby minimizing imports in the form of fishmeal, fish oil, and other nutrient inputs.

Some of the program's research highlights in the past year have included the development of new feed formulations and feeding regimes that enabled the production of market size shrimp in only eight weeks (as opposed to the normal 12–16 weeks), with average weekly growth rates in excess of two grams per week. The program demonstrated the particular importance of improved feed and water management and the use of optimum dietary feeding regimes to elicit maximum growth and feed efficiency.

The program has recently assumed a critical role in the development of a new technology package which offers the U.S. substantial worldwide competitive advantage in the domestic farming of marine shrimp. The emerging zero-exchange biosecure marine shrimp production systems are fully dependent upon new and novel feed formulations, ingredients, and feeding methods. The systems will permit the U.S. to compete in the world market with systems that provide for protection from disease and full compatibility with the natural environment and also are less expensive. The aquaculture feeds program has already identified "key" feed fundamentals which allow the exploitation and integration of genetically improved and disease free shrimp stocks, virus free production methods, and zero environmental impact. It is clear that these advanced production systems are dependent on new feeds technology and feeding methods.

The Oceanic Institute has added world-class scientists to its program staff including nutritionists, feed processing technologists, microbiologists and computer modelers. Solid science, first class facilities and close interactions with genetic and health programs are coming together for major technology advances to benefit the United States. The OI model has been recently adopted by government agencies in parallel fresh water aquaculture efforts. An Industry Liaison Committee (composed of experts representing the various sectors of the aquatic feed manufacturing and shrimp farming industries, including commercial feed producers, feed equipment manufacturers, animal nutrition specialists, and commercial shrimp farmers within the U.S.) supported by the Agriculture Research Service, has given full endorsement to the program in its recent review.

We ask for your continuing support of this aggressive, highly productive and model research and development program.

PREPARED STATEMENT OF THE ORGANIZATION FOR THE PROMOTION AND ADVANCEMENT OF SMALL TELECOMMUNICATIONS COMPANIES

SUMMARY OF REQUEST

The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO) seeks the Subcommittee's support for fiscal year 2001 loan levels for the telecommunications loans program and Rural Telephone Bank (RTB) program administered by the Rural Utilities Service (RUS) in the following amounts:

[In millions of dollars]

5 percent hardship loans	$75
Treasury rate loans	300

guaranteed loans 120
RTB loans 175

In addition, OPASTCO requests the following action by the Subcommittee: (1) removal of the statutory 7 percent cap on Treasury rate loans for fiscal year 2001; (2) a prohibition on the transfer of unobligated RTB funds to the general fund of the Treasury; (3) opposition to the Administration's proposal to fund the RTB's loan subsidies and administrative expenses from the bank's liquidating account; and (4) funding of the distance learning and telemedicine grant and loan program at sufficient levels, including funding for the Administration's proposed pilot program to finance broadband transmission and local dial-up Internet service.

GENERAL

OPASTCO is a national trade association of more than 500 independently owned and operated telecommunications carriers serving rural areas of the United States. Its members, which include both commercial companies and cooperatives, together serve over 2.5 million customers in 42 states. Over half of OPASTCO's members are RUS or RTB borrowers.

Perhaps at no time since the inception of the RUS (formerly the REA) has the telecommunications program been so vital to the future of rural America. The telecommunications industry is at a crossroads, both in terms of technology and public policy. Advances in telecommunications technology in recent years will deliver on the promise of a new "information age." The Federal Communication Commission's (FCC) implementation of the landmark Telecommunications Act of 1996, as well as modernization resulting from prior statutory changes to RUS's lending program, will expedite this transformation. However, without continued RUS and RTB support, rural telephone companies will be hard pressed to build the infrastructure necessary to bring their communities into this new age, creating a bifurcated society of information "haves" and "have-nots."

Contrary to the belief of some critics, RUS's job is not finished. Actually, in a sense, it has just begun. We have entered a time when advanced services and technology—such as broadband fiber optics, high-speed packet and digital switching equipment, and digital subscriber line technology—are an expected and needed part of a customer's telecommunications service. Unfortunately, the inherently higher costs of upgrading rural networks, both for voice and data communications, has not abated. Rural telecommunications continues to be more capital intensive and involves fewer paying customers than its urban counterpart. RUS borrowers average only 6.3 subscribers per route mile versus 130 subscribers per route mile for large local exchange carriers. In order for rural telephone companies to modernize their networks and provide their customers with advanced services at reasonable rates, they must have access to reliable low-cost financing.

The relative isolation of rural areas increases the value of telecommunications services for these citizens. Telecommunications enables applications such as distance learning, telemedicine, and high-speed Internet connectivity that can alleviate or eliminate some rural disadvantages. Telecommunications can also make rural areas attractive for some businesses and result in revitalization of the rural economy. For example, businesses such as telemarketing and tourism can thrive in rural areas, and telecommuting can become a realistic employment option.

While it has been said many times before, it bears repeating that the RUS telecommunications loans and RTB programs are not grant programs. The funds loaned by RUS are used to leverage substantial private capital, creating public/private partnerships. For a very small cost, the government is encouraging tremendous amounts of private investment in rural telecommunications infrastructure.

Most importantly, the programs are tremendously successful. Borrowers actually build the infrastructure and the government gets paid back with interest. There has never been a default in the history of the telecommunications lending programs.

THE TELECOMMUNICATIONS ACT OF 1996 HAS HEIGHTENED THE NEED FOR THE TELECOMMUNICATIONS LOANS AND RTB PROGRAMS

The FCC's implementation of the Telecommunications Act of 1996 will only increase rural telephone companies' need for RUS assistance in the future. The forward-looking Act defines universal service as an evolving level of telecommunications services that the FCC must establish periodically, taking into account advances in telecommunications and information technologies and services. This year, the FCC is expected to convene a Federal-State Joint Board to revisit the universal service definition, as the Act anticipates. While the competitive environment engendered by the 1996 Act may offer the means of meeting this evolving definition in urban areas, rural and high cost areas have less potential for economically sound

competitive alternatives. RUS has an essential role to play in the implementation of the law, as it will compliment new funding mechanisms established by the FCC and enable rural America to move closer to achieving the federally mandated goal of rural/urban service and rate comparability.

At present, considerable regulatory uncertainty exists for rural telephone companies as several critical FCC proceedings implementing the 1996 Act remain unresolved. These include fundamental changes to the universal service and access charge systems and the procedures incumbent carriers use to separate their costs between the Federal and state jurisdictions. In addition, uncertainty exists as to whether rural incumbent carriers will be able to recover the costs of the extensive additional regulatory obligations and potential broadband deployment demands placed on them. If these outstanding issues are resolved in a piecemeal fashion and/or with a strong bias toward new entrants, rural incumbent carriers with universal service obligations could be hampered in their ability to modernize their networks and provide quality, affordable service to all of their customers. Managed sequencing and coordination of existing proceedings is necessary if the Commission is to preserve Congress's public policy goals of affordable rates and access to an evolving telecommunications network for all Americans. Equally important is for Congress to monitor the FCC's implementation of the Act to ensure that all of its goals—including universal service, an even playing field for competition, and deregulation—are realized in rural areas.

A $75 MILLION LOAN LEVEL SHOULD BE MAINTAINED FOR THE 5 PERCENT HARDSHIP LOAN PROGRAM

One of the most vital components of RUS's telecommunications loans program is the 5 percent hardship loan program. These loans are referred to as hardship loans for good reason: They provide below-Treasury rate financing to telephone companies serving some of the most sparsely populated, highest cost areas in the country. The commitment these companies have to providing modern telecommunications service to everyone in their communities has made our nation's policy of universal service a reality and, in many cases, would not have been possible without RUS's hardship loan program. Companies applying for hardship loans must meet a stringent set of eligibility requirements and the projects to be financed are rated on a point system to ensure that the loans are targeted to the most needy and deserving. For fiscal year 2001, the government subsidy needed to support a $75 million loan level is under $7.8 million. Given the necessity of this indispensable program, it is critical that the loan level be maintained at $75 million for fiscal year 2001.

REMOVAL OF THE 7 PERCENT CAP ON TREASURY RATE LOANS SHOULD BE CONTINUED

With regard to RUS's Treasury rate loan program, OPASTCO supports the removal of the 7 percent ceiling on these loans for fiscal year 2001. This Subcommittee appropriately supported language in the fiscal year 1996 Agriculture Appropriations Act to permit Treasury rate loans to exceed the 7 percent per year ceiling contained in the authorizing act. The language has been continued in each subsequent year. Were long-term interest rates to exceed 7 percent, adequate subsidy would not be available to support the Treasury rate loan program at the authorized levels. Accordingly, OPASTCO supports the continuation of this language in the fiscal year 2001 appropriations bill in order to prevent potential disruption to this important program.

THE PROHIBITION ON THE TRANSFER OF ANY UNOBLIGATED BALANCE OF THE RTB LIQUIDATING ACCOUNT TO THE TREASURY AND REQUIRING THE PAYMENT OF INTEREST ON THESE FUNDS SHOULD BE CONTINUED

OPASTCO urges the Subcommittee to reinstate the language introduced in the fiscal year 1997 Agriculture Appropriations Act, and continued in the years following, prohibiting the transfer of any unobligated balance of the RTB liquidating account to the Treasury or the Federal Financing Bank which is in excess of current requirements and requiring the payment of interest on these funds. As a condition of borrowing, the statutory language establishing the RTB requires telephone companies to purchase Class B stock in the bank. Once all loans are completely repaid, a borrower may then convert its Class B stock into Class C stock. Thus, all current and former borrowers maintain an ownership interest in the RTB. As with stockholders of any concern, these owners have rights which may not be abrogated. The Subcommittee's inclusion of the aforementioned language into the fiscal year 2001 appropriations bill will ensure that RTB borrowers are not stripped of the value of this required investment.

THE ADMINISTRATION'S PROPOSAL TO FUND THE RTB'S LOAN SUBSIDIES AND ADMINISTRATIVE EXPENSES FROM THE BANK'S LIQUIDATING ACCOUNT SHOULD BE REJECTED

As it's done the past two years, the Subcommittee should once again reject the Administration's proposal to fund the RTB's subsidy budget authority and administrative expenses through the bank's liquidating account balances. The Administration's proposal is inappropriate on both legal and policy grounds. Statutorily, the Rural Electrification Act provides for the RTB's use of facilities and services of employees of the Department of Agriculture, without cost to the RTB, until such time as the bank is privatized. The proposal also appears inconsistent with the bifurcated structure of the RTB under the Federal Credit Reform Act of 1990 which does not permit funds in the liquidating account to finance new loans. From a public policy standpoint, unobligated balances of the liquidating account have been targeted to support the privatization of the RTB and use of these funds for other purposes would only serve to dilute the value of the bank for all stockholders. Finally, paying for the RTB's administrative expenses and subsidy through the liquidating account offers no budgetary savings. For these reasons, OPASTCO is opposed to the Administration's proposal and urges the Subcommittee to continue to fund the RTB through the general fund of the Treasury.

THE DISTANCE LEARNING AND TELEMEDICINE PROGRAM SHOULD CONTINUE TO BE FUNDED AT ADEQUATE LEVELS

In addition to RUS's telecommunications loans and RTB programs, OPASTCO supports adequate funding of the distance learning and telemedicine grant and loan program. This sensible investment allows rural students to gain access to advanced classes which will help them prepare for college and jobs of the future. Also, rural residents will gain access to quality health care services without traveling great distances to urban hospitals. Loans are made at the government's cost-of-money, which should help to meet demand for the program in the most cost effective way. In addition, OPASTCO supports the Administration's inclusion of a pilot program to finance installation of broadband transmission capacity and to provide local dial-up Internet service to rural areas. In light of the Telecommunications Act's requirement that schools, health care providers, and libraries have access to advanced telecommunications services, and that rural areas have access to advanced services that are comparable to those provided in urban areas, sufficient targeted funding for these purposes is essential in fiscal year 2001.

CONCLUSION

The development of the nationwide telecommunications network into an information superhighway, as envisioned by policymakers, will help rural America survive and prosper in any market—whether local, regional, national, or global. However, without the availability of low-cost RUS funds, building the information superhighway in communities that are isolated and thinly populated will be untenable. By supporting the RUS telecommunications programs at the requested levels, the Subcommittee will be making a significant contribution to the future of rural America at a negligible cost to the taxpayer.

PREPARED STATEMENT OF THE PHARMACEUTICAL RESEARCH AND MANUFACTURERS OF AMERICA

Mr. Chairman and Members of the Subcommittee: On behalf of the Pharmaceutical Research and Manufacturers of America (PhRMA), I present recommendations on the fiscal year 2000 budget request submitted by the Administration for the Food and Drug Administration, for inclusion in the Subcommittee hearing record. PhRMA represents the country's leading research-based pharmaceutical and biotechnology companies, which are devoted to investing more than $24 billion annually in discovering and developing new medicines. PhRMA companies are leading the search for new cures and treatments.

We recognize the difficulties confronting the Subcommittee in meeting overall domestic spending caps affecting programs under your jurisdiction, under the 1997 budget agreement. We also recognize that pressures on appropriators to ensure an appropriate level of U.S. defense spending is likely to be even greater in light of the recent military activity with NATO. Decisions about which domestic programs to maintain or increase thus will be even more difficult. We urge you, however, to remember that many of the fruits of biomedical research are brought to the bedsides of patients through the research and development of new pharmaceuticals and through actions by the FDA to bring those safe and effective medicines to patients

as soon as possible. To achieve this translation of medical research into better health for our citizens requires a commitment to appropriate funding for FDA.

That is why PhRMA fully supports the Administration's fiscal year 2000 request for budget authority specifically for direct federal appropriations of $1.016 billion (excluding rental payments of $95 million) for FDA salaries and expenses. This account is the major and essential component of FDA's resources, and the budget request represents a $128 million increase over the appropriations enacted by Congress for the current fiscal year under Public Law 105–227.

This level of funding is particularly important under the "trigger" provisions of the 1997 FDA Modernization Act (FDAMA) if the pharmaceutical industry is to continue to be required to pay the user fees that have enabled FDA to make new lifesaving, cost effective medicines available to patients much more quickly. The trigger provisions require that general fund appropriations for all FDA salaries and expenses must equal or exceed the fiscal year 1997 appropriation level (excluding user fees), as adjusted for inflation or changes in discretionary budget authority for overall domestic spending, beginning after fiscal year 1997.

As FDA Commissioner Jane E. Henney, M.D., noted in her recent prepared testimony before your Subcommittee, FDA's dedication to the health and safety of the American people is well established. It is America's most important consumer protection agency. The FDA regulates products that account for one-quarter of all consumer spending and that comprise about $1 trillion in sales—including foods, medical and radiological devices, medicines, animal drugs, and cosmetics. These are goods that Americans expect to be safe and reliable.

However, Congress has imposed increasing responsibilities on FDA's staff during the past decade—most recently, under FDAMA and the Animal Drug Availability Act. For example, FDAMA requires that FDA inspect establishments that make drugs and devices every two years. But between 1990 and 1998, the number of firms subject to inspections reportedly rose from 89,000 to 114,000—a 28 percent increase.

In addition, the agency has had to respond quickly to an increasing variety of new public health issues, such as ensuring the safety of food and the nation's blood supply. For these reasons, it is of critical importance that FDA be able to retain and recruit highly qualified staff.

The research-based pharmaceutical and biotechnology industries are particularly concerned that FDA be able to continue to meet highly important performance goals, mutually agreed upon in an historic compact between FDA, Congress and industry. The agreement was first reached in 1992 in the Prescription Drug User Fee Act (PDUFA) and was confirmed in 1997 under FDAMA as PDUFA II. The total FDA "program" request for salaries and expenses in fiscal year 2000 includes authorized appropriations of over $145 million for PDUFA II user fees—an increase of some $13 million over the current fiscal year, to add staff to handle vitally important drug reviews. During fiscal year 1998–2002, pharmaceutical companies will pay over $550 million in user fees under FDAMA, so FDA can continue to reduce both review and overall drug development times. As FDA Commissioner Henney has testified:

"PDUFA is among the most successful agency programs in history. Within its first five years of implementation, the increased resources provided by PDUFA to hire additional review staff has resulted in cutting the average review times for new drugs, without compromising the high standards that FDA has traditionally applied in weighing the risks and benefits of new drugs and thereby in determining their safety and effectiveness."

Under PDUFA, the pharmaceutical industry and FDA are continuing to work to serve a common client—the patient. The industry is working to develop new and better drugs, FDA is striving to improve the drug development and review process.

The critical importance of this partnership, in cooperation with Congress, in delivering new medicines to patients as soon as possible cannot be overemphasized. The 30 new drugs and 9 new biologics approved by FDA in 1998 are to treat diseases that affect 180 million patients and that cost more than $400 billion a year. New treatments include medicines for patients suffering from AIDS, cancer, including breast cancer, cardiovascular disease, Crohn's disease, tuberculosis, rheumatoid arthritis, depression, Parkinson's disease, erectile dysfunction, and the first vaccines to prevent Lyme disease and retrovirus infection.

The prescription drug user fee program—which must be sharply distinguished from proposals for general purpose user fees—is based on three key principles:

—User fees must supplement FDA appropriations, not substitute for them.

—User fees must be targeted to the review and approval of innovative prescription medicines and their supplemental indications, and are not to be used for general agency activities.

—User fees must be applied to meet specific performance goals, agreed upon by FDA, to ensure the timely review and approval of new drugs.

Before user fees, FDA review times averaged about 30 months. But the 30 drugs approved in 1998 were reviewed in an average of 11.7 months slightly better than the 12-month goal specified in PDUFA II. FDA also exceeded the fiscal year 1998 goal to review 90 percent of all standard new drug and biologic applications within 12 months, by completing 100 percent of the reviews within this timeframe.

The prescription drug user fees collected in fiscal year 2000 will enable FDA to continue to meet its PDUFA II performance goals, including:

—Review and act upon 90 percent of standard original NDA and PLA/BLA submissions filed during fiscal year 2000 within 12 months of receipt, and review and act on 50 percent within 10 months of receipt.

—Review and act on 90 percent of priority original drug NDA and biotechnology BLA submissions filed during fiscal year 2000 within six months of receipt.

—Review and act on 90 percent of standard drug efficacy supplements filed during fiscal year 2000 within 12 months of receipt, and review and act on 50 percent within 10 months of receipt.

—Review and act on 90 percent of priority drug efficacy supplements filed during fiscal year 2000 within six months of receipt.

What this means is that FDA can continue to build on its record of helping patients to obtain new medicines more than a year and a half sooner than they did before user fees were enacted, while maintaining its high standards of safety and effectiveness.

In addition, FDAMA contains important provisions that facilitate access by patients to experimental drugs; give FDA more flexibility in determining effectiveness; expand access by doctors to peer-reviewed medical information; and encourage the development and testing of medicines for children.

The U.S. system of new drug approvals is the most rigorous in the world. On average, a company invests about $500 million and takes about 12–15 years to discover and develop a new drug. Only five in 5,000 compounds that enter preclinical testing make it to human testing. And only one of these five is approved for use by patients.

R&D investment by research-based pharmaceutical firms continues to break records. In 1999, pharmaceutical companies will invest $24 billion to discover and develop important new medicines. That figure represents a 14.1 percent increase over last year's record setting R&D spending. And no industry devotes a higher percentage of sales to R&D—20.8 percent—than the research-based pharmaceutical industry.

However, the pharmaceutical industry's ever increasing R&D investment, and FDA's determined efforts to improve the drug development and review process, will be nullified if adequately increased baseline appropriations for all of the agency's programs are not provided.

For these reasons, PhRMA strongly urges that Congress appropriate $1.016 billion (exclusive of rental payments) in fiscal year 2000 for FDA salaries and expenses, as requested by the Administration, to ensure that the agency can fulfill its vital responsibilities to promote and protect the health and safety of the American people.

PREPARED STATEMENT OF THE PREDATOR CONSERVATION ALLIANCE

I am writing you regarding appropriations of federal funds for the U.S. Department of Agriculture "Wildlife Services" program (formerly called, "Animal Damage Control"). I am writing on behalf of Predator Conservation Alliance, a non-profit conservation organization based in Bozeman, Montana. We urge you and the other members of the Subcommittee to cut $10 million from Wildlife Service's "livestock protection" program, which is almost entirely comprised of lethal predator control in the western United States.

The federal Wildlife Services program has received much public scrutiny and criticism for its livestock protection program, which primarily involves killing coyotes, mountain lions and other predators. The problem with the USDA's Wildlife Services program is that public money is being spent to kill publicly owned wildlife, often on public lands, for the benefit of a small percentage of private livestock producers, who are neither required to change their management practices to reduce livestock/predator conflicts nor directly pay for this government "service." Of the federal funds Congress allocates to Wildlife Services, we find that the majority goes to the western states, and the majority of that is spent on killing predators.

Our analysis of Wildlife Service's own data on its expenditures and kill figures from fiscal year 1998 (the most recent data available to the public) reveals the following problems:

—Despite a Clinton Administration policy that federal dollars should fund no more than half of Wildlife Services' state office expenditures, this is violated in 10 of the 17 western states;
—Western livestock producers, including individuals and organizations, contributed less than 17 percent in direct payments for livestock protection, and less than 29 percent when indirect payments to county governments (typically due to a "head" tax on livestock) are included;
—Livestock protection—which is almost exclusively lethal predator control—accounts for three-fifths (61 percent) of Wildlife Services' western state office expenditures, and about the same percentageer the (63 percent) of its western state office expenditures of federally appropriated funds;
—Over the past several years, Wildlife Services' western state office expenditures to kill predators has exceeded reported livestock losses to predators in those states by more than three times!

Predator Project considers the Clinton Administration's recent proposal to reduce Wildlife Services' operational budget for fiscal year 2001 by $2.8 million a step in the right direction. However, we urge Congress to further reduce Wildlife Services' budget by $10 million, by eliminating federal appropriations for the lethal predator control work conducted through the Wildlife Services' "livestock protection" program. For fiscal year 1998 (the most recent years for which figures are available) Wildlife Services state offices spent $9.58 million of federally appropriated funds on livestock protection. We propose a $10 million cut in Wildlife Services' annual federal appropriations to eliminate this aspect of the Wildlife Services program. It is important to note that this total comprises the amount spent by state offices only. Additional federally appropriated funds are spent by the western and national Wildlife Services offices to manage lethal predator control work; these funds will be unaffected by this cut, and will therefore be available to provide technical assistance to livestock producers, targeted lethal predator control, and other Wildlife Services activities in the western 17 states. Eastern Wildlife Services activities, which largely assist landowners in managing their own wildlife problems, would be unaffected by this reduction.

Predator Conservation Alliance is not alone in suggesting that Congress end the wildlife control program. In January, an unusual coalition of taxpayer and environmental groups released "Green Scissors 2000—Cutting Wasteful and Environmentally Harmful Spending" (see attached). Wildlife Services was one of 77 programs which the report recommended be cut, because the program is "preying on taxpayers." According to the report, not only is the program harmful and costly, it does not even work: "This program kills hundreds of thousands of wild animals, but has not significantly reduced livestock losses due to predators." In addition, Wildlife Services' livestock protection activities benefit western ranchers to the exclusion of most eastern ranchers. In fact, data recently obtained by the New Mexico-based group New West Research reveal that only a small percentage of western ranchers use Wildlife Services.

A final good reason for cutting the predator control component of Wildlife Services' budget is that this program is outdated and no longer supported by the majority of Americans. Our nation spends millions of dollars each year to aid wildlife, and the killing of wildlife by Wildlife Services directly contravenes these efforts.

We look forward to working with you to reduce the Federal Government's operations and budget on this issue.

PREPARED STATEMENT OF THE RED RIVER VALLEY ASSOCIATION

Mr. Chairman and members of the Committee. I am Wayne Dowd, and I am pleased to represent the Red River Valley Association as its President. Our organization was founded in 1925 with the express purpose of uniting the citizens of Arkansas, Louisiana, Oklahoma and Texas to develop the land and water resources of the Red River Basin.

As an organization that knows the value of our precious water resources we support the most beneficial water and land conservation programs administered through the Natural Resources Conservation Service (NRCS). We understand how important a balanced budget is to our nation; however, we cannot sacrifice what has been accomplished. The NRCS programs are a model of how conservation programs should be administered and our testimony will address the needs of the nation as well as our region. We believe strongly that the whole, national program must be preserved.

We appreciate that the fiscal year 2001 President's budget increases the NRCS overall funding; however, some programs are NOT adequately funded, to the det-

riment of the agency and our citizens. The increases are earmarked for grants, financial assistance and other non-federal personnel items. The effect is a decrease of funds for direct technical assistance.

We would like to address several of the programs affected by the President's fiscal year 2001 budget proposal. Failure to fund these initiatives would reduce assistance to those who need it.

Conservation Operations Budget.—This has been in steady decline in real dollars over the past several years. This has apparently happened partly as a result of dollars being diverted from Conservation Operations to fund new programs, especially the increases in financial assistance for conservation. We appreciate the increase for Conservation Technical Assistance to $653,805,000; however, this falls short of what is required. We request that $900 million be appropriated for Conservation Technical Assistance.

Conservation Technical Assistance is the foundation of technical support for conservation to the private users and owners of land in the United States. The President's Clean Water Action Plan and the Unified Strategy for Animal Feeding Operations will rely heavily on the technical assistance provided through NRCS's Conservation Operations Program. However, the Administration's proposal is to increase CCC programs such as WRP, EQIP, CRP and the newly proposed CSP. The problem is that personnel funded from these programs can only provide technical assistance for those enrolled in these cost share programs leaving a large percent of the agricultural community without technical assistance. We recommend that funding for all technical assistance should be placed in 'Conservation Technical Assistance' and allow NRCS to perform their mission of implementing these programs and providing assistance to everyone, including those not fortunate enough to be selected to participate in cost share programs..

With increases to EPA's manpower and decreases to NRCS you are emphasizing enforcement and reducing assistance. This is the wrong way to go. We encourage you to change this trend and allow our agricultural community to have access to technology for better conservation than be harassed by the constant threat of penalties for non-compliance.

Section 11 Caps.—Another factor which has seriously reduced the ability of NRCS to meet the considerable demands for its technical assistance is the limitation on funding which can be provided to NRCS due to the Section 11 cap on transfer of funds from the Community Credit Corporation (CCC). The CCC provides the funding for NRCS technical assistance for several programs including EQIP and CRP. Currently, this cap prevents NRCS from covering its staff costs for these crucial programs. We support the lifting of the Section 11 cap which was established before EQIP, CRP and WRP were created.

Watershed and Flood Prevention Operations (Public Laws 566 & 534).—More than 10,400 individual structures have been installed nationally. They have contributed greatly to conservation, environmental protection and enhancement, economic development and the social well being of our communities. More than half of these structures are over 30 years old and several hundred are approaching their 50 year planned life.

Today you hear alot about the watershed approach to resource management. These programs offer a complete watershed management approach and should continue for the following reasons:

—They protect people and communities from flooding.
—Their objectives and functions sustain our nation's natural resources for future operations.
—They are only federally assisted and do not grow the federal government.
—Initiatives and decisions are driven by the communities.
—They are cost shared.
—They follow NEPA guidelines and enhance the environment.
—They often address the need of low income and minority communities.
—The benefit to cost ratio of this program has been evaluated to be 2.2:1.

What other federal programs can claim such success?

There is no doubt of the value of this program. The cost of losing this infrastructure exceeds the cost to reinvest in our existing watersheds. Without repairing and upgrading the safety of existing structures we will miss the opportunity to keep our communities alive and prosperous. It would be irresponsible to dismantle a program that has demonstrated such great return and is wanted by our citizens.

We fully support H.R. 728, introduced in the 106th Congress by Representative Frank Lucas (R-OK) and Representative Wes Watkins (R-OK) as well as S. 1762 introduced by Senator Blanche Lincoln (D-AR); both from the Red River Valley Region. This is a crucial bill to address a serious problem.

In addition to the needs for reinvesting in existing infrastructure there are many new projects which are awaiting funds to be built. The present level, outlined in the budget, of $43.4 million is not adequate. We strongly recommend that a funding level of $250 million be dedicated to Flood Prevention; Public Law 534, $30 million, and Watershed Operations Public Law 566, $220 million. This is more realistic and compares to the programs appropriated in the years prior to 1997. At the proposed funding level it would take over 30 years to complete just the identified projects, with no attention given to rehabilitation needs.

Emergency Watershed Protection Program.—This program comes under Watershed and Flood Prevention Operations, but is a separate line item. This has been a zero budget item; however, there will always be emergency needs.

As our land use expands, to include sensitive environmental ecosystems, major weather events will have an adverse impact requiring NRCS to assist under this program; therefore it should be funded up front. It is important for NRCS to be prepared for a rapid response. With funds available they can react immediately to an emergency when it occurs.

We request that a minimum of $20 million be appropriated for this program in the fiscal year 2001 budget and that these funds are not taken from elsewhere in the NRCS budget.

Conservation Reserve Program (CRP).—This program, administered by Farm Services Agency, impacts NRCS the most. NRCS conducts and is reimbursed for the technical assistance of this program.

We agree with the President's initiative to increase the enrollment cap and request that, as a minimum, the CRP cap be increased to 45 million acres. This is an extremely beneficial program to our nation and should not be allowed to expire. It provides a safety net to those farmers trying to make a living on the marginal lands most suited for this program.

Watershed Survey and Planning.—This was budgeted by the President at $10.4 million and is an extremely important community program. NRCS has used this to become a facilitator for the different community interest groups, state and federal agencies.

As our municipalities expand the water resource issue tend to be neglected until a serious problem occurs. Proper planning and cooperative efforts, through this program, can prevent problems and insure the water resource issues are met. We request that this program be funded at a level of $25 million.

Forestry Incentives Program.—The President's budget has no funding for this program. Congress transferred this program to NRCS from the Farm Service Agency as a restructuring in the Federal Agricultural Improvement and Reform Act of 1996. Forestry on small, privately owned lands is recognized as a farming activity. NRCS is the best agency to administer this program which assists farmers in production agriculture. It is more than just a timber production program. Forests are the most effective land users as they relate to water quality, non point source pollution, air quality, greenhouse gas reduction and wildlife habitat.

We request Congress fund the Forestry Incentives Program at a level of $6.5 million for fiscal year 2001.

Environmental Quality Incentives Program (EQIP).—Requests for assistance through the EQIP program have been overwhelming. The resulting requests far exceed the available funds and is an additional workload on NRCS's delivery system. Additionally, adequate funding for technical assistance must be provided to implement the program at a minimum of 19 percent of the total program.

The $325 million proposed by the President for the EQIP program is an adequate budget for fiscal year 2001; and the technical assistance for this program budgeted at $61.750 million meets the 19 percent level.

Wetlands Reserve Program (WRP).—This is a very popular and important program. It serves as a safety net to those farmers trying to make a living on these marginal lands. It also addresses conservation needs from water quality to global warming.

We agree with the President's request to raise the cap 560,000 acres over two years. We strongly recommend that this program be supported at this level. This will allow the program to continue until fiscal year 2002 when a reauthorization for the program can be made.

Red Bayou Irrigation "Demonstration Project".—Recent findings in the Natural Resources Inventory (NRI) have concluded that irritated agriculture is moving from western states to the east. A prime example of this is the interest to irrigate along the Red River in Arkansas and Louisiana. The drought conditions being experienced has accelerated the efforts of different regions to form irrigation districts and start the process to install systems. The farmers along Red Bayou, Caddo Parish, Louisiana, have been very aggressive in their attempts to become operational. We re-

quest that this project be 'earmarked' as a demonstration project to be used as a model throughout the Red River Valley. NRCS was requested to determine the cost for this irrigation system and we request maximum federal participation for funding of this endeavor.

Over 70 percent of our land is in private ownership. This is important to understanding the need for NRCS programs and technical assistance. Their presence is vital to ensuring sound technical standards are met in our conservation programs. These programs not only address agricultural production, but sound natural resource management. Without these programs and NRCS properly staffed to implement them many owners of our private lands will not apply conservation measures needed to sustain our natural resources for future generations.

The administration has proposed 'new' Clean Water Initiative, but why do they ignore the agency that has a proven record for implementing conservation watershed programs? Congress must decide: will NRCS continue to provide the leadership within the communities to build upon the partnerships already established? The President's proposal does not provide for that leadership and so it is up to Congress to insure NRCS is properly funded and staffed to provide the needed help to our taxpayers for conservation programs. This can be accomplished simply by Funding Conservation Technical Assistance at $900 million and eliminating the Section 11 Caps.

All these programs apply to the citizens in the Red River Valley and we are concerned for the future. The RRVA is dedicated to work toward the programs which will benefit our citizens and provide for high quality of life standards. We therefore request that you appropriate the required funding levels within the individual programs to insure our nation's conservation needs are met.

I thank you for the opportunity to present this testimony on behalf of the members of the Red River Valley Association and we pledge our support to assist you in the appropriation process

Grant Disclosure.—The Red River Valley Association has not received any federal grant, subgrant or contract during the current fiscal year or either of the two previous fiscal years.

REGIONAL AQUACULTURE CENTERS

PREPARED STATEMENT OF LESTER W. MYERS, SOUTHERN REGIONAL AQUACULTURE CENTER

Mr. Chairman and Members of the Subcommittee, I thank you for the opportunity to provide testimony in support of the USDA–CSREES Regional Aquaculture Centers. My name is Lester Myers. I own and operate a catfish farm near Inverness, Mississippi, and am President and General Manager of Delta Western, Inc., Indianola, Mississippi, the largest catfish feed mill in the United States.

Over the last 20 years, aquaculture has become an important part of United States agriculture. Production of channel catfish, the largest sector of domestic aquaculture, has increased more than 30 percent in the last 10 years—a growth rate matched by very few industries. Farm-raised channel catfish now makes up a remarkably large proportion of domestic seafood consumption and, on a value basis, catfish ranks fourth in the United States, behind only shrimp, salmon, and crabs. Further, a significant portion of the salmon consumed by Americans also derives from aquaculture.

As the catch from wild fisheries continues to decline, with no end in sight, the shortfall in seafood production must be met by increased aquaculture production. However, continued expansion and profitability of the aquaculture industry will depend on development of new technology to reduce production costs and make production more competitive in the global market. For the past several years, I have been actively involved with the Southern Regional Aquaculture Center as Chairman of the Industry Advisory Council, and I feel that the Regional Aquaculture Center program is essential to help meet the need for technology development. Already, results from the Regional Center projects are having a significant impact on domestic aquaculture. I would like to illustrate that point with the results of one project that I am very familiar with through my role as General Manager of a catfish feed mill.

Feeds represent about half the cost of raising fish in aquaculture, so advances in feed formulation and feeding practices can have a great impact on profitability. The recently completed project "Improving Production Efficiency of Warmwater Aquaculture Species through Nutrition" was one of the most successful projects developed through the Southern Regional Aquaculture Center. Scientists from nine states—Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, North Carolina,

Tennessee, and Texas—cooperated on the project. These researchers, worked collaboratively to identify the most cost-effective levels of vitamin and protein supplementation in feeds. Their work resulted in improved feed formulations and feeding practices that have saved the catfish, baitfish, and striped bass industries millions of dollars a year. For example, in the catfish industry alone, feed costs have been reduced $2–$4 a ton as a direct result of work on this project. Assuming overall feed use of 600,000 tons per year in the catfish industry, cost savings average $1.8 million annually—over three times the amount spent on this project over its 3-year duration.

The project mentioned above is just one of many projects supported through the Regional Center program that return economic benefits many times the amount invested. This funding efficiency is the result of the decentralized structure of the Regional Centers and the unique cooperative process used to develop research projects.

In summary, representatives of the U.S. aquaculture industry are convinced that the Regional Aquaculture Center programs are highly valuable and productive. Additional new research findings will help insure future success for aquaculture production in the United States. The authorized level of funding for the five Regional Aquaculture Centers is $7.5 million annually. Despite an outstanding performance record and an organizational structure that has become a model for collaborative research in agriculture, funding for the Regional Center program has remained level at half the authorized level of funding, or $4.0 million per year ($800,000 for each of the five Regions). This has resulted in a steady erosion of actual operating funds, at the very time when industry expansion calls for greater investment in research and development. I respectfully request that you recommend the full authorized level of $7.5 million for the existing five Centers to support these extraordinarily important and effective programs.

On behalf of the U.S. aquaculture industry, I thank you for the opportunity to present testimony in support of the Regional Aquaculture Centers, and express my sincere appreciation for the support you have provided in previous years. Again, I would like to emphasize that significant benefits have already been provided from work conducted by these Centers and additional funding is urgently needed by our industry.

PREPARED STATEMENT OF RAMSEY REIMERS, TROPICAL AND SUBTROPICAL REGIONAL AQUACULTURE CENTER

Mr. Chairman and Members of the Subcommittee: Thank you for allowing me the opportunity to submit testimony on behalf of the Regional Aquaculture Centers and the Center for Tropical and Subtropical Aquaculture.

Robert Reimers Enterprises, Inc. has been involved in various aquaculture projects for the last 15 years. Until two years ago, we were the only private sector company involved in aquaculture in the Republic of the Marshall Islands.

To date, we have experimented with a wide range of aquaculture products including Corals, Giant Clams, Sponges, Sea Cucumbers, Trochus Shell, Moi (Threadfin Shad), Shrimp and Black Pearl Oysters. We have invested over $1,000,000 in these ventures and our aquaculture facility is the largest of its kind in Micronesia.

The investments we have made to date are now experiencing a financial return. Our Giant Clam Farm is now cash flow positive and the Black Pearl Oyster project shows tremendous potential. These projects represent two of the very few export products that our country produces, bringing in foreign exchange dollars and providing employment for our local residents.

We can say, unequivocally, that a large portion of our success to date is due to our relationship with the Center for Tropical and Subtropical Aquaculture (CTSA) and their direct involvement in our programs.

CTSA provides a critical link between the scientific community and farm operators through the Aquaculture Extension/Development project which operates in our region. Intensive extension services were provided to us in Giant Clam, Coral, Moi and Black Pearl Oyster culture. Without the hands on demonstrations and the frequent research bulletins provided, we would not have had the ability or courage to enter these industries. Just as important is the constant encouragement and moral support that we receive from all levels of CTSA personnel. For companies pioneering aquaculture ventures in third world countries such as ours, this level of support was absolutely essential.

In addition to the Extension/Development services, CTSA provides an opportunity to directly learn from others in our industry. The annual Industry Advisory Council meeting is one example. For those living in the more remote locations of the Pacific, this meeting provides an especially valued opportunity to meet with other aquaculture professionals, to discuss problems related to our regional industry develop-

ment, to hear of new products and techniques, and to make synergistic business contacts.

CTSA works hard at its mission to develop the aquaculture industry and potential in its region. The management of CTSA makes a concerted effort to listen to industry and respond to industry issues. This is most refreshing coming from what many may view as an obscure research facility. CTSA conducts the research that we, the industry and investors, want to have done. CTSA research helps streamline our processes and will ensure the economic success and continued growth of our projects for as long as it is in existence.

It is our hope that with this testimony, your esteemed offices will consider continued and expanded support for this valuable agency, the Center for Tropical and Subtropical Aquaculture.

PREPARED STATEMENT OF CARTER NEWELL, NORTHEASTERN REGIONAL AQUACULTURE CENTER

Mr. Chairman and members of the Subcommittee: I am Carter Newell of Great Eastern Mussel Farms and Pemaquid Oyster Company, two shellfish aquaculture companies located in mid-coast Maine. I am the immediate past Board Chair of the Maine Aquaculture Innovation Center, and I also sit on a marine advisory panel for the newly-formed Maine Technology Institute. I have been active in commercial aquaculture in my state for twenty-five years.

Although most aquaculture in Maine is conducted in the ocean, our finfish and shellfish growers have much in common with land-based farmers, especially those who rear livestock. We have many similar problems and concerns. It is understandable therefore that we often look to the United States Department of Agriculture (USDA) for assistance. In Maine we believe that USDA, with its research, extension, and commercialization experience has much to offer our growing aquaculture industry.

We connect with USDA through the Northeastern Regional Aquaculture Center (NRAC) which has its office in Massachusetts near New Bedford. Each of the twelve northeastern-most states and the District of Columbia are represented on the NRAC Board of Directors. Through their NRAC affiliation, land grant universities and state trade associations are able to keep up to date with USDA's activities relating to aquaculture industry development.

Recently, the U.S. Department of Commerce (DOC), has taken an increased interest in aquaculture, particularly marine culture. The National Sea Grant College Program, a DOC agency has been involved in NRAC from the beginning. Therefore it can be said that NRAC provides a bridge between Federal agencies, as well as a bridge between the Federal Government and aquaculture in the states.

The recently completed National Census of Aquaculture, based on 1998 data, shows that Maine overall has the fourth largest aquaculture industry in the United States, behind Florida, Mississippi, and Arkansas. However, when it comes to mariculture (ocean aquaculture) Maine is the top producer in the United States. The value of Maine's Atlantic salmon, oyster, and mussel harvests this year is expected to exceed $67 million at the farm gate. This makes aquaculture an important force for economic development in my state.

I am personally involved in an initiative designed to increase one segment of aquaculture in Maine. Four years ago, as Chair of the Maine Aquaculture Innovation Center, I established a "Mussel Working Group" tasked with the responsibility of investigating whether mussel "suspension culture" (from rafts or longlines) could work in Maine. Public interest in this project has been encouraging. We now have over 80 people (many are capture fishermen) who are actively following the progress of our investigations regarding the suspension culture of mussels. Ten rafts of varying designs are now in place.

Suspension techniques, long utilized in European waters, and off Prince Edward Island in Canada, seem to show promise. But we still face a number of serious obstacles, and this is where an organization like NRAC can play an important role. Let me give you an example.

We are learning that bird predation—mostly from eider ducks, threatens the success of mussel rafts. We need to comprehensively focus on ways to keep waterfowl away from the rafts, through the use of acoustical devices or protective netting. Now, Maine has sources to which a commercial farm can go for sponsorship of aquacultural research, but usually, state agencies require match funding. Here is where the RACs can make a real difference.

In the past, NRAC has assisted industry by bringing people together, sponsoring research on environmental, disease, and marketing topics, and effectively communicating the outcome of research of interest to industry. With additional annual ap-

propriations from the Congress, NRAC could do much more in the area of applied commercial research. Support from USDA could be matched with support from state sources, academia and industry. Working together, these partners could concentrate their efforts on the obstacles that currently prevent entrepreneurs from making major leaps forward.

You are all aware, I believe, that aquaculture does not fit neatly into one department of the Federal government. At last count, some fourteen Federal agencies are involved in one way or another with our fledgling industry.

Imagine how this situation confounds the young businessperson trying to establish an aquafarm. Right now, the Northeastern Regional Aquaculture Center is the best place for an interested person to go and obtain Federal information concerning fish farming. By linking with NRAC, the prospective fish farmer can identify people who can provide assistance and training, can obtain fact sheets and easy to read reports on completed and ongoing research. The "information clearing house" function alone should justify continued Congressional support of the RACs.

As the industry becomes more sophisticated, its members will realize that the RACs can play a greater role. We ask that your subcommittee give the RACs the resources they need to realize their full potential.

Thank you for your attention to these remarks.

PREPARED STATEMENT OF MYRON KLOUBEC, MIDWEST REGIONAL AQUACULTURE CENTER

Thank you Mr. Chairman and Members of the Subcommittee for allowing me the opportunity to submit testimony on behalf of the Regional Aquaculture Center Program. Kloubec Fish Farms is one of the Midwest's largest fish producing operations with hatchery, fingerling ponds, and indoor food fish facilities. Originally conceived by my father as a hobby in 1976, it was later developed by myself into a permanent alternative agriculture business in 1981. The business has had considerable success supplying a wide variety of fingerling stock into numerous recreational areas, including regional farm ponds, state and county parks, and private lakes. Since 1981 Kloubec Fish Farms has evolved into a wholesale and retail distributor of quality fish for sale nationwide, and has spread into international markets. My farm has expanded from four ponds and three species in 1976, to over 50 ponds and 14 species currently covering 50 acres. Consisting of spawning labs and a hatchery, Kloubec Fish Farms has become Iowa's largest privately owned and operated fish farm. The operation now has 2 employees. Given the necessary financial and operational inducements I think that my aquaculture operation is an example of what can be done in today's agriculture.

Aquaculture is a young and developing industry, especially here in the Midwest. As with any new agricultural enterprise, we have had to produce new products that consumers wanted as well as obtain the necessary financing to allow our operation to keep growing. At the same time regulations associated with aquaculture have not always been that conducive to the private sector. I personally see a bright future for aquaculture in the U.S. as long the following occurs: (1) increasing research and technology transfer activities in aquaculture, (2) reduce the over-regulation of aquaculture (state and federal), and (3) provide more access to financing for aquaculture ventures. One way in which Congress can influence these factors is to fully fund the $7.5 million authorization for the Regional Aquaculture Centers; Congress has never fully funded the Centers. If the fully authorized amount is not appropriated, then they should at least be funded at the level they have received over the last few years which is $4.0 million. The savings in increased taxes resulting from less imports and more domestic production in aquaculture will help to produce a sound economy for this county. Thank you.

PREPARED STATEMENT OF THE SANTA CLARA VALLEY WATER DISTRICT

SUMMARY

The statement urges the Committee to support adequate funding for the Public Law 566 program in the Administration's budget to provide $1 million for the Llagas Creek Project and $6 million for the Lower Silver Creek Project.

BACKGROUND

The Public Law 566 Watershed Protection and Flood Prevention Program has provided funding for flood prevention projects that have benefitted communities and agricultural interests throughout the United States. Beginning in 1954, the Santa Clara Valley Water District (District) has participated in the program with three

projects in Santa Clara County: Llagas Creek Project, Lower Silver Creek Project, and Upper Penitencia Creek Project. The passage of the federal 1990 Farm Bill, however, halted the Natural Resources Conservation Service watershed plan for Upper Penitencia Creek. Despite the project's high benefit-to-cost ratio of 1.7 to 1.0, the U.S. Department of Agriculture would not approve the project under the Farm Bill because the agricultural benefits are less than the prescribed 20 percent.

PROJECT SYNOPSIS

Public Law 566 projects in Santa Clara County have been significantly delayed in recent years because of the program's limited funding. This drawn-out schedule has caused a significant hardship for the communities. For example, in Morgan Hill, where residents have been waiting since 1954 for project completion, severe flood damages were sustained in 1997 and 1998 from Llagas Creek.

Llagas Creek Project

The Llagas Creek Project is located in the southern Santa Clara County and serves the communities of Gilroy, San Martin, and Morgan Hill. Llagas Creek has flooded in 1937, 1955, 1958, 1962, 1963, 1969, 1982, 1986, 1996, 1997, and 1998. In the areas of Morgan Hill and San Martin, where protection is proposed, flood damages of $150,000 were sustained in 1997 and $200,000 in 1998. However, in both years, the floods did not damage Gilroy, which was protected by the completed portion of the Llagas Creek Project.

The proposed project will protect more than 1,100 homes, 500 commercial and industrial buildings, and 1,300 agricultural acres from a 1 percent flood.

The Llagas Creek Project has not been funded for the last four years by the Natural Resources Conservation Service. The legal transfer of construction authority and program funding from the U.S. Department of Agriculture to the U.S. Army Corps of Engineers (Corps) was completed under the Water Resources Development Act of 1999 (Section 501).

Lower Silver Creek Project

The Lower Silver Creek Project is located in eastern Santa Clara County, within the boundaries of the city of San Jose. The creek has flooded in 1952, 1955, 1958, 1967, 1982, 1983, and 1986. The proposed project on Lower Silver Creek will primarily protect a residential area in eastern San Jose. Approximately 1,400 buildings are located in this flood prone area. Due to curtailment of Public Law 566 federal funding, the District is working with the Natural Resources Conservation Service on a reimbursement agreement to design and build the Lower Silver Creek Project.

FISCAL YEAR 2000 FUNDING

The level of Natural Resources Conservation Service funding for the fiscal year 2000 Public Law 566 program did not provide funds for the Lower Silver Creek Project. $250,000 was appropriated for Llagas Creek in the Corps budget.

FISCAL YEAR 2001 FUNDING RECOMMENDATION

Based on the need to provide critical flood protection for Santa Clara County, it is requested that the Congressional Committee support adequate funding for the Public Law 566 program in the Administration's fiscal year 2001 budget to provide $1 million for the Llagas Creek Project and $6 million for the Lower Silver Creek Project.

PREPARED STATEMENT OF THE SEMINOLE TRIBE OF FLORIDA

The Seminole Tribe of Florida is pleased to submit this statement regarding the fiscal year 2001 budget for the Natural Resources Conservation Service (NRCS) in the Department of Agriculture. The Tribe asks that Congress provide $903.8 million for NRCS's Conservation Operations–01 Partnership; this request exceeds the administration's budget request for fiscal Year 2001 by $250 million. The Seminole Tribe's agricultural enterprises and environmental programs benefit from the technical assistance the NRCS provides through its Conservation Operations Partnership. Recently, the Tribe has been working closely with the Florida State Conservationists on a number of 1996 Farm Bill programs and anticipates increased technical assistance needs in the coming fiscal year.

THE SEMINOLE TRIBE OF FLORIDA

The Seminole Tribe lives in the Florida Everglades. The Big Cypress Reservation is located in the western basins, directly north of the Big Cypress National Preserve. The Everglades provide many Seminole Tribal members with their livelihood. Our traditional Seminole cultural, religious, and recreational activities, as well as commercial endeavors, are dependent on a healthy Everglades ecosystem. In fact, the Tribe's identity is so closely linked to the land that Tribal members believe that if the land dies, so will the Tribe.

During the Seminole Wars of the 19th Century, our Tribe found protection in the hostile Everglades. But for this harsh environment filled with sawgrass and alligators, the Seminole Tribe of Florida would not exist today. Once in the Everglades, we learned how to use the natural system for support without harm to the environment that sustained us. For example, our native dwelling, the chickee, is made of cypress logs and palmetto fronds and protects its inhabitants from the sun and rain, while allowing maximum circulation for cooling. When a chickee has outlived its useful life, the cypress and palmetto return to the earth to nourish the soil.

In response to social challenges within the Tribe, we looked to our Tribal elders for guidance. Our elders taught us to look to the land, for when the land was ill, the Tribe would soon be ill as well. When we looked at the land, we saw the Everglades in decline and recognized that we had to help mitigate the impacts of man on this natural system. At the same time, we acknowledged that this land must sustain our people, and thereby our culture. The clear message we heard from our elders and the land was that we must design a way of life to preserve the land and the Tribe. Tribal members must be able to work and sustain themselves. We need to protect the land and the animals, but we must also protect our Tribal farmers and ranchers.

Recognizing the needs of our land and our people, the Tribe, along with our consultants, designed a plan to mitigate the harm to the land and water systems within the Reservation while ensuring a sustainable future for the Seminole Tribe of Florida. The restoration plan will allow Tribal members to continue their farming and ranching activities while improving water quality and restoring natural hydroperiod to large portions of the native lands on the Reservation and ultimately, positively effecting the Big Cypress National Preserve and Everglades National Park.

The Seminole Tribe's project addresses the environmental degradation wrought by decades of federal flood control construction and polluted urban and agricultural runoff. The interrupted sheet flow and hydroperiod have stressed native species and encouraged the spread of exotic species. Nutrient-laden runoff has supported the rapid spread of cattails, which choke out the periphyton algae mat and sawgrass necessary for the success of the wet/dry cycle that supports the wildlife of the Everglades.

The Seminole Tribe designed an Everglades Restoration project to allow the Tribe to sustain ourselves while reducing impacts on the Everglades. The Seminole Tribe is committed to improving the water quality and flows on the Big Cypress Reservation. We have already committed significant resources to the design of this project and to our water quality data collection and monitoring system. We are willing to continue our efforts and to commit more resources, for our cultural survival is at stake.

In addition to addressing the ecosystem concerns related to the Big Cypress Reservation, the Tribe has been actively involved in the development of the ecosystem-wide restoration plan. The Tribe, as an active member of both the Governor's Commission for a Sustainable South Florida and the South Florida Ecosystem Restoration Task Force and Working Group, has worked cooperatively with our neighbors to design a sustainable future for all of South Florida.

SEMINOLE TRIBE EVERGLADES RESTORATION INITIATIVE

The Tribe has developed a conceptual water conservation plan that will enable us to meet new water quality standards essential to the cleanup of our part of the South Florida ecosystem and to plan for the storage and conveyance of our water rights. We have also designed, with the assistance of the NRCS, the Tribe's best management practices program. We continue to use available funds to further the design and planning work necessary to implement our Everglades Restoration Initiative.

The Tribe's Everglades Restoration Initiative is designed to mitigate the degradation the Everglades has suffered through decades of flood control projects and urban and agricultural use and ultimately to restore the nation's largest wetlands to a healthy state. Our Everglades Restoration Initiative will enable the Tribe:

—to collect and monitor data to establish a baseline and to evaluate performance of the overall system design;
—to design and construct surface water management systems to remove phosphorus, convey and store irrigation water, improve flood control, and rehydrate the Big Cypress National Preserve;
—to commit to the long-term operation and maintenance of new water management systems; and
—to design and implement comprehensive best management practices for the Big Cypress Reservation.

This project will enable the Tribe to meet proposed numeric target for low phosphorus concentrations that is being used for design purposes by state and federal authorities. It will also provide an important public benefit: a new system to convey excess water from the western basins to the Big Cypress National Preserve, where water is vitally needed for rehydration and restoration of lands within the Preserve.

CONCLUSION

Everglades restoration is a well-recognized national priority. Through its assistance to the Tribe, NRCS has provided valuable technical assistance to date. Beginning in fiscal year 1999, NRCS has provided programmatic support through EQIP and WRP, which is anticipated to continue. The Tribe also anticipates additional programmatic assistance through the implementation of a portion of the Tribe's water conservation plan through the small watershed program as authorized through Public Law 83–566. None of the joint objectives of the Tribe and the NRCS can be accomplished, however, without sufficient funding of the Florida Conservationist's technical assistance budget.

The Seminole Tribe is ready, willing, and able to begin work immediately. Doing so will require substantial commitments from the Tribe, including the dedication of over 9,000 acres of land for water management improvements. However, if the Tribe is to move forward with its contribution to the restoration of the South Florida ecosystem, a substantially higher level of federal financial assistance will be needed as well.

The Tribe has demonstrated its economic commitment to the Everglades Restoration effort; the Tribe is asking the federal government to also participate in that effort. This effort benefits not just the Seminole Tribe, but all Floridians who depend on a reliable supply of clean, fresh water flowing out of the Everglades, and all Americans whose lives are enriched by this unique national treasure.

Thank you for the opportunity to present the request of the Seminole Tribe of Florida. The Tribe will provide additional information upon request.

PREPARED STATEMENT OF THE SOCIETY OF AMERICAN FORESTERS

Mr. Chairman, I am William H. Banzhaf. I am the Executive Vice-President of the Society of American Foresters (SAF). The more than 17,500 members of the Society constitute the scientific and educational association representing the profession of forestry in the United States. SAF's primary objective is to advance the science, technology, education, and practice of professional forestry for the benefit of society. We are ethically bound to advocate and practice land management consistent with ecologically sound principles.

I am especially pleased to be here today to comment on the fiscal year 2001 budget for the Department of Interior and Related Agencies. I wish to thank the subcommittee for its continued support of professional forestry, and its continued support of our priorities. I thank the Chair for the opportunity to testify on these important issues.

The public policy activities of SAF are grounded in scientific knowledge and professional judgment. From this perspective we review proposed budgets for forestry and related natural resource programs to determine their adequacy to meet stated objectives and public needs.

THE USDA FOREST SERVICE

Forest Inventory and Analysis

Of all Forest Service programs, the Forest Inventory and Analysis (FIA) is our top funding priority for fiscal year 2001. The Agriculture Research, Extension, and Education Reform Act of 1998 demonstrated how strongly Congress supports an improved FIA program. The Forest Service has developed a strategic plan for the program, a plan that we believe strongly responds to Congress' intent, and the recommendations of a blue ribbon panel designed specifically to evaluate the progress

of the program and make recommendations for its improvement. The plan calls for an $8 million increase per year through 2003 to fully implement the program. Full implementation ought to be our goal.

We are extremely concerned that the Administration does not truly support this important program. The President's budget proposal provides no new money for the FIA program. We do believe the Agency itself is committed to the program. This is evidenced by a Memorandum of Understanding (MOU) between the National Association of State Foresters and Chief Dombeck on February 15, 2000. This MOU commits the Forest Service to fully implementing the strategic plan, which would elevate the role of FIA within the Forest Service and hopefully, increase future funding requests from the Administration. The MOU also encourages states to make financial and other contributions toward fully implementing the FIA program, which is absolutely necessary to make it a success.

In the past, we have discussed a problem with internal funding within the Forest Service. Essentially the National Forest System (NFS) was not making an appropriate contribution to the FIA program that collects inventory data on NFS lands. Chief Dombeck has shown real leadership in improving this problem, and we are pleased that the Forest Service will allocate funding to assure that all NFS lands are inventoried as outlined in the FIA Strategic Plan.

The Forest Inventory and Analysis program provides accurate, comparable data across all forestlands in the United States. Local governments, journalists, environmental groups and private citizens, in addition to forestry professionals in every employer category, need and use this information. Understanding the condition of the nation's forests is critical for appropriate planning and sustainable management. We believe the subcommittee has recognized the importance of this program in the past, and will continue to do so in the future.

Moving toward the new annualized inventories and increasing the range of data collected will create new demand for this important program. In order to support these endeavors, we encourage the subcommittee to continue to support increased funding for this critical program.

Cooperative Fire Protection Programs

We also strongly support funding for the Cooperative Fire Protection programs. Uncontrolled wildland fires pose a tremendous threat to the lives, property, and natural resources across the country. Conditions are particularly hazardous in the wildland-urban interface, a zone where human development intermingles with forests and grasslands. In order to secure firefighter safety, minimize property damage, and resource loss, cooperative approaches must be effective. Firefighters must receive the training, information, and equipment necessary to safely carry out their responsibilities.

Wildfire does not respect political boundaries. Effective wildfire response requires a coordinated interagency effort. Frequently, federal land managers call upon state and volunteer firefighters nationwide to assist in coping with wildland fires, and to provide assistance to carry out prescribed burns and fuel reduction programs.

There are two components of the Cooperative Fire Protection programs: the State Fire Assistance program and the Volunteer Fire Assistance program. The State Fire Assistance program provides state forestry agencies with assistance in delivering a coordinated wildfire response and in complying with national safety and training standards allowing state and local crews to be deployed to federal fires and other emergency or disaster situations. The program also assists states with hazard assessments, fuel treatment projects, and public education efforts.

State forestry agencies administer the Volunteer Fire Assistance program through grants and other assistance to local fire departments for training and equipment. The program's main focus is on rural and urban interface communities that need assistance in meeting both existing and expanded fire suppression responsibilities. The Volunteer Fire Assistance program is another strong cost share program that helps rural firefighters secure the latest training and equipment. Rural communities fight forest fires, and without this program they would not have the appropriate resources. This funding is critical because these communities have seen a significant decline in receipts from national forest and BLM revenue sharing programs. Resources are scarce in rural America.

Cooperative Fire Protection programs are critical to both forest health and the safety of our communities. We ask the subcommittee to consider strong funding levels for these programs.

Addressing the Ecological Infrastructure Backlog

Much has been said about the backlog issues associated with the national forests. Whether it is forest health, deteriorating forest roads, endangered species, salmon

habitat, recreation facilities, hazardous fuels, or any number of other issues, it is clear that the national forests desperately need attention. The Forest Service must address its ecological infrastructure backlog. Ecological infrastructures are those mechanisms that allow forest and other natural systems to function properly. Any one component of a system that is not functioning properly has the potential to impact other parts of the system. This is not always the case, but clearly there are examples in the national forests. Humans manipulate these processes sometimes acting as an equalizer, sometimes doing more damage. The key is allowing professional natural resource managers to put the infrastructure back in place.

The Agency is attempting to deal with all the ecological infrastructure needs. They have mapped areas of forest health risk across the nation. They are addressing a very serious problem with the National Forest System road network. They are addressing wildland/urban interface issues. The most frustrating thing about all of these efforts is the estimated costs associated with addressing them. The Forest Service believes it will cost $8.6 billion to address the road backlog it faces. The Congressional Research Service believes it will cost $3.9 billion to completely address the hazardous fuels buildup on the National Forest System. These figures do not include other ecological infrastructure issues that plague the National Forest System, such as the costs associated with restoring salmon habitat, enhancement of endangered species habitat, or a host of other problems. While these figures are astronomical and beyond what Congress can realistically fund, the Forest Service will receive money to address some of these problems and one problem should not be favored over the other by the Congress or the Administration. Forest Service managers on the ground know where critical problems exists, they know how to address them, and they have the wherewithal to get the job done. The Forest Service should continue to develop plans and tools like the forest health risk maps, which Congress can study and consider. We believe this helps Congress, in their oversight role, fund backlogged work with confidence that the work will be completed. The Forest Service needs a reliable multi-year source of funding to address these issues, and the ability to set the priorities at the local level. The Agency also needs adequate and appropriate staff to carry out these activities.

We appreciate the efforts the Forest Service has made to respond to repeated criticisms regarding accountability. We note that one of their responses has been to collapse numerous line items in the National Forests System Account to three. We do not support this initiative. Collapsing the line items reduces one's ability to understand where the Forest Service priorities lie. We do support the Forest Service's efforts to detail performance measures, and we believe this process will improve over time.

America's Forested Landscape

It is important that the Forest Service and the federal government strengthen their commitment to state and local forestry agencies and the 10 million nonindustrial private forestland owners of this nation. The Forest Service has a unique partnership with the state forestry organizations, a partnership that has the opportunity to improve the health of our nation's forests through technical assistance, inventory and monitoring, and protection from fires, insects, and disease on the 543 million acres of non-federal forests. Due to limited funding, the State and Private Forestry programs have yet to fully meet their potential, however, SAF supports these programs and hopes Congress will as well.

We are concerned about the status of private forestland in this nation. State, county, private, and industrial lands are increasingly producing forest-related goods and services. The most dramatic change on these lands is the shift in production of timber. Approximately 94 percent of all timber produced in the U.S. is produced on non-federal lands. The volume of timber from national forests has decreased dramatically, from 12.7 billion board feet (bbf) to 3.4 bbf, over the past 12 years. Such reductions shift the burden of producing wood fiber to state and private lands in order to meet the nation's increasing demand for forest products. The federal government has some responsibility to protect and enhance the sustainable flow of forest products from state and private lands precisely because of the substantial decrease in production on Forest Service lands. We are seeing examples of increasing urban sprawl, forest fragmentation, and more importantly large managed private forests sold as smaller parcels to individual owners reducing overall land management opportunities. As a nation we have decided that forests, both public and private, are important for economic, environmental, human health, and spiritual reasons. We express the importance and value of our forest resources through a variety of mechanisms, including legislation. Many federal statutes, including the Endangered Species Act, the Clean Water Act, the Clean Air Act and others, have a regulatory impact on the management of private lands. Other statutes, the Cooperative

Forestry Assistance Act of 1978, and the 1990 Farm Bill Forestry Title, for example, take a cooperative, incentive based approach to non-federal forests. These acts recognize the need for state, federal, and local cooperation to achieve resource benefits across the landscape, and they use a non-regulatory, incentive-based approach to achieve them. This cooperative approach is vital on issues that cross ownership boundaries, such as watersheds, forest insects and disease, and particularly wildfire.

Adequate funding is essential if the program is to reach non-industrial private landowners, only about 10 percent of whom have written management plans for their land. Even worse, the majority of timber sales on private lands go forward without the benefit of professional forestry advice. While this may seem like merely a problem of poor business practices, we in the forestry profession view it as a serious threat to the long-term sustainability of the nation's forest resources. Private land has public value. That is why we actively support programs that increase the amount of forestry advice available to non-industrial private forest landowners. In addition to private sector consulting and industry efforts, extension programs, and other mechanisms, we believe the State and Private forestry programs can help both public and private sector foresters meet these challenges.

Maintaining and Enhancing Forest and Rangeland Research

There has been a general clamor for increased funding for forestry research since the publication of the 1990 RPA program report, which identified improving scientific knowledge about natural resources as a high priority. The National Research Council's (NRC) 1990 report, Forestry Research: A Mandatefor Change, found the knowledge required for sound forest management policies inadequate. The 1997 NRC report entitled Forested Landscapes in Perspective, which focused on the needs of non-industrial private landowners, continued to report that information needs were not being met. There are ongoing efforts studying the question of the adequacy of forestry research, and they all come to the same conclusion: current forestry research efforts are inadequate.

SAF is concerned about the relatively stagnant Forest Service research budget of the last few years, but have been encouraged by recent modest increases, and we thank the Committee for that support. These appropriations, however, represent a significant decline in constant dollars and have lead to the unavoidable loss of not only administrators but scientists with significant expertise in highly specialized areas.

Natural resource management issues are more complex today than they ever have been in the past. To find solutions we need interdisciplinary research in the biological, physical, and social sciences. The Agency has done a good job, and could do more, to reduce overhead and put more research dollars to work in direct research projects. But if we continue to lose scientists and research dollars, we believe complex issues are unlikely to be resolved, and the future of the Forest Service research program will be in jeopardy. With recognition of this disturbing trend, we encourage the Committee to increase the appropriation for Forest Service Research above the President's request. We have presented separate testimony on this issue, and we thank the Committee for its continued interest in the need for forestry research.

The Bureau of Land Management

The fiscal year 1998 Interior and Related Agency Appropriation Act (Public Law 105–83) included language that expanded the use of the Bureau of Land Management's Forest Ecosystem Health and Recovery Fund (FEHRF), allowing the BLM to expand silvicultural treatments to improve forest ecosystem health. Funds from this account are used to support Public Domain forest management efforts, including reforestation, thinning, salvage timber sales and other fuel reduction activities including prescribed fire. The expanded authority for the FEHRF, combined with increased funding for prescribed burning, will provide BLM managers with the tools to improve forest and wildlife habitat on BLM lands. And again, we thank the Committee for developing this change in authority.

In spite of the funding available under the FEHRF to implement ecosystem health projects, the BLM lacks the on-the-ground personnel, within the Public Domain, necessary to plan and implement these important activities. Since 1981, the BLM Forestry Management program has experienced an inflation-adjusted 65 percent budget decrease, whereas the entire Management of Lands and Resources budget has experienced only a 10 percent decrease over the same time period. With this in mind, we do support the modest increase of about $2.8 million requested in the President's budget to complete on-the-ground forest management projects. However, we firmly believe the BLM needs to increase its forest management expertise in order to take full advantage of the FEHRF and effectively shift to a focus on forest restoration. Therefore, we support an increase in funding and congressional direc-

tion for additional forestry personnel to plan and administer forest health improvement activities under the BLM Forestry Management program.

In conclusion, we strongly support Forest Service research, in particular Forest Inventory and Analysis, and the Cooperative Fire Protection programs, and state and private programs. We also support the BLM's Forest Ecosystem Health and Recovery Fund and the effort to restore the Public Domain forests. Thank you, Mr. Chairman for the opportunity to share our views with you and the subcommittee today.

ABOUT THE SOCIETY

The Society of American Foresters, with about 18,000 members, is the national organization that represents all segments of the forestry profession in the United States. It includes public and private practitioners, researchers, administrators, educators, and forestry students. The Society was established in 1900 by Gifford Pinchot and six other pioneer foresters.

The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

The Society is the accreditation authority for professional forestry education in the United States. The Society publishes the Journal of Forestry; the quarterlies, Forest Science, Southern Journal of Applied Forestry, Northern Journal of Applied Forestry, and Western Journal of Applied Forestry; The Forestry Source; and the annual Proceedings of the Society of American Foresters national convention.

PREPARED STATEMENT OF THE SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

We greatly appreciate the support this Subcommittee has provided to these programs of the U.S. Department of Agriculture and respectfully request the following modest appropriations and oversight to ensure that the laws passed by Congress are being carried out effectively.

A $15.175 MILLION APPROPRIATION IS NEEDED FOR APHIS/ANIMAL CARE'S ENFORCEMENT OF THE ANIMAL WELFARE ACT

An unprecedented coalition of organizations has joined together seeking adequate funds for enforcement of the Animal Welfare Act (AWA). The Coalition includes national groups such as the American Veterinary Medical Association, the American Zoo and Aquarium Association, the National Association for Biomedical Research and the Society for Animal Protective Legislation, as well as grassroots organizations from across the country. This represents a unique meeting of the minds between the regulated community and the animal welfare community, who recognize the desperate need for increased funding for this vital program.

The Animal Welfare Act is the chief federal law for the protection of animals. The USDA seeks compliance with its minimum standards for the care and treatment of animals during transportation and at the more than 10,000 sites of dealers, research, testing and teaching facilities, zoos, circuses, carriers (airlines, motor freight lines and other shipping businesses) and handlers (ground freight handlers).

Forty-five percent of the facilities that are inspected are found to be noncompliant. Facilities with serious deficiencies require reinspections to ensure that corrective action is taken. Our review of inspection reports shows a widespread inability of inspectors to make the needed reinspections; the only reason they are unable to reinspect is a lack of sufficient funds.

In 1966 the Laboratory Animal Welfare Act (later renamed the Animal Welfare Act) was adopted in an effort to prevent the sale of lost or stolen pets into research. Nevertheless, this has continued to be a serious problem. In an attempt to address this problem, in the mid-1990s, Animal Care instituted a policy of conducting quarterly inspections of random source dealers. Since stepping up its enforcement in this area (which has come at the expense of inspections conducted elsewhere), USDA has revoked 11 dealer licenses and imposed over $500,000 in fines. The number of random source (USDA licensed Class B) dealers supplying dogs and cats to research has dropped from 104 to 32.

This example illustrates the value of frequent, unannounced inspections of licensees and registrants. Increasing the number of inspections will significantly improve compliance with the law.

Limited resources could be better utilized if Congress prohibited the supply of dogs and cats by Class B dealers altogether. It is not feasible for AC to expend the tremendous effort necessary to track the sources on each random source dog and cat. As a result, AC is unable to provide an assurance that each dog and cat from these dealers is not a lost or stolen pet. There is no need for continued reliance on Class B dealers because there are other sources for the dogs and cats needed for research purposes including breeders. Report language from the Subcommittee could offer support for H.R. 453, the Pet Safety and Protection Act, which would end the supply of dogs and cats to research facilities by random source dealers. Adoption of this legislation would reduce USDA's regulatory burden, while permitting experimentation to continue unhindered. The 1985 amendment to the AWA mandates at least one inspection per year of all registered research facilities. A vigorous inspection program is vital to maintaining public confidence in the quality of research and ensuring the humane treatment of research animals. With the need to evaluate performance, as well as engineering, standards, each inspection is extremely time-consuming and labor intensive.

Increased funding will permit AC to hire and equip more inspectors, whose numbers have declined from a high of 88 to a current low of only 64. AC will be able to increase its searches for unlicensed/unregistered facilities, an important effort because failure to obtain licensure or registration is a widespread problem with many entities purposefully evading AC and the requirements of the AWA. The area most frequently ignored for lack of sufficient funds has been inspection of airlines. Increased funding will permit AC to conduct an adequate number of inspections of airlines in an effort to protect against the injury, loss or death of animals being transported by air and to help meet the requirements of the recently adopted Federal Aviation Administration amendment for safe transport of animals by air.

A $1 MILLION LINE ITEM APPROPRIATION IS NEEDED FOR THE ANIMAL WELFARE INFORMATION CENTER LOCATED AT THE NATIONAL AGRICULTURAL LIBRARY

The Animal Welfare Information Center (AWIC) was established by the 1985 amendment to the Animal Welfare Act, the Improved Standards for Laboratory Animals Act, to serve as a clearinghouse and educational resource of information on alleviating or reducing pain and distress in experimental animals (including anesthetic and analgesic procedures), reducing the number of animals who must be used for research and identifying alternatives to the use of animals for specific research projects.

Animal Care is seeking to maximize compliance with the Animal Welfare Act, and the AWIC is the single most important resource for educating research facility personnel on their responsibilities under this law. There are more than 1,200 registered research facilities nationwide, and the services of the AWIC are available to all individuals at these institutions.

The AWIC staff, four full-time professionals, one technician and two part-time professionals, respond to requests for information on topics covered by the Animal Welfare Act including alternatives to painful procedures, unproved methodologies, training, environmental enrichment for nonhuman primates, and checking for unintended duplication. The staff conduct training, present at meetings, exhibit at conferences, produce documents, maintain a website and work on special projects.

The AWIC website (http://www.nal.usda.gov/awic) receives approximately 30,000 hits per month. According to AltaVista, there are links to the AWIC site by approximately 765 pages. Annually the AWIC staff fills more than 18,000 requests for specific publications and has provided reference services in response to more than 1,900 requests.

The AWIC has not received an increase in appropriations during its 14 years, restricting the services it is able to provide. Though a number of documents are in the final stages of preparation, there are insufficient funds to provide print and electronic versions of them all. These documents include an updated listing of animal-related audiovisuals in the National Agricultural Library collection, two issues of the Animal Welfare Information Center Bulletin, a database on swine (who are being used in increasing numbers) as an animal model, an information resource on the use of fish, amphibia, reptiles, cephalopods, and insects in research, and processing a series of data sets on anesthetics, analgesics, and tranquilizers into searchable files on the AWIC website.

Funds are urgently needed to permit the AWIC staff to develop a training program to help Institutional Animal Care and Use Committees best fulfill their responsibilities under the Animal Welfare Act. The increased costs of personnel, publishing, journals and books, computer hardware and software, travel and exhibiting have all increased dramatically since 1986 when the AWIC was first funded.

$500 THOUSAND FOR ENFORCEMENT OF THE HORSE PROTECTION ACT

It has been thirty years since the Horse Protection Act was adopted by Congress, yet soring of Tennessee Walking Horses continues to be a widespread problem. Soring is defined by APHIS as "the application of any chemical or mechanical agent used on any limb of a horse or any practice inflicted upon the horse that can be expected to cause it physical pain or distress when moving." Horses are sored to produce an exaggerated gait.

The most effective method of reducing the showing of horses who have been sored is to have Animal Care (AC) inspectors present at the shows. AC has been restricted to attending less than 6 percent of horse shows because of extreme shortage of funds. Unless sufficient funding is provided to enable AC to attend more events, the industry will continue to defy the law with impunity.

Lack of financial support has made it necessary for Animal Care to rely heavily on the industry to assume responsibility for enforcement of the law. This is the same industry that has turned a blind eye to compliance with the law since 1970! "Designated Qualified Persons" (DQPs) are the "inspectors" from industry who are supposed to assist AC in identifying sore horses and pursuing action against the individuals who are responsible. The history of the DQPs reveals their failure to achieve the level of enforcement of the unbiased, well-trained, professional inspectors who work for AC. In fiscal year 1997 (the most recent year for which such information is available), the rate at which DQPs turned down horses for soring was 1.42 percent. The turndown rate more than doubled to 3.57 percent when government inspectors were present to oversee the activities of the DQPs.

An increase in appropriations to $500,000 would permit AC to attend a greater percentage of horse shows, thereby ensuring significantly stronger compliance with the Horse Protection Act.

CONGRESS NEEDS TO PROVIDE INCREASED OVERSIGHT OF WILDLIFE SERVICES OPERATIONS AND RESEARCH

Mammals

Wildlife Services (WS) has been involved in an extremely effective oral rabies vaccine program. Use of treated baits has been successful in curbing the spread of rabies. Unfortunately, the Administration has suggested a reduction in this funding. Resources should be maximized to address the rabies threat before it spreads to additional states. We encourage that full funding be restored for this vital effort.

Wildlife Services (WS) needs to utilize a variety of tools for management of wildlife under its purview. However, it is essential that these tools are effective and publicly acceptable.

WS needs to begin a phase out of use of steel jaw leghold traps. Leghold traps slam shut with bone-crushing force on the limbs of their victims, tearing ligaments and tendons, severing toes and causing excruciating pain. These traps, opposed by the vast majority of Americans, have been condemned as "inhumane" by the American Veterinary Medical Association, the American Animal Hospital Association and the World Veterinary Association.

On December 11, 1997, the United States Government reached an "Understanding" with the European Union in which the U.S. agreed to phase out use of "conventional steel-jawed leghold restraining traps." WS has the responsibility of complying with the U.S. obligation by ending its use of these barbaric devices.

WS should begin by immediately prohibiting use of leghold traps for 3 species for which there is extensive documentation that effective, publicly acceptable, less cruel alternatives exist. These species are raccoon, beaver and opossum. While we believe that this policy should extend to all species, there is no justification for refusing to implement this modest step in alleviating unnecessary animal suffering at once.

WS should pursue no further testing of leghold traps as this would be an extremely wasteful and cruel use of taxpayer money. Previously, funds designated for trap research were merely passed on to a nongovernmental organization to utilize as it saw fit, without involvement from WS. If funds are allocated for trap testing, WS should conduct the research since the agency has the appropriate technical expertise.

Further, WS should adopt a policy of checking all restraining traps within a 24-hour period. A wealth of scientific studies documents the fact that the longer an animal is in a restraining trap, the greater the injury. For this reason, the majority of states have a daily trap check requirement. Animals should not be subjected to long-drawn out pain because of a failure to assume the responsibility of carefully checking traps every day. This policy will help reduce the trauma experienced by non-target animals, too, ensuring that more of these animals will be able to be released alive.

Birds

WS is expected to approve the poisoning of two million blackbirds with DRC 1339 which takes one to three days to kill the birds by uremic poisoning. We urge this distinguished Subcommittee to eliminate funding for this empty gesture to appease the growers of sunflower seeds which the birds eat during their spring migration.

The poison is a cruel and basically ineffective means of attempting to control blackbird numbers since there are over 35 million blackbirds in this portion of the flyway! WS' specious claim that no other birds are harmed by the poison is patently incredible. The American taxpayer is certainly harmed by being forced to contribute to this cruel boondoggle.

WS is developing a fertility control substance, which could be genuinely effective in reducing blackbird numbers. We urge the Subcommittee to encourage this sensible effort by WS and cut the useless funding for painful poison application. We agree with the National Audubon Society demand for an immediate end to the project.

PREPARED STATEMENT OF THE STATE OF ILLINOIS

As you begin to formulate your appropriations and funding priorities for fiscal year 2001, I respectfully urge you to consider the following items for inclusion in the upcoming agriculture appropriations bill. Each request is followed by a brief description of the project. These projects and funding requests are of particular importance to the State of Illinois and I hope you will be able to include them in this legislation. In addition, I am grateful for all of the assistance that you have been able to provide to the State of Illinois—your efforts are greatly appreciated and provide many benefits throughout the state.

NATURAL RESOURCES AND ENVIRONMENT

Illinois River Basin Restoration Program, "Illinois River 2020"—Farm Bill Components

The Illinois River Basin Restoration Program is a comprehensive proposal of authorizations and appropriations that will address the serious threats to the Illinois River and its tributaries and implement Illinois' goals for the restoration, enhancement, and conservation for the Illinois River and its 55 county watershed. The Illinois River Basin Restoration Program is a two-tiered approach to provide a voluntary, incentives-based program that restores and protects the Illinois river hydrology and water quality, addresses urban non-point source issues, farmland protection and open space, land treatment for stormwater, and best management practices for upland areas that drain into the river and its tributaries.

The following natural resources and environment requests relate directly to the Illinois River Preservation Initiative:

Environmental Quality Incentives Program (EQIP)

Request. Fully fund the Environmental Quality Incentives Program (EQIP) at its authorized level of $200 million nationally and increase Illinois' share to $9 Million.

Description. Illinois only received $2.4 million in EQIP dollars in 1998 and in 1999, respectively. In 1999, over 160 landowners could not participate in the program because there was a shortfall of $1.8 million for projects. An additional $4.5 was needed in 1999 to fund new EQIP priority areas that were denied because of insufficient funds.

Farmland Protection Program (FPP)

Request. Dedicate $10 million in fiscal year 2001 and fiscal year 2002 in the FPP for the Illinois River Basin.

Description. The FPP provides matching funds (up to 50 percent of the fair-market value) to state, local and Tribal governments to permanently protect farmland threatened by development from urban and suburban sprawl, through the purchase of easements that preserve the land for farm use.

Wildlife Habitat Incentives Program (WHIP)

Request. Dedicate $1 million in both fiscal years 2001 and fiscal year 2002 to the Wildlife Habitat Incentives Program (WHIP) for the Illinois River Basin.

Description. WHIP offers cost-share assistance for up to 75 percent of the habitat restoration expenses and technical assistance for farmers, ranchers and other landowners who wish to implement wildlife habitat practices. Eligible practices include native grass restoration, riparian area restoration, and aquatic habitat establishment.

Conservation Reserve Program (CRP)

Request. Dedicate 400,000 acres of Conservation Reserve Program acres to the Illinois River Basin for fiscal year 2001 and fiscal year 2002.

Description. The CRP provides farmers with technical and financial assistance, including annual rental payments, in exchange for removing environmentally sensitive land from production and implementing conservation practices such as wildlife habitat restoration and field windbreaks. This expansion of acreage would bring an estimated $909 million in new federal funding to Illinois for restoration over 15 years of the CRP contract lifetime.

Wetlands Reserve Program (WRP)

Request. Dedicate 10,000 acres of Wetland Reserve Program to the Illinois River Basin for permanent easements.

Description. The WRP offers technical and financial assistance to farmers who wish to restore and protect agricultural wetlands. The USDA provides up to 100 percent of the wetland restoration costs and up to 100 percent of the fair market agricultural value of the land in return for permanent or 30-year easements or wetlands restoration cost-share agreements. The allotment of this acreage would bring an estimated $11 million in new federal funding to Illinois for wetland restorations.

Other natural resources and environment requests include the following:

Trees Forever Illinois Buffer Initiative (Illinois Department of Agriculture)

Request. Annual commitment of $200,000 over five years for the "Trees Forever Buffer Initiative."

Description. Agriculture and rural America continue to face various water quality issues including but not limited to surface water quality and TMDLs, Gulf Hypoxia, nutrient management planning and many others. The Trees Forever Illinois Buffer Initiative is a project targeted at the establishment of demonstration projects across the state, which will highlight the benefits of various types of vegetative buffers. Projects will include strearnside buffer plants of trees, shrubs and grasses; streambank stabilization demonstrations; stream channel enhancements; constructed wetlands; livestock facility border plantings and various combinations. The purpose of the project is to bring together various state, federal, and local groups which may already be promoting components of these practices and apply them to specific whole farm or whole resource needs.

Mahomet Aquifer Consortium

Request. $10 million for an extensive study of the Mahomet Aquifer in Central Illinois.

Description. The Mahomet Aquifer Consortium is proposing a study of the Mahomet Aquifer in Central Illinois. The Study will identify and resolve water quality and quantity issues, help ensure a water supply for the future, optimize future water costs, and promote planned economic development for the communities affected by the aquifer. The project is broken down into 2 phases with phase one taking 3 years and an estimated cost of $4 million dollars. Phase two will cost $6 million and take 6 years to complete.

FOOD NUTRITION AND CONSUMER SERVICES

Request. A total of $405 million to Illinois for the following domestic food programs:

—*National School Lunch Program.*—Full funding of this program will translate into $329.7 million for Illinois. There are currently 1,864,271 students enrolled.

—*School Breakfast Program.*—Full funding of this program will mean $22.2 million for Illinois. There are currently 1,022,966 students enrolled.

—*Child and Adult Care Food Program.*—Full funding of this program will mean $46 million for Illinois. There are currently 114,819 students participating.

—*Summer Food Service Program.*—Full funding of this program will mean $5.0 million for Illinois. There is currently a daily average of 118,200 students attending.

—*Special Milk Program.*—Full funding of this program will mean $2.1 million for Illinois. There is currently a daily average of 161,876 students attending.

Description. Every Illinois student needs a strong foundation for learning. Thousands of children come to school already at risk of academic failure and we must break that cycle. These nutrition programs serve a vital role in supporting student educational programs and it is critical that they be funded at the highest possible levels.

National Corn to Ethanol Research Pilot Plant

Request. $14 million for a National Corn to Ethanol Research Pilot Plant (NCERPP).

Description. The State of Illinois has appropriated $6 million for construction of the NCERPP at Southern Illinois University at Edwardsville. The total cost of constructing the project is estimated at $20 million. The cost of operating the facility will be borne by industry and university research conducted at the plant. A total of $14 million is needed, and no federal funds were appropriated for this in fiscal year 2000.

Center for Alternative Agriculture Crops and Products (Southern Illinois University)

Request. $1.95 million for the Center for Alternative Agriculture Crops and Products at SIU-Carbondale.

Description. This center synergizes various corporations, agencies, and regional universities of the heartland and mid-south to explore alternative income crops and products for Southern Illinois, Illinois, and the entire region. Emphasis would be on increased farm income and increased rural development through added production, processing, and employment. The plan calls for $1.95 million for renovation and expansion of a 13,000-sq. foot building on SIU-Carbondale campus.

Southern Illinois University/University of Illinois Agriculture Outreach Center

Request. $2.5 million for a joint SIU/U of I agriculture outreach center.

Description. Located on the Carbondale, IL Campus, University of Illinois Extension Service and SIU College of Agriculture Agribusiness Economics Department will partner to serve Southern Illinois constituents via on-site classroom instruction, digital television delivery, and web-based access. Building 103 on the Carbondale campus would be renovated, expanded, and rewired. Estimated cost is $1.8 million.

Plant and Alternative Crop Training Center-Belleville, IL

Request. $2.5 million for a Plant and Alternative Crop Training Center at Southern Illinois University Belleville Research Station.

Description. Project seeks to add a 10,000-sq. ft. facility for university and industrial training on the SIU Belleville Research Station site near the Mid-America airport. The facility would allow agricultural industries of the Metro-East (St. Louis) area to have access to an indoor multimedia training/meeting facility. This plan allows for synergy with Donald Danforth Plant Science Center shared use of land and 1,200-sq. ft. of wet-laboratory space. Construction cost is estimated to be $2.5 million.

Soybean Genomics Lab at Southern Illinois University

Request. $189,000 for the Soybean Genomics Lab at SIU.

Description. Expand the current laboratory at Southern Illinois University to accommodate four added faculty researchers in soybean genomics and transformation.

Peoria Research Lab Invasive Species Biological Control Center (through Agriculture Research Service.)

Request. $4–8 million to establish an Invasive Species Biological Control Center.

Description. The U.S. is facing an unprecedented need to develop viable strategies for management of invasive species. Biological control is a fundamental management strategy that can be used to manage invasive pests both before and after introduction. The Midwest has become a focal point for invasive species introductions due to its location at the heart of the Great Lakes Region and as home to major international shipping and air transportation systems. We propose that developing a coordinated administrative structure and facility to enhance invasive species management and biological control activities in the region should be a joint priority of USDA and state partners.

Agriculture Research Service—Greenhouse Facility at University of Illinois

Request. $4 million for the University of Illinois for construction of a state-of-the-art greenhouse facility.

Description. The State of Illinois seeks to construct a state-of-the-art greenhouse facility that will support research associated with the Maize (corn) Genetics Stocks Collection and the National Soybean Germplasm. Collection at the University of Illinois. (The University received $400,000 in planning funds in fiscal year 2000 for this project.)

Agriculture Research Service—Laboratory in Peoria

Request. $4 million for the ARS Laboratory in Peoria

Description. The State of Illinois supports funding for improvements and renovation to the ARS laboratory in Peoria. ($1.8 million was appropriated for fiscal year 2000 for this purpose.)

Soybean Disease Biotechnology Research Center

Request. $3.5 million for the National Soybean Research Laboratory (NRSL) at the University of Illinois.

Description. Fiscal year 2001 request is $3.5 million. To be established within the National Soybean Research Laboratory (NSRL) at the University of Illinois, the Center will be the first line of defense against major soybean diseases that threaten the most important "biofactory" of new foods and uses in the future, namely, the soybean crop. Scientists in the Center will employ cutting edge biotechnology research to provide soybeans with new and improved mechanisms of escape from, tolerance of, and resistance to major pathogens, including soybean cyst nematode (SCN) and other soy diseases that threaten the profitability of the soybean industry. The Center will draw on the 17,000 lines in the National Soybean Germplasm Collection at the NSRL and apply the power of structural, comparative, and functional genomics and genetic transformation. The Illinois soybean industry will provide funds to help establish the Center and support its research program.

Illinois-Missouri Biotechnology Alliance

Request. $3 million in funding for the Illinois-Missouri Biotechnology Alliance.

Description. The State of Illinois supports funding for the Illinois-Missouri Biotechnology Alliance to continue research at the Universities of Illinois and Missouri on biotechnology. Congress appropriated $1.184 million in funds for this project in fiscal year 2000.

Postharvest Antimicrobial Resistance

Request. Support funding for Agriculture Research Service's Postharvest Antimicrobial Resistance food safety research project at the Peoria Lab.

Description. Congress appropriated $400,000 for this project in fiscal year 2000.

Aflatoxin Research at the University of Illinois

Request. $130,000 for Aflatoxin Research at the University of Illinois.

Description. The State of Illinois requests funds to continue aflatoxin research at the University of Illinois.

FARM AND FOREIGN AGRICULTURAL SERVICES

Warehouse Examination Agreements (Illinois Department of Agriculture)

Request. $400,000 to cost-share additional expense of warehouse examinations.

Description. Prior to 1985, federal policies dictated that commodities would be isolated from market prices and forces until prices rose to specified levels. As a result, large inventories and Government owned commodities and commodities pledged as collateral for price support loans accumulated and the facilities win which these commodities were stored had to be examined to adequately protect the Commodity Credit Corporation's (CCC) interests. This led to CCC relying heavily on cooperative agreement because the volume of workload associated with these high stock levels did not make it feasible for CCC to hire and train a workforce that would be adequate to conduct all the necessary examinations. USDA terminated this program in 1997. Illinois' storage share and federal reimbursements were: In 1993/4, 7.78 million bushels of grain stored—$364,920 reimbursed; in 1994/5, 7.87 million bushels—$364,820 reimbursed, in 1995/6, 8.04 million bushels of grain—$379,487 reimbursed. Given the fact that today USDA is estimating that 70 percent and 80 percent respectively of Illinois's 1999 corn and soybean crops are presently committed in LDP's or CCC loans, the Department is asking USDA to again cost share the additional expense of warehouse examinations.

FOOD SAFETY AND INSPECTION SERVICE

Quality Assurance Pilot Certification Program for Small Meat Processors

Request. $200,000 per year over three years for a Quality Assurance Pilot Certification Program for small meat processors.

Description. This Pilot Program is an effort by the Illinois Department of Agriculture to establish a Quality Assurance Certification Program for small meat and poultry slaughter and processing plants. Under this certification program, the Department will contract with food safety experts to provide education and HACCP compliance training to plant management and employees. After completion of the project, material can be used by other states.

National Center for Food Safety and Technology

Request. $3 million for the National Center for and Technology

Description. The State of Illinois seeks continuation of the $3 million received by the Illinois Institute of Technology (IIT) for its National Center for & Technology through the fiscal year 2000 Agriculture Appropriations bill. The Center needs the funding to continue its progress in fighting the growing incidence of food borne illness. The NCFST has been fighting food borne illness for over a decade. It is a unique collaboration between government, academia and the food industry that develops manufacturing methods to detect and prevent contamination of foods. The NCFST's partners are the U.S. Food & Drug Administration, IIT and almost 70 members of the food industry.

IIT Center for Safe Food for Small Businesses

Request. The State of Illinois supports the Illinois Institute of Technology's request for $3 million in federal support.

Description. This Center provides direct technical assistance to small and medium sized food manufacturers to assure both safe products for public consumption and improve the companies competitiveness. IIT will be requesting continuation of federal funding for the overall National Center for Food Safety & Technology. The State of Illinois will provide $1 million in fiscal 2001 for this project.

National Food Testing Center at the University of Illinois

Request. $25 million to create a state of the art National Food Testing Center at the University of Illinois.

Description. To create a state-of-the-art facility for conducting safety and efficacy research on new, improved, and functional foods, including health-related, genetically enhanced foods. The National Food Testing Center will support and expedite the most important experiments on foods, that is, tests to assure that they are safe and effective. Through these experiments, hundreds of new and improved foods and related products will be tested and approved for human use, resulting in greatly improved human health, quality of life, and longevity. This will enable the U.S. to capture proprietary benefits from its investment in agricultural and biomedical research. In addition, consumers of these products will be fully confident that these products will be safe and effective.

RURAL DEVELOPMENT

Pork Producers' Producer-Owned Cooperative Initiative

Request. Support funding for the capitalization of pork producers' producer-owned cooperatives.

Description. The National Pork Producers are asking for $200 million for grants to develop, establish, and assist in the capitalization of producer-owned cooperatives. These will facilitate slaughtering, processing, distribution, and marketing of livestock and livestock products. They believe that producer-owned, value-added marketing cooperatives provide the best tools for the future and will allow independent pork producers to stay in business.

Belvidere-Boone County, Illinois New Uses Ag-Tech District

Request. $400,000 annually five years for the Belvidere-Boone County, Illinois New Uses Ag-Tech District

Description. The New Uses Economy from bio-based products is poised for growth as public and private sectors begin to shift their research and development away from petroleum-based products. In order to leverage local, state and private investment and to continue the development of the project, federal funding of $400,000 per year is necessary for the next five years to undertake the following: (1) Continuation of the discovery process including the definition of the New Uses Economy and the definition of a Green Zone Program; (2) Expansion of partnerships with the private sector, universities, and the State; (3) Development of the Ag-Tech Park including master planning and site development; and, (4) Pursue continued funding through private corporations, foundations, and state and federal grants.

MARKET DEVELOPMENT PROGRAMS

Market Access Program

Request. Fully fund market development programs.

Description. The Market Access Program (MAP) uses funds from the U.S. Department of Agriculture's (USDA) Commodity Credit Corporation (CCC) to help U.S. producers, exporters, private companies, and other trade organizations finance promotional activities for U.S. agricultural products. Each year, MAP activities help

launch and expand sales of a wide variety of U.S. agricultural, fish, and forest products overseas.

Farmers benefit from MAP as the primary suppliers of commodities. All regions of the country benefit from the program's employment and economic effects from expanded agricultural export markets. In 1997, agricultural exports totaled $57.3 billion, generating about 974,000 full-time American jobs, including 562,000 non-farm sector jobs.

More than one million Americans now have jobs that depend on U.S. agricultural exports. USDA economists calculate that each dollar earned from agricultural exports stimulates another $1.32 in business activity for the economy.

Since 1985, the Market Access Program and its predecessors, the Targeted Export Assistance Program (TEA) and the Market Promotion Program (MPP), have helped boost agricultural exports, resulting in a positive agricultural trade surplus of $12.5 billion in fiscal year 1999, and contributing billions of dollars more in increased economic activity and additional tax revenues.

Agriculture Structure Center (University of Illinois)

Request. $320,000 for an Agriculture Structure Center in Illinois.

Description. The start of the new millennium finds farmers dealing with a lot of stress. In addition to 12 year lows in corn prices, 27 year lows in soybean prices and 50 year lows in hog prices, tremendous concern lies in the rapid consolidation of farms and the businesses that serve them. In the United States, essentially five companies control most of the field seed business, four to five companies control most of the meat packing business, twenty to twenty-five companies control most of the chicken business and ten companies control half of the food retailing business. Within ten years, thirty beef cattle feeding and fifty hog-producing businesses will finish 50 percent or more of all beef cattle and hogs. This rapidly changing structure has led many in production agriculture to wonder if there will be a role in the future for independent producers. Existing public and private institutions are not well situated at this time to provide answers to these producers on how they can remain relevant and competitive in a highly integrated, global business.

Institute for Value Added and Alternative Agriculture Products at Southern Illinois University

Request. $175,000 for an Institute for Value Added and Alternative Agriculture at Southern Illinois University.

Description. One method of improving the economic condition of the agricultural sector is to increase the value of the products that are sold and to create a greater demand for existing or new food or agricultural products which can be produced in Illinois. If more feed grains, as well as other agricultural produce, were processed before they leave the state, it would not only increase the value of the product being exported, but also provide tremendous employment opportunities and industrial growth. An institute for value added and alternative agricultural products would contribute to economic growth through research and development of new and/or improved products. The proposed institute would be a focal point for agricultural commodity groups and agricultural related industries. The university is in a unique position to support such an institute with a well established College of Agriculture with current programs in food and nutrition, animal and plant science, agricultural economics, as well as faculty in other colleges with interests in marketing, genetics, bioengineering and economic development.

FOOD AND DRUG ADMINISTRATION

Clinical Pharmacology Program

Request. $3 million for fiscal year 2001 for the FDA's Clinical Pharmacology Program.

Description. The existing clinical pharmacology program offers many benefits-development of new drugs, training in pharmacology, important research, resource for the local and regional communities, and maintaining the U.S. as a world leader in drug development and research. Some of the research projects that clinical pharmacology programs have been involved in are: AIDS, diabetes, heart attacks, lupus, and kidney disease. Despite an authorization of $3 million in fiscal year 2000, the program only received an appropriation of $500,000. Congress first authorized the clinical pharmacology program in 1991. Up to $1.9 million annually in funds was authorized for FDA to set up clinical pharmacology programs at several medical schools throughout the U.S. An FDA peer review panel established the program at four universities: U of I College of Medicine in Peoria, Meharry Medical College in Tennessee, Mayo Clinic in Minnesota, and the State University of New York in Buf-

falo. IN 1998, the program was reauthorized in the FDA Modernization Act until 2002 at $3 million per year.

ANIMAL PLANT HEALTH INSPECTION SERVICE (APHIS)

National Food Animal Institute (Illinois Department of Agriculture)

Request. Three-year commitment of $1 million annually for a National Food Animal Institute in Illinois.

Description. The Institute would be established by the Illinois Department of Agriculture to review research through peer review and to publish and disseminate unbiased information about all the aspects of the food animal industry. It would maintain comprehensive information systems for the improvement and enhancement of the food animal industry for use by the public, government agencies, and other interested parties. The Institute must fulfill its purpose with unbiased integrity.

Pseudorabies Swine Slaughter

Request. Support full funding for Animal Plant and Health Inspection Service (APHIS). Funds from APHIS would be used to institute a pseudorabies swine slaughter surveillance collection point at Johnsonville Packing, Momence, IL.

Description. Currently, Illinois is struggling to acquire an adequate number of slaughter surveillance samples to maintain the compliance established by the National Program Standards. In 1998, first point testing was conducted at the end of the year to achieve the required numbers. It has been established that slaughter surveillance of cull sows and boars is the superior method of determining the PRV status in herds at the grassroots level. Funds from APHIS are critical toward the establishment of a pseudorabies swine slaughter surveillance collection point in Illinois.

Swine Producer Laboratory Testing

Request. Support a one-time appropriation from Animal Plant and Health Inspection Service (APHIS) for $100,000 to defray the cost for swine producers conducting laboratory testing necessary to diagnose or maintain the health of their swine herds.

Description. With the current low prices for hogs, many producers are either foregoing diagnostic or preventative health measures in an effort to obtain some profit from their animals. Maintaining a healthy swine herd helps the producer produce his product in a more efficient manner. Providing this assistance would insure that animals that are unhealthful and diseased would have access to proper diagnosis and eliminate potential disease situations arising in the herd and possible spread within the swine industry. In 1997, Illinois produced 1.82 billion pounds of pork, placing it fourth in U.S. hog production. The number of hog producers in Illinois continues to drop: 8,800 hog farms in 1996; 7,500 hog farms in 1997; and 7,000 hog farms in 1998.

APHIS-Gypsy Moth "Slow the Spread" Program

Request. Support fiscal year 20O1 spending levels to provide Illinois with an estimated $200,000 for the APFUS program.

Description. The Illinois Department of Agriculture, under authorities provided in the Insect Pest and Plant Disease Act, annually cooperates with APHIS and various units of local and county government to identify and control the Gypsy Moth in Illinois. The annual program includes both the identification of gypsy moth infestations as well as a treatment control program. In the past, no funding has been transferred between agencies. In the trapping (identification) program, APHIS has concentrated on the Chicago Metropolitan area and the Illinois Department of Agriculture has worked in the balance of the state. Once an area is identified as being in need of a treatment control, the APHIS has provided the biological pesticide, the local unit of government has provided funding for the applicator and the Illinois Department of Agriculture has provided overall project oversight and coordination. In fiscal year 1999, the APHIS provided funding to states for an expansion of the trapping (identification) program to attempt to further reduce the spread of the insect.

Johne's Disease Pilot Program (Illinois Department of Agriculture)

Request. Support a three-year commitment from the Animal Plan and Health Inspection Service (APHIS) for $200,000 for the purpose of establishing a Johne's Disease pilot program.

Description. Johne's disease is a wasting disease of cattle, sheep, goats and cervidae. This disease is contracted through direct contact with infected animals, which are generally infected at a young age, but may not exhibit signs of the disease until they are four or five years of age. Johne's disease is characterized by weight loss, severe diarrhea, depression, and poor performance. There is no cure for Johne's

disease. It has been estimated that economic losses can amount to $227 per cow. A recent National Animal Health Monitoring System (NAHMS) sampling of Illinois dairy cows, indicated a prevalence of at least 10 percent in the cull cows from the dairy herds tested. Illinois would like to start a pilot program that could be used as a model for the U.S.

Renewables Bioprocessing Research Program (University of Illinois)

Request. $20 million for the Renewables Bioprocessing Research Program (RBRP) at the University of Illinois.

Description. The Renewables Bioprocessing Research Program (RBRP) is an effort by the University in collaboration with other agencies and institutions to provide "plant to product" research information for the production and processing of corn, soybeans, and wheat. Objectives of the RBRP program are: (1) Establish an interdisciplinary collaborative research effort in the production and development of new food and industrial products from corn, soybeans, and wheat coproducts; (2) Establish an interdisciplinary collaborative research effort to improve the overall efficiency of converting renewable corn, soybean and wheat coproducts into saleable products; (3) Enhance the development of small-scale laboratory procedures to accurately predict the genetic capabilities of different genotypes, phonetypes, and varieties to make desired end use products; and, (4) Provide commercial companies with a single integrated program of contract research.

National Facility for USDA Animal Health

Request. Support USDA's efforts to fund a national facility for Animal Health in Ames, Iowa.

Description. This new facility would replace the National Animal Disease Center (NADC), the National Veterinary Services laboratory (NVSL), and the Center for Veterinary Biologics (CVB). All of these units are in substandard facilities, except for one building at the NADC that is new and few APHIS buildings that will be renovated to fit in the new plan. The three laboratories, especially NADC, are national and international in that they have the capability address a broad spectrum of major livestock diseases in BL–2, BL–3, and BL–3 Ag (containment facilities.) Improving competitiveness in the world market, enhancing our nation's livestock industries, and protecting against emerging diseases more than ever depends on maintaining disease-free animals and ensuring that systems are in place to respond to disease outbreaks. Healthy livestock are fundamental to a safe food supply for the American public.

National Coolwater Broodfish Center, SIU

Request. The State of Illinois and Southern Illinois University request $250,000 per year for this project.

Description. SIU seeks funding of $250,000/year from USDA to establish a center than can expand the aquaculture industry in Illinois. The goal of this concept is to develop a center to domesticate suitable strains of coolwater fish species that will allow the farm belt to become a greater participant in the aquaculture industry. Currently, most aquaculture occurs with warm water fish (catfish) in the south and coldwater fish (trout and salmon) in the north. There is a lack of domesticated species suitable for aquaculture use in the middle latitudes in the U.S. The impact of this project extends to a vast area beyond. The proposed center would take advantage of the existing on-campus strength present at the Fisheries and Illinois Aquaculture Center, and would:

—Domesticate suitable strains of coolwater species for commercial foodfish production.
—Selectively breed coolwater fishes for desirable traits (e.g., rapid growth, improved dress-out percents, and disease resistance).
—Maintain genetic histories of coolwater broodfishes.
—Provide selectively bred coolwater broodfishes to commercial producers throughout all coolwater regions of the U.S.A.

Land Use Impacts and Water Quality Research

Request. $450,000 for Land Use Impacts and Water Quality Research at Southern Illinois University (SIU)

Description. Building on 8 years of collaborative research focusing on basic and applied research concerning groundwater, agricultural chemicals, and the impacts of natural disasters on groundwater, soils, and diversity, this proposal focuses on the impacts of land use on water quality. Changes in land use due to urbanization, growth of large animal feed lots, and agricultural practices impact water quality, flow, and management. SIU will organize and manage a research program to provide a scientifically valid basis upon which to base management and regulatory deci-

sions on land use and water resources. $350,000 was included for this project in fiscal year 2000 Agriculture Appropriation Bill.

Should you need additional information, please do not hesitate to contact Bobby Thomson in my Washington, DC office at (202) 624–7772. Thank you for your consideration of these requests and for your leadership on this most important legislation.

PREPARED STATEMENT OF THE STATE OF WYOMING

This testimony supports fiscal year 2001 expenditures for the Department of Agriculture's Environmental Quality Incentives Program (EQIP) in the amount of $350,000,000 and requests that $12,000,000 be designated for the Colorado River Salinity Control Program.

This testimony supports fiscal year 2001 appropriations for the Department of Agriculture's Environmental Quality Incentives Program (EQIP) to carry out Colorado River salinity control activities. The State of Wyoming is a member State of the Colorado River Basin Salinity Control Forum (Forum), a seven-State organization created by the Governors of the Colorado River Basin States. The Forum's Executive Director, Jack Barnett, will submit separate testimony in support of this requested appropriation and the State of Wyoming has participated in the development of, and concurs with the statements made in, the Forum's testimony to this Subcommittee.

Wyoming is also represented on the Colorado River Basin Salinity Control Advisory Council, which was created by the 1974 Colorado River Basin Salinity Control Act (Public Law 93–320). Like the Forum, the Advisory Council is composed of gubernatorial representatives of the seven Colorado River Basin States and serves as a liaison between the seven States and the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency (EPA). It advises these Federal officials and the involved agencies on the progress of efforts to control the salinity of the Colorado River and annually makes funding recommendations, including the amount believed necessary to be expended by the USDA for its on-farm Colorado River Salinity Control (CRSC) Program. Our testimony makes those funding requests that are contained within the Advisory Council's written program funding recommendations.

The Plan of Implementation and the numeric water quality criteria set for three Lower Colorado River stations constitute the State-adopted, EPA-approved, water quality standards for salinity the Colorado River. Jointly developed and revised each three years by the States and involved Federal agencies, the Plan of Implementation is being carried out to ensure continuing compliance with the numeric water quality criteria for salinity.

During its October 1999 meeting, the Advisory Council recommended that at least $17,500,000 be expended by the Department of Agriculture for cost-sharing to implement salinity reduction practices (funds that are matched with individual contractor's cost-share funds) in fiscal year 2001, plus sufficient funds for administration, technical information and education, to assure that the Program's progress of removing salt and preventing additional salt loading into the Colorado River system stays on the schedule set forth within the Plan of Implementation.

Should a lesser funding level be provided for this important basin-wide water quality program, the progress (as measured in tons of salt prevented from entering the Colorado River system) achieved by the USDA component of the multi-agency, State and Federal Colorado River Basin Salinity Control Program will fall far short of meeting the rate of salinity control determined to be determined necessary to assure compliance with the basin-wide standards for salinity in the Colorado River. Failure to maintain the standards' numeric criteria could result in the imposition of state-line water quality standards (as opposed to the successful basin-wide approach that has been in place since 1975) and impair the Colorado River Basin States' ability to develop their Compact-apportioned water supplies. Further, it is unmistakable that funding shortfalls will result in significantly higher costs to implement the same level of salinity control through the CRSC Program in future years.

The Federal Agriculture Improvement and Reform Act of 1996 (Public Law 104–127) provided for the CRSC Program to continue in the future—as a component part of the Environmental Quality Incentives Program (EQIP). We view the inclusion of the Salinity Control Program in EQIP as a Federal recognition of commitment to complying with the Colorado River salinity water quality standards. The Secretary of Agriculture has a vital role in meeting that commitment. We urge the Subcommittee to remind the Secretary of Agriculture of his obligations under that Federal commitment as he makes decisions about national conservation priority areas

and priority resource concerns. The intention of Public Law 104–127 is that the nation's agricultural programs be "locally led and driven" and we agree with that approach. Since the enactment of that law, however, the Salinity Control Program has not been funded at a level adequate to ensure that the water quality standards for salinity in the Colorado River can be maintained at or below the numeric criteria levels specified in the standard.

The Colorado River Basin States have urged the U.S. Department of Agriculture to designate the Colorado River Salinity Control Program as a national conservation priority area as provided for in the USDA's promulgated regulations for the EQIP. Although numerous requests have been made for this designation, USDA's responses have justified the lack of national conservation priority area designations by pointing to the lack of adequate EQIP funding. An authorization of $350,000,000 for EQIP funding in fiscal year 2001—an additional $150,000,000 above the $200,000,000 level minimum specified in Public Law 104–127—is both appropriate and needed.

I accordingly request that this committee support the borrowing of $350,000,000 from the Commodity Credit Corporation (CCC) in fiscal year 2001 for the EQIP Program, and that the Congress advise the Administration to designate $12,000,000 of the EQIP funding for the Colorado River Basin Salinity Control Program. Thank you for the opportunity to submit this testimony.

PREPARED STATEMENT OF TEXAS A&M UNIVERSITY

Mr. Chairman and members of the Committee, I am Ed Hiler, Vice Chancellor for Agriculture and Life Sciences in the Texas A&M University system. I appreciate the opportunity to appear before you today, to describe a few exciting research projects we have underway, and to ask for your support for continued federal funding. New technology is the life blood of American agriculture. With the 1996 Farm Bill and resulting phase down in federal farm programs, it is imperative that research continues providing a technological underpinning for agriculture. Today, I will describe several examples of how we can provide this underpinning.

DESIGNING FRUITS, VEGETABLES AND OTHER FOOD PLANTS FOR PREVENTION OF LIFE-THREATENING DISEASES

To identify plant "phytochemicals" that prevent disease and enhance those compounds in fruits, vegetables, and other food plants that promote human health. Objectives seek to reduce the risk of, to slow, and/or to prevent diseases such as cancer, heart disease, stroke, and atherosclerosis. Consumers, health care providers, farmers, and government will benefit from the production, consumption, and health effects of producing and consuming these improved plants. We are requesting increased funding for this important continuing project at $2,000,000 for fiscal year 2001.

EFFICIENT IRRIGATION FOR WATER CONSERVATION IN THE RIO GRANDE BASIN

Recent drought conditions in the border region of the Rio Grande Basin highlight the importance of ample water resources for the region's economy and environment. More efficient agricultural and urban irrigation systems can conserve large amounts of water that can be used for other purposes. The objective of this two-state initiative is to increase the efficiency of agricultural and urban landscape irrigation and encourage development of efficient water markets in the basin. We are requesting funding for this project at $3,250,000 for fiscal year 2001.

ANIMAL FIBER RESEARCH

Appropriations are sought to conduct wool, mohair and cashmere research that will stabilize and increase the profitability of the sheep, Angora, and cashmere goat industries in the United States and Texas while providing U.S. consumers with high quality animal fibers at internationally competitive prices. In this three-state initiative, emphasis will be placed on the development and expanded use of objective fiber measurements in the areas of nutrition, management, selection, harvesting, and marketing. We are requesting funding for this project at $300,000 for fiscal year 2001.

FARM-LEVEL IMPACTS OF AGRICULTURAL POLICY

Funds are needed to conduct agricultural policy research that directly supports congressional committees involved in setting agricultural policy. This two-state research activity emphasizes the regional and farm-level effects of alternative agricul-

tural policies on crop producers. Monitoring performance at the farm level continues to be particularly critical as government explores its role in providing an income safety net for American agriculture. We are requesting funding for this project at $500,000 for fiscal year 2001.

LIVESTOCK AND DAIRY POLICY ANALYSIS

Funds are needed to allow Texas A&M University and Cornell University to conduct agricultural policy research on the livestock and dairy industries that will assist congressional committees in developing new legislation for agricultural programs. Legislative options will be analyzed to determine policy impacts on various sectors of the agricultural economy, markets and land prices. Monitoring the performance of the dairy sector at the farm level will be particularly critical at a time of regulatory dairy policy reform mandated by the 1996 Farm Bill and government roles in providing an income safety net for American agriculture. We are requesting funding for this project at $625,000 for fiscal year 2001.

CENTER FOR NORTH AMERICAN STUDIES

This two-state funding initiative, which has received continual support from Congress since fiscal year 1994, would continue and expand the programs of the Center for North American Studies headquartered in The Texas A&M University System. The Center provides leadership for the promotion of stronger agricultural relationships among Canada, Mexico and the United States through cooperative study, research, policy analysis and training. We are requesting funding for this project at $300,000 for fiscal year 2001.

CONSORTIUM FOR AGRICULTURAL SOILS MITIGATION OF GREENHOUSE GASES (CASMGS)

A consortium of eight Land Grand universities, USDA agencies, and a private-public research laboratory seeks funds to develop and verify scientifically defensible methods to measure and estimate the effects of soil conservation and crop management practices on carbon sequestration in agricultural soils. The consortium will also assess the economic and environmental consequences of programs designed to sequester atmospheric carbon dioxide in agricultural soils. We are requesting funding of $5,000,000 from USDA for this project for fiscal year 2001.

SHRIMP AQUACULTURE RESEARCH

Federal support is needed to maintain continued funding for ongoing efforts and to expand programs of the U.S. Marine Shrimp Farming Program (USMSFP). This program, currently funded by the USDA/Cooperative State Research, Extension and Education Service (CSREES) through the Oceanic Institute in Hawaii and the Gulf Coast Research Laboratory Consortium as based in the Texas Agricultural Experiment Station and The Texas A&M University System Agriculture Program. We are requesting funding for this project at $5,000,000 for fiscal year 2001.

INTERNATIONAL GOAT RESEARCH AT PRAIRIE VIEW A&M UNIVERSITY

Congressional funds are sought to continue the effort supporting dairy and meat goat research at the International Goat Research Center at Prairie View A&M University, a member of The Texas A&M University System. We are requesting funding for this project at $750,000 for fiscal year 2001.

NEW PRODUCTS FROM RANGELANDS AT TEXAS A&M UNIVERSITY-KINGSVILLE

Congressional funds are sought to continue research efforts to support the commercialization of new industrial and food crops from native plants—such as cacti and mesquite—from arid lands, greatly benefitting Americans who live in the southwestern United States. We are requesting funding for this project at $120,000 for fiscal year 2001.

SOUTHERN PLAINS COTTON RESEARCH AND EDUCATION CONSORTIUM

The cotton industry in the Southern Plains is under unprecedented stress from declining prices due to strong global competition, improved boll weevil management, and increased cotton acreage in the southeastern U. S. An agricultural research and education consortium composed of Texas Tech University, the Texas Agricultural Experiment Station, the Texas Agricultural Extension Service, and USDA Agricultural Research Service has been formed to address these challenges in the Southern Plains. The consortium proposes to initiate a five-year, $27.5 million program to increase profits of Southern Plains cotton farmers and processors. The effort will ac-

complish its goal by developing and disseminating improved cotton germplasm, crop management practices, pest control programs, textile processing technologies, and marketing programs. We are requesting funding for this project at $5,500,000 for fiscal year 2001.

AGRICULTURE AND THE ENVIRONMENT—LANDSCAPE ISSUES

The focus of the Texas Institute for Applied Environmental Research is on agriculture and the environment. Funding for this initiative will be used to continue development of (1) conceptual approaches that can be used to resolve environmental problems in agriculture while maintaining the competitiveness of the industry, (2) modeling tools that analyze policy alternatives to determine their effectiveness in achieving environmental objectives and their economic impacts on the targeted industry, and (3) implications of smart growth initiatives on production agriculture. We are requesting funding for this project from USDA at $750,000 for fiscal year 2001.

PROTECTING U.S. AGRICULTURE FROM BIO-TERRORISM & EXOTIC BIO-INVADERS

An integrated system for protecting U.S. agriculture and its food supply against the threat of bioterrorism is recognized as an increasingly high priority addition to similar systems for protecting humans and cyberspace. The system will also work for natural or accidental outbreaks of animal and plant disease resulting from introduction of exotic bio-agents. The proposed agricultural bio-security system will include a surveillance network utilizing GPS and satellite imaging technology, field and laboratory based diagnostic capacity deploying DNA-chip technology to identify and characterize bio-agents, and a geo-referenced information system for predicting and tracking the spread of bio-agent after introduction. The system will include means to support intervention and mitigation following attack. The system will be developed in partnership with the USDA's Agricultural Research Service, other universities, and the private sector. We are requesting funding for this project at $5,000,000 for fiscal year 2001.

CENTER FOR FOOD SCIENCE AND ENGINEERING

Appropriations are requested to construct and equip a 125,000 sq. ft. facility at College Station, Texas to house: USDA-Agricultural Research Service food safety programs and the Texas A&M University Institute of Food Science and Engineering. Dedicated incubator space will be provided for entrepreneurs seeking to break into food manufacturing. We are requesting funding for this project at $30,000,000 for fiscal year 2001.

ECONOMICALLY & ENVIRONMENTALLY SOUND RICE PRODUCTION AND MANAGEMENT IN THE U.S.

Privately held rice lands provide several societal and ecological benefits. Rice has an annual impact of about $13 billion on the economy of the U.S., and represents the economic, social, and environmental underpinning of major sections of the Gulf Coast. Rice production in these soils provides several environmental benefits, including wildlife habitats, water filtration through wetlands, and flood protection. Federal support is needed to identify and place values on ecological services provided by rice production and to design and evaluate technologies and policies that increase these public benefits while improving the industry's economic viability. We are requesting funding from USDA for this project at $1,000,000 for fiscal year 2001.

INCREASING FOOD SAFETY THROUGH ADVANCED MOLECULAR TECHNOLOGIES

Appropriations are sought to develop and test the application of advanced molecular technologies for enhancing the safety of the nation's supply of meats, fruits, and vegetables. Foods contaminated with animal wastes and other sources of bacterial pathogens annually cause millions of illnesses and thousands of deaths. New and rapidly advancing molecular technologies promise to make possible the early and economical tracking and investigation of such pathogens. This will significantly increase our ability to determine sources of outbreaks and to anticipate the effects of food production and processing practices on the ability of these organisms to cause disease. The Texas and Iowa Agricultural Experiment Stations and Texas Tech University propose cooperative public-private research needed to put such technologies in place throughout the nation and the world. We are requesting funding for this project at $1,250,000 for fiscal year 2001.

NATURAL FIBERS MARKETS AND POLICY ANALYSIS

Scientists at Texas Tech University and Texas A&M will determine, monitor and continuously assess the status of the U.S. natural fiber (cotton, mohair and wool) industries within the context of the U.S. and world natural and synthetic fiber markets. It will periodically evaluate the impacts of proposed, anticipated and potential policy, trade and macroeconomic changes/trends in both the U.S. and abroad, on the U.S. natural fiber and textiles markets. The program will anticipate shifts in the levels of competitive advantage of U.S. industries and the resulting capital/resource flows that might result from changing economic and policy environments. These types of analyses are particularly important in light of the current debate about the role that the U.S. government should play in the agricultural sector/markets, and about the costs and benefits of global trade liberalization. We are requesting funding for this project at $550,000 for fiscal year 2001.

RISK MANAGEMENT SAFETY NET

Increased volatility of commodity prices and dissatisfaction with crop insurance as a policy tool have heightened interest in the role of government in providing a safety net for U.S. agriculture. This initiative would support analyses of alternative safety net proposals as a risk management tool for production agriculture as a substitute for conventional farm programs. We are requesting funding for this project at $500,000 for fiscal year 2001.

STRENGTHENING OUR CAPACITY TO CARE: COMMUNITY SUPPORT FOR YOUTH AND FAMILIES

This initiative will provide a comprehensive youth and family development program designed to strengthen and enhance local community educational programming in youth life skills, community service, workforce preparation, character education, fathering support and parenting education. The goal of this initiative will result in the empowerment of families and increased ability of youth to be successful contributing members of society. We are requesting funding for this project at $2,500,000 for fiscal year 2001.

IMPROVED STRESS TOLERANCE OF CORN FOR THE SOUTHERN GREAT PLAINS AND DEVELOPING COUNTRIES

Farmers and consumers in many parts of the world would benefit from corn hybrids that combine high yield potential (like those developed in the United States and Europe) with the stress tolerance found in certain tropical and subtropical varieties. Working in close cooperation over the past several years, the Texas A&M University System (TAMUS), Texas Tech University (TTU), and the International Maize and Wheat Research Center (CIMMYT) have demonstrated the feasibility of introducing genes for stress tolerance into germplasm with high yield potential. These three partner institutions propose a five-year, $7.5 million effort to introduce multiple and complementary genes for drought, heat, nutrient, disease, and insect tolerance (from tropical and subtropical germplasm) into high-yielding germplasm adapted to the Southern High Plains and tropical/subtropical environments. The anticipated result of this effort are hybrids with yield potentials equal to the best commercially available materials and no more than half the sensitivity of current materials to moderate and severe drought, heat, nutrient, disease, and insect stresses. We are requesting USDA funding for this project at $500,000 for fiscal year 2001.

CENTER FOR HISPANIC FAMILY STUDIES

This initiative from Texas A&M University-Kingsville will provide leadership for teaching and research about the Hispanic family in the United States, including life span analysis ranging from infant studies to gerontology. Child care, nutritional and educational services will be offered to the studied population. We are requesting funding for this project at $3,300,000 for fiscal year 2001.

THE BORDERLANDS: HUMAN IMPACTS ON AVIAN COMMUNITY DYNAMICS

Texas A&M University-Kingsville seeks appropriation to examine the immediate and future impacts that a growing human population in southern Texas/northern Mexico borderlands is having (and will have) on the diverse avian communities that share this region. The evaluation of the effects of invasive species, urbanization, environmental contaminants, and agricultural practices have on avian ecology, such as changes in reproduction, mortality, resource allocation, and the temporal and spatial distribution of species will benefit our understanding of how to better man-

age this rich resource now and in the future. We are requesting funding for this project at $1,660,000 for fiscal year 2001.

ENHANCING AGRICULTURAL PRODUCTION IN SALINE REGIONS

Congressional appropriations are sought to conduct research into methods of increasing terrestrial and aquatic agricultural production in regions with shortages of fresh water but abundant supplies of saline water. Technology developed as a result of this research effort will be transferred to the private sector for commercialization. Texas A&M University-Kingsville requests funding for this project at $320,000 for fiscal year 2001.

EMERGING HEALTH & TRADE ISSUES IMPACTING NATIONAL CATTLE INDUSTRIES: JOHNE'S DISEASE

Develop modern methods for detecting and preventing Johne's Disease of cattle to improve animal health, enhance production efficiency and eliminate disruption of vital interstate and international trade. We are requesting funding for this project at $2,000,000 for fiscal year 2001.

A FUNGAL GENOME INTERNET

The Fungal Genome Internet (FGI) will integrate fungal genome research at institutions in Georgia, Louisiana, New Mexico, North Carolina, Oklahoma, and Texas. The long term objective of the FGI is to use the information derived from fungal genomes to enhance the beneficial aspects of fungi and to control their negative impact on our society. The FGI will be an academic focal point for the functional analysis, including bioinformatics and transcriptional profiling, of three important fungal genomes. The FGI will also coordinate functional genomics activities in other academic and industrial labs. At Texas A&M University, the FGI will be a joint effort with the Departments of Biology, Plant Pathology and Microbiology, Biochemistry and Biophysics and the Crop Biotechnology Center. Texas A&M University requests funding for this project at $3,000,000 for fiscal year 2001.

NEW FOOD AND ANIMAL WASTE COMPOSTING TECHNOLOGY—A NATIONAL OUTREACH/TECHNOLOGY TRANSFER INITIATIVE

New "in-vessel" composting technology has been developed at Texas A&M University-Commerce that will rapidly decompose, stabilize and sanitize food residuals, animal wastes and animal mortalities. Funding of this three-year initiative will (1) provide demonstration and implementation programs in strategic, visible national production centers, (2) facilitate and coordinate linkages between waste stream generators and end product users, and (3) focus efforts of the existing Center for Rural Water Studies toward value-added processing and utilization of noxious food and animal wastes. Texas A&M University-Commerce requests funding for this project at $1,000,000 for fiscal year 2001.

REDUCING AMMONIA EMISSIONS FROM FEEDLOTS

Ammonia emitted from feedlot surfaces combines with combustion byproducts to produce minute particulate matter (dust) that is of significant environmental and health concern to the United States Environmental Protection Agency (EPA). The purpose of this initiative is to develop scientific and engineering methods for reducing ammonia emissions from feedlots and thereby reducing health and environmental problems. West Texas A&M University requests funding for this project at $1,500,000 for fiscal year 2001.

FOOD SAFETY AND WATER QUALITY

Reducing levels of food-safety-related-pathogens in live animals is a potential means of increasing food safety. The purpose of this initiative is to characterize the role of water as a vehicle for food-safety-related-pathogens in feedlot cattle in the Texas High Plains. West Texas A&M University requests funding for this project at $1,000,000 for fiscal year 2001.

PREPARED STATEMENT OF THE U.S. APPLE ASSOCIATION

The U.S. Apple Association (USApple) appreciates the opportunity to provide this testimony on behalf of our nation's apple industry.

Our testimony will focus on the following three areas: the Market Access Program (MAP); Food Quality Protection Act (FQPA) implementation; and Agricultural Research Service (ARS) funding.

USApple is the national trade association representing all segments of the apple industry. Members include 36 state apple associations representing the 9,000 apple growers throughout the country as well as more than 450 individual firms involved in the apple business. Our mission is to provide the means for all segments of the U.S. apple industry to join in appropriate collective efforts to profitably produce and market apples and apple products.

MARKET ACCESS PROGRAM (MAP)

USApple strongly supports increasing the annual appropriation for MAP from $90 million to $200 million.

All segments of the U.S. apple industry benefit directly from the use of export promotion funds, which increase export demand. In fiscal year 1999, the apple industry received $3 million in MAP export-development funds. These funds are matched by grower funds, and are used to promote apples in more than 20 countries throughout the world. Since 1987, when the apple industry first utilized MAP funds, apple exports have increased by 88 percent.

The U.S. apple industry faces keen competition around the globe from competitors who receive significant government funds for generic promotions. The governments of our foreign competitors spend approximately $500 million on export promotion and market development. It has become increasingly difficult for U.S. exporters to compete with European and Chinese producers who receive massive government assistance. Increased funding for this critical program will assist U.S. apple producers to better compete, and revive export demand in countries recently hit by adverse economic conditions.

FOOD QUALITY PROTECTION ACT (FOPA) APPROPRIATIONS

USApple strongly supports full funding for the following programs intended to facilitate fair FQPA implementation, and to offset its anticipated negative impact on apple growers.

Specifically, USApple supports the U.S. Department of Agriculture's following budget requests.

—$14 million for the Pesticide Data Program, administered by the Agricultural Marketing Service;

—$3.2 million for the National Agricultural Statistics Service pesticide-usage surveys;

—$2.6 million for the Office of Pest Management Policy administered by the Agricultural Research Service;

—$12.2 million for the Integrated Pest Management Research Grant Program administered by the Cooperative State Research, Extension and Education Service (CSREES);

—$18 million for the Pesticide Impact Assessment Program, Crops at Risk and Risk Avoidance and Mitigation Program also administered by CSREES.

(ARS) TEMPERATE FRUIT FLY RESEARCH POSITION—YAKIMA, WASHINGTON

USApple requests the appropriation of $300,000 to fill a critical position at the USDA–ARS laboratory in Yakima, Washington to conduct research of temperate fruit flies, a major pest of apples.

FQPA implementation is expected to significantly reduce the number of pesticides currently available to growers for the control of pests such as cherry fruit fly and apple maggot. Left unchecked, these temperate fruit flies can be devastating. Research is critically needed to develop alternative pest controls should growers lose access to presently-available crop protection tools as a result of FQPA implementation.

Congress appropriated $300,000 last fiscal year for this critical position. We request that the committee appropriates $300,000 for this position in fiscal year 2001.

(ARS) POST HARVEST QUALITY RESEARCH POSITION—EAST LANSING, MICHIGAN

USApple requests that the committee direct USDA to provide continued funding for postharvest quality research at the ARS laboratory in East Lansing, Michigan.

This facility is conducting research that is critical to the future economic recovery of the apple industry. Using a series of new sensing technologies, researchers at the East Lansing facility are developing techniques that would allow apple packers to measure the sugar content and firmness of each apple before it is shipped to con-

sumers. Research has shown that consumers will increase purchases of high quality products that consistently meet their expectations. We believe consumers will eat more apples if this technology is fully developed and employed, by our industry.

However, the administration is proposing to terminate the East Lansing research program effective Sept. 30, 2000. We request that the committee direct USDA to continue funding for this critical research.

Thank you for this opportunity to present this testimony on behalf of USApple and the U.S. apple industry.

PREPARED STATEMENT OF THE UNITED STATES TELECOM ASSOCIATION

SUMMARY OF REQUEST

Project Involved.—Telecommunications Loan Programs Administered by the Rural Utilities Service of the U.S. Department of Agriculture.

Actions Proposed.—Supporting RUS loan levels and the associated funding subsidy for the hardship, cost of money, Rural Telephone Bank and loan guarantee programs in fiscal year 2001 in the same amount as loan levels specified in the fiscal year 2000 Agriculture Appropriations Act which are the same levels as those requested in the President's budget for fiscal year 2001. Also supporting an extension of the language removing the 7 percent interest rate cap on cost of money loans. Also supporting continuation of the restriction on the retirement of class A Rural Telephone Bank stock in fiscal year 2001 at the level contained in the fiscal year 2000 Agriculture Appropriations Act and an extension of the prohibition against the transfer of Rural Telephone Bank funds to the general fund. Supporting funding in the amount of $25 million in loan and grant authority designated for distance learning and telemedicine purposes. Also supporting $2 million in direct loans and grants for a pilot program to finance broadband transmission and local dial up Internet service in rural areas as requested in the President's budget. Opposing the President's budget proposal to transfer funds from the unobligated balances of the liquidating account of the Rural Telephone Bank for the Bank's administrative expenses and loan subsidy costs.

The United States Telecom Association (USTA) represents over 1,000 local telephone companies that provide over 95 percent of the access lines in the United States. USTA members range from large public-held corporations to small family-owned companies as well as cooperatives owned by their customers. I am Roy Neel, President and CEO of USTA. I submit this testimony in the interests of the members of USTA and their subscribers.

USTA members firmly believe that the targeted assistance offered by a strong RUS telecommunications loan program remains essential in order to maintain a healthy and growing rural telecommunications industry that contributes to the provision of universal telephone service. We appreciate the strong support this committee has provided for the telecommunications program since its inception in 1949 and look forward to a vigorous program for the future.

A CHANGING INDUSTRY

As Congress recognized through passage of the Telecommunications Act of 1996, telecommunications in the United States is in the midst of the most significant changes any industry has ever undergone. Both the technological underpinnings and the regulatory atmosphere are dramatically different and changing at an extraordinarily rapid pace. Without system upgrades, rural customers will be left out of the emerging information revolution.

The need has never been greater for the technology employed by RUS borrower rural telecommunications companies to continue to be modernized. In addition to upgrading switching capability to allow new services to be extended to rural subscribers, it is crucially important that rural areas be included in the nationwide drive for greater bandwidth capacity. In order to provide higher speed data services, such as Digital Subscriber Line (DSL) connections to the Internet, outside plant must be modernized in addition to new electronics being placed in switching offices. With current technology, DSL services cannot be provided to customers located on lines more than three miles from the switching office. Rural areas have a significant percentage of relatively long loops and are therefore particularly difficult to serve with these higher speed connections. Rural telecommunications companies are doing their best to restructure their networks to shorten loops so that DSL may be provided, but this is not an inexpensive proposition and may not be totally justified by market conditions. However, these services are important for rural economic development, distance learning and telemedicine. RUS-provided financial incentives for

additional investment encourage rural telecommunications companies to build facilities which allow advanced services to be provided. The economic externalities measured in terms of economic development and human development more than justify this investment in the future by the federal government.

Greater bandwidth and switching capabilities are crucial infrastructure elements which will allow rural businesses, schools and health care facilities to take advantage of the other programs available to them as end users. The money spent on having the most modern and sophisticated equipment available at the premises of the business, school or clinic is wasted if the local telecommunications company cannot afford to build facilities that quickly transport and switch the large amounts of data that these entities generate. RUS funding enhances the synergies among the FCC and RUS programs targeted at improving rural education and health care through telecommunications.

The RUS program provides needed incentives to help offset regulatory uncertainties related to universal service support, interstate access revenues and interconnection rules with a reliable source of fairly priced, fixed-rate long term capital. After all, RUS is a voluntary program designed to provide incentives for local telecommunications companies to build the facilities essential to economic growth.

RUS endures because it is a brilliantly conceived public-private partnership in which the borrowers are the conduits for benefits from the federal government to flow to rural telephone customers, the true beneficiaries of the RUS program. In fact, the GAO recently observed in a Congressional hearing that if there were no RUS telecommunications program, today's Congress would invent one. The government's contribution is leveraged by the equity, technical expertise and dedication of local telecommunications companies.

IMPACT OF CREDIT REFORM ON THE RURAL TELEPHONE BANK

Contrary to the intent of Congress, the interpretation of credit reform by the Office of Management and Budget (OMB) has significantly affected the operation of the Rural Telephone Bank (RTB). One of the most damaging impacts of OMB's interpretation of the credit reform law is to essentially cleave the RTB into two banks—a liquidating account bank which is responsible for pre-credit reform loans, and a financing account bank which is responsible for post credit reform loans. USTA has protested this arrangement since it began, since it prevents the relending of borrower repayments to fund new loans in direct contravention of Sec. 409 of the Bank's enabling act. This, in turn, forces the RTB to borrow unnecessarily from the Treasury to fund new loans. It also permits funds to build up in the liquidating account that were generated by GAO-documented interest rate overcharges, instead of those funds being returned through relending to the same universe of borrowers that initially generated them.

In the fiscal year 2001 budget proposal, the Administration proposes, despite its recognition that these are equity funds belonging to stockholders, to take monies from the liquidating account and fund the loan subsidy for new loans as well as the RUS administrative expenses allocated to the RTB. This is in direct conflict with an existing provision of law, Sec. 403(b) of the Rural Telephone Bank Act (Public Law 92–12). That provision states ". . . in order to perform its responsibilities under this title, the telephone bank may partially or jointly utilize the facilities and the services of employees of the Rural Electrification Administration or of any other agency of the Department of Agriculture, without cost to the telephone bank". (Emphasis added)

Instead of using the repayments into the liquidating account to fund the expenses of the RTB (contrary to the Rural Electrification Act) or to fund the loan subsidy, neither of which would result in any budget savings, OMB should adhere to Sec. 409 of the Rural Electrification Act and allow those repayments to be used to fund new RTB loans. It is ironic that in the same budget proposal that purports to have the RTB act more like a private bank, OMB continues to maintain the artificial split of the bank's resources which prevents it from acting as would a private bank—relending repayments.

RUS TELEPHONE PROGRAM PROCEDURES

Under the leadership of Acting RUS Administrator Chris McLean and Assistant Administrator for Telephone, Roberta Purcell, significant steps have been made in streamlining the policies and procedures of the RUS telecommunications loan program. RUS should be commended for the progress it has made and continue to reduce regulation and improve service delivery, within the context of the government's interest in security for these rural telecommunications infrastructure improvement loans.

RECOMMENDATIONS

Continuation of the loan levels and necessary associated subsidy amounts for the RUS telephone loan programs that were recommended by this committee and signed into law for fiscal year 2000 would maintain our members' ability to serve the nation's telecommunications needs, maintain universal service and bring advanced telecommunications services to rural America.

For a number of years, through the appropriations process, Congress has eliminated the seven percent "cap" placed on the insured cost-of-money loan program. The elimination of the cap should continue. If long term Treasury interest rates exceeded the 7 percent ceiling contained in the authorizing act, adequate subsidy would not be available to support the program at the authorized level. This would be extremely disruptive and hinder the program from accomplishing its statutory goals. Accordingly, USTA supports continuation of the elimination of the seven percent cap on cost-of-money insured loans in fiscal year 2001.

The restriction on the retirement of the amount of class A stock by the Rural Telephone Bank, adopted in fiscal 1997, should be continued. The Bank is currently retiring Class A stock in an orderly, measured manner as current law requires. This should continue. The Committee should also continue to protect the legitimate ownership interests of the Class B and C stockholders in the Bank's assets by continuing to prohibit a "sweep" of those funds into the general fund.

Recommended Loan Levels.

USTA recommends telephone loan program loan levels for fiscal year 2001 as follows:

[In millions of dollars]

RUS Insured Hardship Loans (5 percent)	$75
RUS Insured Cost-of-Money Loans	300
Rural Telephone Bank (RTB) Loans	175
Loan Guarantees	120
Total	670

Distance Learning and Telemedicine

USTA strongly supports the loan and grant proposal and recommends its funding for fiscal year 2001 at the levels proposed in the Administration's budget submission, that is, $25 million for loans and grants. This program is a perfect complement to the traditional RUS telecommunications loan programs. For distance learning and telemedicine to become a reality, schools and hospitals need training and equipment. Similarly, local telecommunications companies need modern infrastructure to connect these facilities to the telecommunications network.

Even though our members do not benefit directly, USTA also supports the $2 million requested in the President's budget for a pilot program of loans and grants to finance broadband transmission and local dial up access to the Internet in rural areas. RUS was founded on the notion that rural Americans should have no lesser service, facilities and prices for telephone service as those living in more densely populated, lower cost areas. As we move into the Information Age, in which increases in productivity, economic development, education and medicine can greatly benefit from the tremendous potential of the Internet, it is a continuation of the historic of the historic mission of RUS to support the extension of vital new services to rural America.

CONCLUSION

Our members take pleasure and pride in reminding the Subcommittee that the RUS telecommunications program continues its perfect record of no defaults in over a half century of existence. RUS telecommunications borrowers take deadly seriously their obligations to their government, their nation and their subscribers. They will continue to invest in our rural communities, use government loan funds carefully and judiciously and do their best to assure the continued affordability of telecommunications services in rural America. Our members have confidence that the Subcommittee will continue to recognize the importance of assuring a strong and effective RUS Telecommunications Program through authorization of adequate loan levels.

PREPARED STATEMENT OF THE UNIVERSITY OF ILLINOIS

Mr. Chairman and distinguished members of the Agriculture, Rural Development, and Related Agencies Subcommittee: We are pleased to provide this updated testimony on behalf of the federally-funded project entitled "Studies to Reduce the Aflatoxin Problem in Corn" being carried out in the University of Illinois Crop Sciences Department by Professors J.M. Widholm and D.G. White, in cooperation with scientists in other institutions and agencies. Professors White and Widholm provided the technical information in this report. We wish to thank you, Mr. Cochran and others on the Committee, for appropriating $1,249,000 to date for this important research. We continued to make progress on the project during the past year. We request an fiscal year 2001 allocation of $180,000 so that we can move closer to achieving the goals of the project.

THE AFLATOXIN PROBLEM AND OUR STRATEGY TO SOLVE IT

Because of its toxicity and carcinogenicity (causes cancer), aflatoxin in corn grain is a very serious problem. When the causal fungus, Aspergillus flavus, is present on the grain, the toxin is often present also. Aflatoxin problems occur primarily in years and areas of moisture stress, which means their occurrence is relatively unpredictable. According to our studies of sixty-five widely grown commercial corn hybrids, including yellow dent corn, white corn, and food-grade white and yellow corn, there is little or no resistance to A. flavus in commonly grown hybrids.

The toxin can form in the maturing grain before harvest and in stored grain if the moisture levels are too high. Due to the danger posed by aflatoxin, levels of the toxic compound are closely monitored in corn grain. If levels of aflatoxin are too high in a given sample, the grain represented by the sample cannot be sold in interstate commerce. There is a significant monitoring cost, but it is small relative to other costs incurred by aflatoxin.

It is estimated that in any given year 5 to 30 percent of the nation's corn crop experiences severe moisture stress. Direct yield and quality losses caused by aflatoxin are at least $500 million annually. That loss accrues to producers. In addition, there are harmful health, social, and economic effects of aflatoxin when it is present in corn-based food products. Aflatoxin is one of the most carcinogenic of naturally occurring compounds. It is very detrimental to the health of humans or animals that ingest it. For these reasons, it is important to eliminate aflatoxin from corn grain. That is the mission of this project.

The strategy of the project is to: (1) through field tests, identify resistant germplasm in existing collections, (2) using tissue culture techniques, evaluate and select corn cultures that inhibit A. flavus growth and/or aflatoxin production, (3) regenerate promising plants for greenhouse and field evaluation, and (4) using recombinant DNA techniques, introduce into corn antifungal genes encoding enzymes such as chitinase and B-glucanase, which may impart resistance to A. flavus.

PROGRESS REPORT AND LOOK TO THE FUTURE

Previous and current conventional breeding and selection approaches

Since 1991 we screened thousands of corn inbred lines, some of which already existed in various collections and some of which we derived from existing material. We discovered an additional 21 lines since last year for a total of 32 with high levels of resistance to Aspergillus ear rot and to the production of aflatoxin. We concentrated on sources of resistance that can be used to improve inbred lines B73 and Mo17, from which most important commercially used inbred lines are derived.

In inheritance studies, we found that resistance genes have both additive and dominant affects. It is desirable for resistance genes to be dominant, so that when resistant and susceptible lines are crossed, the resulting hybrids will be as resistant as the resistant parent. Some of the resistance genes discovered are strongly dominant. Much of the effort was concentrated on inbred line Tex 6, developed at the University of Illinois by selecting from a southern white corn population that has high levels of resistance to southern corn leaf blight. So far, Tex 6 is the best source of resistance produced in this project.

Tex 6 confers extremely high levels of aflatoxin resistance when crossed with most of the inbreds that are important in the cornbelt. Inheritance studies indicate that the resistance in Tex 6 is controlled by just a few genes, which is very desirable. The fewer the genes controlling a trait, the easier it is to transfer that trait to otherwise desirable lines and the faster the trait can be introduced into widely used material using the common backcrossing approach.

A major milestone was reached when, using Tex 6 and other experimental lines and the backcrossing approach, we were able to transfer effective aflatoxin resist-

ance into commercially used inbreds related to both B73 and Mo17. In 1995, 1996, and 1999 yield trials, hybrids with some of these new aflatoxin resistance inbreds as one parent yielded as well as popular commercial hybrids. This breakthrough paves the way for private firms to introduce resistance to A. flavus and aflatoxin into their best lines.

The most important development in corn production in recent years was the introduction of practical high oil corn hybrids by Dupont and Pfister Hybrids, using materials developed at the University of Illinois. Unfortunately, high oil hybrids, which are produced by the so-called Topcross™ method, are more susceptible to Aspergillus ear rot and aflatoxin production than are normal hybrids of the same pedigree with a normal pollinator. Fortunately, high oil top crosses that involve some of the sources of resistance developed in this aflatoxin project are equal in resistance to normal resistant hybrids. Thus, this project is providing the mechanism to assure that the enormous potential of high oil corn is not reduced by aflatoxin.

Past, current, and future biotechnology research on aflatoxin

Four years ago, we used Restriction Fragment Length Polymorphism (RFLP) markers to identify those chromosome regions associated with specific genes for aflatoxin resistance. We found that some genes confer resistance to the fungal disease organism (A. flavus) that causes ear rot. Some do not confer resistance to the fungal organism but do inhibit its production of aflatoxin. Some genes do both.

A cooperator, Professor Gary Payne of North Carolina State University, identified a specific protein from seed of inbred Tex 6 that inhibits aflatoxin production in culture but has very little effect on growth of the fungus. He identified another protein that inhibits the growth of the fungus. Apparently there are corn genes that code for each of these proteins. Among other advantages of this finding, corn breeders will be able to use marker-assisted selection, a molecular selection technique, which should greatly speed the process of screening and selecting high-yield, aflatoxin-resistant lines of corn.

This year we completed work with inbred line C12, which has good levels of resistance and also makes a protein that blocks some, but not all, aflatoxin synthesis. If we can enhance the production of these blocking proteins and transfer the gene or crenes that code for them into otherwise productive corn hybrids, several advantages will accrue. Since fewer genes will have to be transferred, less time will be required to incorporate desirable aflatoxin-reducing genes into commercially important hybrids. Also, the fungus will be less likely to develop ways to defeat the resistance mechanism.

Once these genetically controlled resistance mechanisms are fully understood, the resistance genes can be transferred to other crops, such as peanuts, that also have aflatoxin problems. Contrary to some previous indications, corn lines identified in this project that are resistant to A. flavus apparently are not consistently resistant to Fusarium maniliforme, which produces fumonison, another highly toxic and carcinogenic mycotoxin. There is direct evidence that fumonison causes cancer and birth defects in humans, not just in laboratory animals. We believe that some of the emphasis on this project should shift to fumonison, which may turn out to be a bigger problem than aflatoxin. Fumonison is produced by a common fungal disease of corn.

Biotechnology breakthrough

We experienced a major breakthrough during early fiscal year 1998 with the successful introduction of antifungal genes bean chitinase and B-1,3-glucanase into corn cells, both alone and in combination. The particle gun was used to accomplish this transformation. The transformed cells were regenerated into plants and were self-pollinated to obtain plants that are homozygous for the antifungal genes. Subsequently, we demonstrated by several different methods that the introduced genes are stable, are passed to progeny in normal reproduction, and are expressed in seeds of the transformed plants. In other species, these particular genes are expressed as enzymes that break down cell walls of invading fungi, thus preventing or reducing fungal diseases.

During tests in fiscal year 2000, some of the transformed plants showed resistance, although none were as resistant as Tex 6. We found that Tex 6, which confers the highest level of natural fungal resistance, has high levels of natural chitinase in its tissues. This is a different chitinase, however, than the one we introduced by recombinant DNA techniques. During the past year, several new plants were transformed with aflatoxin resistance genes. They are being evaluated for resistance in the greenhouse and field.

Plans for fiscal year 2001

In fiscal year 2001, we will continue to look for unique aflatoxin resistance mechanisms in the corn germplasm. We will seek to enhance natural resistance to A. flavus through conventional breeding techniques and will conduct further research aimed at increasing the resistance of high oil corn hybrids to the pathogen. We will also continue to evaluate plants transformed with resistance genes from corn and other species. We expect recent advances in the science of functional genomics to be useful in this project. Among other goals, we would like to develop additional genetic techniques that simplify the process of screening the thousands of lines of corn germplasm. Also, it will be very important to determine if a combination of chitinases confer greater and more lasting resistance than only one.

Cooperation

We continue to have good cooperation with other institutions and USDA–ARS. Several sources of resistance we discovered and several resistant lines derived from them were shown to be resistant in field studies conducted by cooperators in Mississippi and south Texas. Professor Gary Payne of North Carolina State University continues to make valuable contributions to the project. Several private firms have shown interest in our aflatoxin resistant lines. So far, they have just been observing the material and comparing it with materials they already have. Reports on the new material are generally positive.

Progress in moving the resistance genes to commercial lines is inhibited by a legal problem that confronts those who market seed. Increasingly, growers are inclined to sue companies when plants grown from seeds that are advertised as resistant to a disease have some level of damage. There is still enough uncertainty and variability with aflatoxin resistance genes that companies are reluctant to advertise the resistance trait. If companies cannot advertise the trait, they cannot differentiate their product from that of competitors. If they cannot differentiate their product, they cannot recover the costs of research required to introduce the trait. To the extent we can develop stable and predictable aflatoxin resistance in this project, we can help to overcome the barriers to adoption of an important technology.

SUMMARY

We believe this project is making excellent progress toward the desired outcome of reducing or eliminating aflatoxin as a serious problem in corn production and use. To summarize project results to date, we identified several corn lines that are resistant to the organism (Aspergillus flavus) that causes ear rot and produces aflatoxin. We also discovered lines that inhibit aflatoxin production without inhibiting fungal growth. This increases the possibility of inducing aflatoxin resistance that does not decrease with time.

We learned how aflatoxin resistance is inherited when crosses are made. We have sources of resistance that are effective when used in either the northern or southern corn belt. We developed practical tissue culture tests and DNA analysis techniques to identify resistant germplasm. We found that high oil corn hybrids are more susceptible to aflatoxin-producing organisms than normal hybrids, but that resistance sources developed in this project can be used to produce resistant high oil corn. The project continues to generate important papers in scientific journals. The papers provide valuable information on both practical and basic science issues associated with aflatoxin.

In a landmark achievement, we introduced antifungal genes bean chitinase and B-1,3-gluconase from other organisms into corn cells and successfully regenerated plants that have these genes. We found that the introduced genes are stable, passed to progeny during normal reproduction, and expressed in seeds. We still need to screen more germplasin for resistance sources. Natural resistance genes tend to work for a while and then become less effective as the pests evolve new virulence mechanisms. We still have to broaden the base of inbred lines that will be used to introduce aflatoxin resistance into commercial varieties grown in the major corn growing regions of the nation.

Our goal is to insert new resistance genes that can be moved rapidly into commercially used inbreds and that are effective in reducing and eliminating other mycotoxins as well.

REQUEST

We respectfully request an allocation of $180,000 in federal funds for fiscal year 2001 to continue this important project. This amount will allow us to maintain the momentum and productivity of this innovative afloatoxin research program and capitalize on the progress made to date.

PREPARED STATEMENT OF THE UNIVERSITY OF ILLINOIS

Mr. Chairman and Distinguished Members of the Agriculture, Rural Development, and Related Agencies Subcommittee:

Request

We request $3.5 million to create a unique integrated animal waste and odor management research program (AWORP). This program will focus on technology for reducing, modifying, recycling, and utilizing waste streams from livestock production and eliminating associated air, water, and soil quality problems.

Need

The AWORP is essential if the U.S. is to:

—Sustain economically, socially, and environmentally viable livestock production operations in the central U.S.
—Capture value added to feed grains by livestock production
—Compete effectively in vast emerging markets for animal protein products,
—Recover and recycle nutrients used in production of feed grains, principally corn and soybeans that are fed to livestock
—Provide healthy working conditions for swine industry workers
—Preserve safe and attractive environments in the vicinity of U.S. livestock operations, and
—Provide adequate protein at reasonable prices for U.S. citizenry and other consumers around the world.

Background

Livestock production in the U.S. permits consumers around the world to enrich their diets with high quality protein in many forms. Adequate levels of animal protein characterize healthy populations in affluent nations. Inadequate levels are characteristic of poor, undeveloped nations and unhealthy people.

Currently, livestock production in the U.S. is threatened by fears concerning its environmental impact. Aerial emissions such as odor, particulates, and gases from livestock operations are already major concerns. A new area of concern is biological emissions, including microorganisms, their associated toxins, and ammonia. These emissions are potentially detrimental to the health and wellbeing of humans and animals who breathe or otherwise ingest them. Workers and animals within livestock production facilities are most likely to be affected.

The nutrients in animal wastes are valuable if they can be retained in production animals or recycled through crop and natural ecosystems. It is very undesirable, from health, aesthetic, environmental, and economic standpoints, for nutrients to end up in rivers, lakes, or aquifers that provide water for humans or animals.

Environmental problems related to livestock production are solvable. However, the complex interrelationships among variables influencing nutrient/contaminant production and flow through the system dictate that several factors must be managed simultaneously, in an integrated systems approach.

Therefore, to improve waste and odor management, these factors must be researched simultaneously, using a systems research approach. Existing research programs tend to focus on only one factor at a time and do not reflect conditions caused by multifactor interactions in complex livestock/cropping systems. AWORP will be conducted within a research infrastructure and with research protocols that correct deficiencies in present animal waste research programs and facilities.

Objectives

AWORP will produce practical technology and information that enables livestock producers to: reduce production of waste and odor in livestock operations; reduce waste and odor emissions from production facilities, reduce indoor levels of waste and odor components that cause human and animal health problems, rapidly and efficiently collect animal manure, treat manure to preserve plant nutrients and prepare for safe utilization, recycle manure, its constituent nutrients, and water in economically, socially, and environmentally acceptable ways, improve health, safety, and working conditions for livestock production workers, and make livestock production compatible with neighboring individuals and communities.

Features

AWORP will utilize a flexible array of integrated components required for a systems approach to waste and odor research:

—Pilot-scale swine and cattle production facilities for investigating the interactive effects of facilities design and operation, dietary and health management prac-

tices, and animal management techniques on manure and nutrient output and efficiency of manure collection.

—Pilot-scale manure handling, processing, and storage capabilities to evaluate a wide range of current and emerging technologies for waste management, nutrient preservation, emissions control, and odor elimination.

—Well instrumented fields for use in comparing strategies for capturing the nutrient output from livestock systems and in measuring the short- and long-term effects of manure applications on soil, water, and air quality.

Location and alliances

AWORP will be headquartered at the University of Illinois at Urbana-Champaign (UIUC). It will be a powerful mechanism for resolving critically important livestock waste and odor problems and an important contribution to a huge national effort involving state, federal, and private cooperation and investment.

Among several other related assets, the UIUC currently has a large, multidisciplinary research program on swine odor and waste management, which is funded at over $1 million per year in state and private funds overseen by the Council on Food and Agriculture Research (C-FAR). This C-FAR Strategic Research Initiative (SRI) is characterized by an unprecedented level of stakeholder involvement in priority setting, funding, and accountability.

The initiative includes extensive atmospheric measurements, atmospheric chemistry studies, and studies of human health effects in cooperation with the Illinois Natural History Survey, Department of Atmospheric Sciences, and other units at the University of Illinois and with the National Farm Medicine Center in Marshfield, WI, which has an Animal Environmental Physiology Laboratory (AEPL) with experience in measuring ammonia and particulate emissions from livestock facilities.

Budget and Summary

We request $3.5 million in federal funds to mount AWORP. These funds, complemented by significant state and private investments, will be used to staff, equip, house, and operate AWORP, and launch and sustain its projects. The University of Illinois will contribute the core staff (estimated cost, $300,000 annually) and a strategically located field site (estimated value, $150,000). The University will operate and maintain AWORP facilities (estimated cost, $500,000 annually).

PREPARED STATEMENT OF THE UNIVERSITY OF ILLINOIS

Mr. Chairman and distinguished members of the Agriculture, Rural Development, and Related Agencies subcommittee:

We request that $4 million in federal funds be appropriated in fiscal year 2001 to construct a state-of-the-art greenhouse facility at the University of Illinois. Detailed planning is underway, supported by the $400,000 which was appropriated in fiscal year 2000. We thank you and the Subcommittee for your past support. This facility will support research associated with the Maize (corn) Genetics Stocks Collection and the National Soybean Germplasm Collection. These collections are maintained at the University of Illinois by the United States Department of Agriculture—Agricultural Research Service (USDA–ARS). As a partner in this endeavor, the University of Illinois agrees to provide and prepare the site, provide utility connections, and operate and maintain the facility in support of the collections and for related research programs.

NEED

Currently, University of Illinois greenhouses are used to support the collections, but they are so heavily used by both state and federal scientists that not enough space is available to support the collections adequately, nor is the space designed properly for support of the collections. The new greenhouse facility will significantly enhance the rate at which state and USDA scientists can identify and evaluate useful plant genes and incorporate them into new and improved plant varieties, tailored to the needs and opportunities of American agriculture.

To make effective use of conventional breeding and selection techniques and powerful new biotechnology approaches, scientists need excellent greenhouse facilities. Properly designed and efficiently operated greenhouses permit scientists to grow and maintain plants year round regardless of weather; perform experiments and evaluations requiring extraordinary levels of environmental control; and protect and reproduce valuable plants that are too fragile to survive in the natural environment. Genetically engineered plants being regenerated from single cells or small pieces of

tissue are often fragile and need the protection of growth chambers and greenhouses.

The Maize Genetics Stocks Collection and the National Soybean Germplasm Collection are unique and extremely valuable collections. Scientists all over the world request samples from among more than 70,000 lines of corn maintained in the Maize Collection. They use these samples to study corn genetics and basic molecular genetics. Likewise, all soybean breeders, both private and public, can draw on 18,000 lines of soybeans in the National Soybean Germplasm Collection for materials to serve as sources of genes that impart new and improved characteristics to soybeans.

Through negotiations spearheaded and financed by the Illinois and Iowa Agricultural Experiment Stations, Illinois and Iowa soybean checkoff boards, and USDA–ARS, the soybean collection has recently been enriched with over 2,000 new lines of soybeans from the genriplasm collection of the People's Republic of China, which maintains the largest collection in the world. This expansion of the collection will generate an even greater need for greenhouse space. The contributions from China are scheduled to continue at the rate of 500 new lines or more every two years. Evaluations to date indicate that there are many important quality and disease-resistance genes in the Chinese material that are not found in material already in the U.S. collection.

The corn and soybean collections are the repositories for quantity and quality characteristics that will characterize and sustain the U.S. corn and soybean industries into the future. The future of these industries is, indeed, written in genetic code. The collections are unique in the nation and are absolutely essential to continued improvement of these two important crop species. The scientists directly associated with the collections are constantly collecting, classifying, evaluating, multiplying, and distributing new materials. In addition they continue to maintain and evaluate the materials already in the collection. The biotechnology revolution is providing many powerful new techniques for evaluating the collection and is stimulating scientists to use the collections much more than before.

From time to time, because seed in the collections will only remain viable for five to ten years in storage, these materials must be grown to produce new seed. Many of the materials are not adapted to the outdoor environment of Illinois or they are too valuable to risk losing them to weather or other unpredictable events in the field. Thus greenhouses are essential to the maintenance of the collections. They are also essential to the performance of many other kinds of experiments involved in corn and soybean genetic improvement.

The work of evaluating and using the collections continues to be a major area of cooperation between the USDA–ARS and the University of Illinois. While samples are available to scientists all over the world, University of Illinois scientists and graduate students and their genetics and plant breeding programs benefit considerably from their proximity to the collections and their direct access to the USDA–ARS people who maintain the collections. USDA–ARS scientists, in turn, benefit greatly from being located in this great institution, with its vast and diverse physical and intellectual resources.

To illustrate the value of the University/USDA relationship, a Korean soybean land race obtained in an AID-financed University program and placed in the National Soybean Germplasm Collection, was discovered by a University of Illinois scientist to be the only line in the collection, perhaps the only soybean line in the world, that lacks the Kunitz trypsin inhibitor, which must be removed from soybeans by processing in order for them to be useful. The resulting introduction of Kunitz-free soybeans by the University and USDA–ARS is a very important contribution to the industry.

IMPLEMENTING THE PROJECT

The proposed greenhouse complex will be created by constructing four greenhouse bays adjacent to and integrated with the Turner Hall greenhouse complex at the University of Illinois. The bays will be attached to the Turner Hall greenhouse service corridor, thus providing ready access to the rest of a very large greenhouse complex, its basement, and several adjoining laboratory and office buildings of the University of Illinois College of Agriculture, Consumer, and Environmental Sciences, including facilities in which the contingent of USDA–ARS scientists are housed.

The four greenhouse bays will provide 10,000 net assignable square feet (nasf) of modern standard greenhouse space. This will meet current and anticipated greenhouse space needs for maintaining and expanding the collections. Basement space under these greenhouse sections will be used for additional cold storage for the Maize Genetics Stocks Collection, for laboratory space to support the nematology re-

search program, and for unfinished space for future expansion as program needs develop.

The integration of the facility with the existing greenhouse facilities will provide significant economies of scale and scope, simplify connection to existing utilities, and facilitate sharing of greenhouse equipment and support services.

SUMMARY AND BUDGET

We request $4.0 million in federal funds in fiscal year 2001 to offset the costs of constructing the proposed greenhouse complex. As a partner in this nationally important effort, the University of Illinois agrees to provide land and utility connections, prepare the site, and pay the cost of operating and maintaining the facility henceforth. Site preparation and utility connections are estimated to cost $200,000. Annual operating and maintenance costs are estimated at $100,000.

PREPARED STATEMENT OF THE LOVELACE RESPIRATORY RESEARCH INSTITUTE AND THE UNIVERSITY OF MIAMI

Mr. Chairman and Member of the Subcommittee: We appreciate the opportunity to present jointly our testimony on behalf of the Lovelace Respiratory Research Institute (LRRI) in New Mexico and the University of Miami School of Medicine (UMSM) in Florida for our proposed Minority Health Tobacco Research Center (MHTRC).

INTRODUCTION

Nicotine is a drug. It is a highly addictive drug that is unregulated. It is also a drug that appears to have profound inhibitory effects on the mammalian immune system. The delivery system of choice for this drug is the cigarette. There is no doubt that the use of tobacco products causes untold human injury and suffering. What is less well studied is the effect of secondary smoke (and by inference the delivery of nicotine to non-smokers) on the health of family members and co-workers of addicted users of these products. We propose the establishment of a center designed to study the physiology and behavioral medicine of secondary smoke combining the unique capabilities of two leading complementary research institutions, the University of Miami School of Medicine and its Drug Abuse Research Center in Florida and the Lovelace Respiratory Research Institute in New Mexico.

Extensive experience in health research at UMSM in minority substance abuse and minority health will be linked to the world class physiology, cell and molecular biology and toxicology expertise present at LRRI to model the role of secondary smoke on the biology of the individual using cellular and rodent models followed by studies of family members of smokers. Medical and behavioral interventions will then be developed based on the resulting data.

Although prohibited from regulating tobacco products as it does other drugs by court action, the FDA does have an obligation to study the effects of these drugs on the public health of the nation. By supporting the Minority Health Tobacco Research Center, the FDA will be contributing to the knowledge base of the scientific community on the effect of secondary smoke and low dose nicotine exposure on minority health.

THE NEED FOR THE MINORITY HEALTH TOBACCO RESEARCH CENTER

The MHTRC as a joint project will be devoted to the reduction of health risks associated with addiction to tobacco and other harmful substances. Approximately 20 percent of all deaths are associated with tobacco smoking. Tobacco kills more people than murder, AIDS, suicide, illicit drug use and automobile accidents combined. The medical consequences of tobacco addition include the three leading causes of death: cardiovascular disease, cancer and cerebrovascular disease. Its related medical costs are astronomical. For example, in Florida in 1996, tobacco-related Medicaid payouts were estimated to be $264 million and $365 million.

Tragically, the use of tobacco is also the most preventable cause of disease and death. We now know that nicotine is at least as addictive as cocaine or heroin. Recent studies even suggest that nicotine interacts with other drugs of abuse, that it reinforces craving and increases intake of cocaine and other drugs. However, nicotine is a special case of addition because tobacco is legally sold and its use is not prohibited among adults. In spite of the evidence that nicotine is an addictive drug, which affects the brain in the same way that illicit substances such as opiates and cocaine do, nicotine dependence has not been considered substance abuse.

The need to focus on the minority population is particularly significant given the underutilization of the health system by the population. This disturbing fact is documented in a recent study produced by the Commonwealth Fund and published on February 18, 2000. The report discovered that Hispanics account for an alarming one-quarter of the nation's 44 million uninsured people. Hispanics are twice as likely as the general population to go without coverage. The number of uninsured Hispanics more than doubled to 11.2 million from 1987 to 1998. (bkb@cmwf.org)

LRRI AND UMSM ARE UNIQUELY QUALIFIED TO ADDRESS TOBACCO AND HARMFUL SUBSTANCE ADDICTION

UMSM researchers have significant expertise and experience in many relevant areas including: substance abuse, evaluation research, community research, behavioral medicine, disease prevention, treatment of tobacco-related disease, basic science research, epidemiology, and public health. The University's Tobacco Research Evaluation and Coordinating Center (RECC) has been responsible for the evaluation of Florida's Tobacco Pilot Program. Other strengths in the area of biomedical research and treatment include pediatric oncology and the Bachelor Children's Research Center, the Pediatric Environmental Respiratory Center, as well as the proposed Minority Health Tobacco Research Center (MHTRC)

LRRI has undertaken some of the leading studies of animal models of smoking and the role of nicotine in immune function. It is one of the few research organizations capable of undertaking complex inhalation exposure protocols with appropriate animal models that predict human physiological responses. LRRI will undertake experimental protocols investigating the role of second hand smoke on neonates and other adults. These models determine the precise immunological defects that result from these exposures. This data will then be compared to the cellular immune function of newborns, older children, and family members of minority subjects in Miami and New Mexico.

FOCUS ON MINORITY POPULATIONS

The proposed MHTRC will be devoted to the study of unrecognized health risks associated with addiction to tobacco products, predominantly in minority populations. This group may be uniquely susceptible to immune suppression, increased fetal HIV transmission, increased respiratory inflammation and infection, synergistic negative health effects with other abused substances and impaired immunological function of non-smoking family members exposed at home or in urtero.

The MHTRC will address the culturally relevant behaviors that underlie tobacco use in human populations. The importance of the MHTRC lies in its bridging the use of animal models to the study of disease in people and the subsequent formulation and testing of medical and behavioral interventions to improve or eliminate the negative health consequences associated with tobacco use. Of further interest is the opportunity to compare two different Hispanic populations that differ in genetics and cultural characteristics (Mexican and Hispanic in New Mexico and Cuban in Florida) as well as characterizing African-American and Caucasian populations. Creating the MHTRC represents a unique opportunity to build upon the rich diversity of Florida's population, the commitment of the UMSM to the community and its experience with behavioral intervention, particularly related to tobacco use and substance abuse. Florida is an ideal location for the proposed MHTRC, being a bellwether state for social, demographic and epidemiological changes that the rest of the nation is currently facing or will face in the near future. Our extensive experience working with traditionally hard-to-reach populations such as minority substance abuser will ensure that the interventions developed will be culturally and linguistically appropriate and acceptable. UMSM also has the means for rapid dissemination of effective prevention and intervention within the minority communities through an already developed community health care coalition.

The goals of the MHTRC are to:

—Identify risk behaviors which lead to tobacco use and substance abuse.

—Reduce the incidence and prevalence of tobacco use and that of other addictive substances.

—Reduce the development of and suffering from disease associated with tobacco and other addictive substances through research and interventions in the basic sciences, clinical medicine and epidemiological research.

—Reduce exposure to environmental tobacco smoke.

—Develop, test and apply science-based community interventions to achieve these goals. We know that intervention with effective prenatal programs saves a tremendous amount of money that otherwise would be spent on healthcare after

birth. The same can be said for early detection of breast cancer through the screening of over 30,000 medically underserved women which has demonstrated that early detection and intervention saves dollars as well as lives. As is true for cancer, we already possess a great deal of knowledge that could be used to develop interventions and prevention strategies for addiction to tobacco and other harmful substances. Applying this knowledge could effect savings of billions of dollars for state, local and national governments. Equally important, the quality of life will be improved for individuals, families and their communities as well as society at large. It is becoming ever more apparent that we, as a society, cannot afford to ignore prevention and early intervention strategies since crises management is far too costly in terms of quality of life and unnecessary expenditures of dollars.

By achieving our stated goals, the MHTRC will be in a perfect position to:

—Improve quality of life,

—Decrease morbidity and mortality,

—Increase survival and,

—Significantly decrease health care expenditures by applying effective prevention and intervention.

For fiscal year 2001, we seek $4 million ($2 million for each institution) for this joint New Mexico-Florida initiative by the LRRI and UMSM. We feel strongly that the unique challenges you face have never been greater than at this point in history, but there has also never been a greater opportunity to apply science-based solutions to the riddle of addiction and greatly improving public health by eliminating or reducing is negative health consequences.

We hope, Mr. Chairman, that you and your colleagues on the Subcommittee will find it possible to support this important initiative.

PREPARED STATEMENT OF THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Mr. Chairman, distinguished Members of the Subcommittee, I would like to thank you for this opportunity to provide testimony describing ongoing research and commercializing efforts of The University of Southern Mississippi (USM) and the Mississippi Polymer Institute. I am very grateful to the Subcommittee for its leadership and the continued support of the Institute and its work. This testimony will include an update on the progress of the Institute since my testimony of approximately one year ago. During the past year, our efforts have focused principally on two commercialization thrusts. One effort involves our novel, agricultural-based inventions in emulsion polymerizations, and the other is to produce and commercialize a viable, formaldehyde-free, soybean derived adhesive for a variety of composite board materials, i.e., particleboard or oriented strand board (OSB). During the past year, we have continued to exploit the opportunities offered by these novel materials and continue to be optimistic about their commercial fate. I will discuss the two inventions separately in order to offer more clarity. In the case of castor, lesquerella, or soy oil, we have designed and synthesized novel monomers or polymer building blocks that offer state-of-the-art technology. For instance, the attributes of the technology includes the ability to produce odor free, solvent free, non-polluting latex coatings. This represents best-available-technology for the production of solvent free latex coatings. The success of the technology depends on the use of agricultural materials as a building block of emulsion derived polymers offering a new opportunity for ag derived materials as a raw material in the polymer industry. By contrast, contemporary latex coatings contain 1,500 grams and more of air pollutants or volatile organic content (VOC) per gallon. Moreover, this novel technology, if practiced, would allow governmental regulatory agencies to tighten the restrictions on volatile organic content (VOC) emissions of applied coatings without harm to the coatings industry. I intend to share details of this novel and patented technology with the Environmental Protection Agency so that they can, if they wish, make an independent evaluation to confirm its suitability and efficacy. Much of the fundamental scientific principles regarding its mode of action have been confirmed, yet additional data must be collected. Specifically, we have identified one specific area in which it can be used, i.e., emulsion polymerizations. However, there are other fields of specialization where it could be very valuable and these opportunities must be evaluated. In particular, we believe this technology can be employed in light industrial and original equipment manufacture (OEM) industrial coatings as well as architectural coatings, and confirmation of these concepts is a priority in future work. The second and critically important objective is to secure manufacturing facilities for commercial production of the new material(s). Thus, we are currently in negotiations with parties who have expressed interest in manufacturing the novel ag based monomer(s).

It is imperative that a manufacturing facility be secured during the 1999–2000 period if this technology is to be successful. For instance, we have provided samples to our industrial partners from samples prepared in our laboratory. However, requests for the novel material are far too great to continue the practice of laboratory synthesis and thus we must move to an industrial type synthesis. In fact, one industrial client has expressed interest in placing orders for the monomer in the third or fourth quarter of 2000.

Furthermore, the uniqueness of this technology has been confirmed in industry, and at least one participating polymer manufacturing firm is sampling polymers manufactured via this novel technology. Therefore, we believe that the time when industrial firms will seek production quantities of the novel monomer is drawing closer, and we must be prepared to meet their needs. This is indeed an exciting time as we see the fruition of your support, and our efforts coming to the conclusion we both desire—the commercial production and sale of novel ag based materials to the polymer industry.

In yet another of our novel ag based technologies, we have developed formaldehyde-free adhesives for use in the composites industry, specifically for particleboard and oriented strand board. The new adhesives are composed of more than 98 percent agricultural products and are comparable in properties with traditional formaldehyde adhesives. Formaldehyde emissions are regulated as formaldehyde is considered a potential cancer producing agent. Consequently, there is a move afoot to remove formaldehyde from articles of commerce.

In 1983, the Mississippi Legislature authorized the Polymer Institute at USM to work closely with emerging industries and other existing polymer-related industries to assist with research, problem-solving, and commercializing efforts. During the past year, seventeen new polymer-related industries have located in Mississippi. In particular, during the past four years Sunbeam-Oster, Dickten and Masch, Wellman, and Kohler have constructed facilities approaching a cost of $1.4 billion and each has commented on polymer science and engineering as a significant factor in their decision to locate near to The University of Southern Mississippi and the Mississippi Polymer Institute.

The Institute provides industry and government with applied or focused research, development support, and other commercializing assistance. This effort complements existing strong ties with industry and government involving exchange of information and improved employment opportunities for USM graduates. Most importantly, through basic and applied research coupled with developmental and commercializing efforts of the Institute, the Department of Polymer Science continues to address national needs of high priority.

The focus of my work is commercialization of alternative agricultural crops in the polymer industry. This approach offers an array of opportunities for agriculture as the polymer industry is the largest segment of the chemical products industry in the world, and heretofore has been highly dependent upon petroleum utilization. However, my efforts are directed to the development of agricultural derived materials that will improve our nation's environment and reduce our dependence on imported petroleum. As farm products meet the industrial needs of the American society, rural America is the benefactor. Heretofore, this movement to utilize alternative agricultural products as industrial raw materials has received some attention but much less than opportunities warrant. Your decisions are crucial to the accomplishment of these goals as funding from this Subcommittee has enabled us to implement and maintain an active group of university-based polymer scientists whose energies are devoted to commercializing alternative crops. We are most grateful to you for this support and ask for your continued commitment.

The faculty, the University, and the State of Mississippi are strongly supportive of the Mississippi Polymer Institute and its close ties with industry. Most faculty maintain at least one industrial contract as an important part of extramural research efforts.

Polymers, which include fibers, plastics, composites, coatings, adhesives, inks, and elastomers, play a key role in the materials industry. They are used in a wide range of industries including textiles, aerospace, automotive, packaging, construction, medical prosthesis, and health care. In the aerospace and automotive applications, reduced weight and high strength make them increasingly important as fuel savers. Their non-metallic character and design potentials support their use for many national defense purposes. Moreover, select polymers are possible substitutes for so-called strategic materials, some of which come from potentially unreliable sources.

As a polymer scientist, I am intrigued by the vast opportunities offered by American agriculture. As a professor, however, I continue to be disappointed that few of our science and business students receive training in the polymer-agricultural discipline as it offers enormous potential. The University of Southern Mississippi and

the Mississippi Polymer Institute are attempting to make a difference by showing others what can be accomplished if appropriate time, energy, and resources are devoted to the understanding of ag based products.

I became involved in the polymer field 36 years ago and since that time, have watched its evolution where almost each new product utilization offered the opportunity for many more. Although polymer science as a discipline has experienced expansion and a degree of public acceptance, alternative agricultural materials are an under-utilized national treasure for the polymer industry. Moreover, there is less acceptance of petroleum derived materials today than ever before and consequently the timing is ideal for agricultural materials to make significant inroads as environmentally friendly, biodegradable, and renewable raw materials. These agricultural materials have always been available for our use, yet society for many reasons, has not recognized their potential. The following examples are included and represent opportunities other than those already described which supports this tenet:

—A waterborne, waterproofer has been designed and formulated with the help of several natural products. The material functions as a waterproofer yet is carried in water. However, after application to the intended substrate, typically wood or cementous products, the material becomes hydrophobic and highly water resistant. We have collected two and one-half years of exposure data on this product with excellent success. It is currently being marketed via Southern Chemical Formulators of Mobile, AL. The distribution of this material has been slowed as the result of a fire at Southern Chemical Formulators that destroyed production facilities. We will make additional contacts with industrial firms this year who would be possible distributorship candidates.

—A new, multi-functional polymer additive was designed, synthesized, tested, and submitted to the patent office. The patent office has approved the issuance of a patent entitled, "Novel Multi-Functional Surface Active Agents, Syntheses and Applications Thereof," U.S. patent no. 5,807,922, September 15, 1998. The product is currently being evaluated by the Hanson Company as a potential commercial product. It is a highly efficient, multi-faceted additive that functions as a dispersant, a defoamer, an adhesion promoter, a gloss enhancer, and corrosion inhibiting species. It is derived from an agricultural raw material and is very novel in its performance and applications. We will utilize this technology in the synthesis of our own emulsion polymers and test them for property improvements and thus commercial viability.

—We have exploited the potential of lesquerella, a crop that produces a triglyceride similar to castor oil. Several high performance products have been prepared and include polyesters, stains, foams, pressure sensitive adhesives, and 100 percent solid ultraviolet (UV) coatings. This technology was highlighted at the AARC/NASDA meeting in Washington, DC. We are developing a cooperative relationship with Alcorn State University, Lorman, MS to grow and thus evaluate the agronomics of lesquerella as a new crop for Southeastern U.S. region.

—Novel open cell foams have been designed and prepared from lesquerella and/or castor oil. They are of high quality and can substitute for foams used extensively in industrial settings. Moreover, this ag based foam technology will be exploited during the coming year as a potential weed deterrent and mulch. The idea is to apply a layer of foam around crops to retard, if not stop, weed intrusion and their associated competition for food and water.

U.S. agriculture has made the transition from the farm fields to the kitchen tables, but America's industrial community continues to be frightfully slow in adopting ag based industrial materials. Let us aggressively pursue this opportunity and in doing so:

—Intensify U.S. efforts to commercialize alternative crops and dramatically reduce atmospheric volatile organic content emissions. The result will be much cleaner air for all Americans.

—Reduce U.S. reliance on imported petroleum.

—Maintain a healthy and prosperous farm economy.

—Foster new cooperative opportunities between American farmers and American industry.

Mr. Chairman, your leadership and support are deeply appreciated by the entire University of Southern Mississippi community. While I can greatly appreciate the financial restraints facing your Subcommittee, I feel confident that further support of the Mississippi Polymer Institute will continue dividends of increasing commercialization opportunities of agricultural materials in American industry. Advances in polymer research are crucial to food, transportation, housing, and defense industries. Our work has clearly established the value of ag products as industrial raw materials and we must move it from the laboratories to the industrial manufac-

turing sector. Only then can the U.S. enjoy a cleaner and safer environment which these technologies offer, as well as new jobs, and expanded opportunities for the U.S. farmer. We are most grateful for the support you have provided in the past. The funding you have provided has allowed the laboratory work to be conducted, yet we are at the crossroads of commercialization and additional funds are needed to take this technology from the laboratory to the manufacturing facilities. Moreover, past funding has been essentially level with some slight increases. Our current circumstance finds us in dire need of additional resources to take these technologies to the market place and to continue our developments of other exciting technologies. Thus, we respectfully request $1.5 million in federal funding to exploit the potentials of commercializing alternative agricultural materials and to continue our initiatives. Thank you Mr. Chairman and Members of the Subcommittee for your support and consideration.

Mr. Chairman, I have included with this testimony written descriptions of our most advanced technology based on castor and/or lesquerella oils. I am told that 30,000 acres of castor beans are being planted in Texas, and I have herein already described our efforts to accelerate the adoption of lesquerella as a new industrial crop. The presentations are presented in the "lay" and "technical" fashion in an effort to meet the needs of the non-scientist as well as the highly technical professional, respectively.

PREPARED STATEMENT OF THE UPPER MISSISSIPPI RIVER BASIN ASSOCIATION

The Upper Mississippi River Basin Association (UMRBA) is the organization created 19 years ago by the Governors of Illinois, Iowa, Minnesota, Missouri, and Wisconsin to serve as a forum for coordinating the five states' river-related programs and policies and for collaborating with federal agencies on regional water resource issues. As such, the UMRBA has an interest in the budget for the U.S. Department of Agriculture's conservation programs and technical assistance.

Of particular importance to the UMRBA is funding for the Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP), and Environmental Quality Incentives Program (EQIP). Taken together, these three Commodity Credit Corporation-funded programs provide an invaluable means for the USDA to work with landowners, local conservation districts, and the states to ensure that agricultural productivity is maintained while protecting the nation's soil and water resources. As stewards of some of the nation's most productive agricultural lands and important water resources, the five states of the Upper Mississippi River Basin believe these programs are vital. Strong farmer interest and state support demonstrate the region's commitment to the objectives of these programs. In 1998, state, local, and private entities matched every dollar of NRCS investment in the five states with an additional $0.80.

The President's fiscal year 2001 budget proposal includes a $1.3 billion Farm Conservation Initiative, a combination of new legislative and funding proposals with important potential implications for the USDA's core conservation programs. Funding for the CRP would be increased modestly to $1.742 billion and the CRP acreage cap would be raised by 3.6 million acres to 40 million acres. The UMRBA would welcome such an adjustment to the CRP cap and also supports efforts to ensure that future CRP enrollments target the best opportunities to improve water quality and habitat values. Only 40,000 acres will remain next year under the current WRP acreage cap. The UMRBA supports legislation to increase the cap to permit enrollment of 250,000 acres per year in the WRP from 2001 to 2005. In order to realize the potential benefits of such an increase in the acreage cap, it is of course essential to provide the funds necessary to support additional enrollments. The Administration has proposed increasing WRP funding to $286 million in 2001.

The CRP and WRP have been extremely effective in helping Midwest farmers to protect land and water resources by curtailing production on some of their most sensitive land. And there are certainly many more opportunities to make good use of the CRP and WRP in the region. However, it is also essential to support sound conservation practices on the far greater amount of land that remains in production. EQIP is the USDA's largest and most effective means of assisting farmers and ranchers to implement conservation practices on land currently in production. The President is proposing legislation to increase the authorized CCC funding to EQIP by $625 million over five years. Such an increase would provide significant benefits to our region's farmers and natural resources. Under the Administration's plan, a portion of these increased funds would assist animal feedlot operators to implement conservation practices. Various incidents throughout the country have clearly dem-

onstrated the need for such assistance, which can help balance the new dynamics of livestock production with the need to protect soil and water resources.

The President is also proposing a new, $600 million Conservation Security Program (CSP), to be administered by the NRCS. The CSP would provide assistance to farmers and ranchers who implement various conservation practices. The UMRBA states are keenly aware of the need for more resources to support practices such as conservation tillage and buffer strips. However, it is not clear whether additional resources should be directed to existing programs such as EQIP or to a newly established CSP.

The UMRBA does remain concerned with the adequacy of funding and staffing levels in the NRCS' conservation operations account. The technical assistance funded through conservation operations provides the foundation for the USDA's voluntary conservation planning. The Administration has proposed an increase of $86 million in conservation technical assistance funding for fiscal year 2001. However, a large part of this increase would be dedicated to specific programs and initiatives outside of the USDA's core conservation programs. As a result, NRCS field staff will likely continue to have difficulty providing the timely, comprehensive technical assistance that farmers need if they are to participate effectively in the USDA's conservation programs. A 1998 National Workload Analysis indicated that the NRCS needed as many as 4,000 employees at the field level in the Midwest. At the time, actual field staff in the region numbered fewer than 2,500. The UMRBA urges Congress to ensure that the NRCS has both the staff and funding necessary to deliver its conservation programs effectively.

The Midwest and indeed much of the nation will face significant challenges in the future as dams built under the Public Law 534 and Public Law 566 programs age. More than 200 floodwater dams in the NRCS' Midwest Region will reach the end of their design life within 10 years. Many of these structures must be rehabilitated if they are to continue to function safely and effectively. The UMRBA encourages Congress to provide USDA with the authority and funding it needs to serve as an effective federal partner in addressing these needs.

The five states of the UMRBA acknowledge that our region faces enormous soil and water conservation needs and limited public and private resources to address those needs. In this context, it is imperative that NRCS work with the states, conservation districts, and farmers to identify and target the most pressing problems. Coordination and communication with the states is particularly critical to success in addressing the interstate resource challenges faced on the Upper Mississippi River. Success in addressing such complex, large-scale issues will not come quickly. It will require long-range thinking and commitment over time from all levels of government and from farmers. The states look to both Congress and the Administration to join them in providing such leadership.

PREPARED STATEMENT OF THE USA RICE FEDERATION

The U.S.A. Rice Federation wishes to express our opposition to the recommendations of the Administration for reductions in the appropriation for fiscal year 2001 for the Department of Agriculture for two items that are of importance to the rice industry. We are seeking funding for these two items at last year's levels. In addition, we support the requested funding levels for the White River Irrigation Demonstration Project and the Bayou Meto Project.

The U.S.A. Rice Federation is the nation's largest rice association, representing all segments of the U.S. rice industry. The Federation's charter members are the U.S.A. Rice Council, U.S. Rice Producers' Group and the Rice Millers' Association. Through these organizations, Federation membership encompasses U.S. rice producers who grow 80 percent of America's rice crop; farmer-owned cooperatives and privately owned mills comprising virtually all of the U.S. rice milling industry, with members in Arkansas, California, Florida, Louisiana, Mississippi, Missouri, and Texas; and a wide range of allied businesses in these and other states. The diversity and scope of this association permits it to provide a view common to all aspects of the industry, and to the vast majority of its participants.

The first item of concern to the industry relates to the funding of the Dale Bumpers National Rice Research Center at Stuttgart, Arkansas. This Center is the only one of its kind in the United States. It was established with the view of making U.S. produced rice more competitive in the global market through research for improved yields, a superior grain quality, pest resistance and stress tolerance. It has just recently commenced operations with emphasis on genome research that would focus on rice genetics. The results of the genome research would be of benefit not only for rice but also for other crops as well.

The Administration has proposed a major reduction in funding of this Center. The Administration has proposed for fiscal year 2001 a reduction in the current appropriation of $5,336,700 to $4,502,500 by terminating two projects and reducing the appropriation for rice research by $382,500 and for aquaculture by $457,700. The reduction for rice research would seriously impair the genome research efforts of the Center, and unduly impair the objectives for which the Center was established.

The other appropriation item on which we wish to comment is the appropriation for wildlife services operation contained in the budget for APHIS. The Administration has proposed a cut of $2 million in this appropriation by reducing the appropriation from $31 million to $29 million in fiscal year 2001. One of the activities carried out by this appropriation is work on efforts to control blackbird populations which are a scourge of the rice industry, particularly in Louisiana, and Texas. The appropriation is used to apply bait that has been treated with a chemical, DRC 13329, as well as conducting baiting studies and studies on new chemicals that may be used as repellants for blackbirds. The appropriation from the Department of Agriculture supplements funds generated by producers in these states under their rice research and promotion legislation. The industry depends on this appropriation to aid in its efforts to control damage to the crops caused by the tremendous number of blackbirds that descend on the fields each spring.

We also support the requested funding levels of $22.7 million for the White River Irrigation Demonstration Project and $9.5 million for the Bayou Meto Project in Arkansas.

We wish to thank you for your help to the rice industry in the past and encourage you to continue your support for this industry.

Please include this statement in the record of the hearing and make copies available to the members of the Subcommittee.

PREPARED STATEMENT OF THE WILDLIFE MANAGEMENT INSTITUTE

Mr. Chairman, I am Ronald R. Helinski, Conservation Policy Specialist for the Wildlife Management Institute. Established in 1911, the Institute is staffed by professional wildlife scientists and managers. Its purpose is to promote the restoration and improved management of wildlife in North America. I am submitting testimony for the Subcommittee on Agriculture, Rural Development and Related Agencies—Senate Committee on Appropriations for:

NATURAL RESOURCES CONSERVATION SERVICE

Conservation Operations-Technical Assistance (TA).—The President's budget request is for $86.431 million taking into consideration an increase of FTE's amounting to 1,843. WMI supports additional needed Technical Assistance (TA) both via funding and through the use of innovative delivery mechanisms. WMI submits that there are other ways to deliver TA, primarily through partnerships. Over the past several years, Congress has emphasized the need for a balanced budget. NRCS FTE's over that time period have been status quo. During that time, NRCS had to find new ways to provide services to its constituent base (landowners, farmers, and ranchers). Through NRCS's innovative spirit, more partnerships than ever before occurred. They effectively leveraged monies enabling them to continue to offer services to landowners. These partnerships bloomed into cooperative ventures with state fish and wildlife agencies to address needed expertise and assistance with Farm Bill programs. In many instances through the use of MOA's NRCS match dollar for dollar with state fish and wildlife organizations to hire needed FTE's to facilitate fish and wildlife TA to landowners. This innovation enabled NRCS to: 1) obtain needed expertise where they lacked it and 2) were able to increase FTE's on the ground providing needed TA. The continuation of this management style will provide more actual dollars to landowners via established Farm Bill programs (financial assistance) without taking away from TA funding. Partnerships with state fish and wildlife agencies and conservation NGO's are paying off and should be continued—it provides flexibility and needed services in a time of fiscal responsibility. An example of how this process works can be found in the states of: AR, MO, KY, TX, NC, GA, CO and WY.

With Farm Bill program demand ratios of 3:1 for WRP, 3:1 for WHIP, 2:1 for CRP and 4:1 for EQIP its not just about staffing needs but financial assistance too. Increased monies are needed to facilitate the demand. It's a true limiting factor for the demand far exceeds the available dollars available. With an increase in TA dollars being used in a partnership effort with state fish and wildlife agencies and/or conservation NGO's more services will be delivered on the ground thus meeting constituent demand.

There also is an increasing need to properly evaluate applications of Farm Bill programs on the ground. The above mentioned partnerships are a means to an end. Follow up with landowners has been hit or miss based on NRCS field priorities and current priority workloads. State fish and wildlife agencies and conservation NGO's would help supplement on site visits and offer a more umbrella approach to follow up visits. Properly evaluating implementation of Farm Bill programs on the ground will reinforce conservation connections and help catch problems in their early stages, thus saving money in the long run.

Programs-Wetland Reserve Program (WRP).—WMI is in support of increasing acreage to the 250,000 enrollment level in fiscal year 2001. With the national ratio of eligible offered acres to enrolled acres being 5:1 there is a need to expand the popular WRP program to meet national conservation goals. This program returns long-term benefits to both farmers and the American public.

Wildlife Habitat Improvement Program (WHIP).—WMI supports an increase in funding for this very successful program. With a 3:1 demand to approved contract ratio, $50 million (12.5 for TA/37.5 for financial assistance) is far below the needed amount to meet constituent desires. As a result of the zeroing out of this program in fiscal year 2000 the pent up demand will be high. WMI supports a $100 million allocation annually for this program. As mentioned above, through the leveraging of TA funds, more monies can be made available for direct financial assistance—we recommend $87.5 million for landowners.

Conservation Security Program (CSP).—WMI applauds the recognition of strengthening conservation efforts on private land. With the focus on family farms and specific attention to private grazing lands, orchards, vineyards and other non-program crops, needed niches are now being addressed. "Thinking about the land itself as our most valuable commodity" is, as stated by Secretary Glickman, necessary for long term conservation needs. To that end, WMI supports this $600,000 million program with these caveats: (1) by complimenting other Farm Bill programs CSP will support the coequal status of soil, water, and wildlife and (2) that evaluation mechanisms be established to monitor RESULTS from the investment of those monies.

Forest Incentives Program (FIP).—Zeroing out this program is a mistake. In most cases wildlife has benefitted from landowner use of available FIP funds. This is especially true when it comes to utilizing the management technique of forest stand improvement. WMI recommends that this program allow cost sharing for the use of prescribed fire on non-industrial, private lands. By doing this you will help encourage aggressive fuels management as well as assist with the development of needed understory and successional forest stage development for such wildlife species as bobwhite quail, woodcock and a variety of other bird and mammal species. Thus you will be promoting forest health, reduce unwanted wildfire risk, and improve wildlife habitat. To accomplish the above WMI recommends funding FIP at a $25 million level.

FARM SERVICES AGENCY

Conservation Program Initiative (CPI).—WMI supports the increase from 36.4 million to 40 million acres in fiscal year 2001. The Conservation Reserve Program (CRP) is a voluntary and incentive-based program that have turned millions of acres of marginal cropland into vital wildlife habitat. These programs also help stem soil erosion, help agricultural producers meet the requirements of a variety of environmental laws and regulations. CRP also helps producers remain economically viable in an era of low commodity prices through program payments and increased opportunity for income from hunting, fishing and other recreational activities.

We also support the bonuses of $125 million each year in fiscal year 2001 and 2002 for continuous CRP sign ups.

Supplementary Income Assistance Payments budgeted at 2.464 billion needs to include conservation compliance as part of the delivery mechanism to landowners. Accountability for the use of public funds to constituents concerning improvements to water, soil and wildlife is a must.

Technical Assistance (TA).—WMI recommends leveraging some of the $52 million available with state fish and wildlife agencies and conservation NGO's to assist NRCS with TA delivery to landowners. In these times of balanced budgets, emphasis has been on streamlining government. Efficiency and becoming more effective are the rallying calls of those in Congress. With that in mind, WMI suggests that there are other ways to deliver TA to this nation's private landowners. We suggest going the route of developed partnerships with state fish and wildlife agencies and conservation NGO's. Through the use of MOA's NRCS can match dollars with the above partners to expand TA as well as offer more monies to Farm Bill program

participants. MOA's currently in effect in AR, MO, KY, TX, NC, GA, and WY are a model of how such leveraging can occur.

Wildlife Services, Animal and Plant Health Inspection Service (APHIS).—WMI recommends that the President's Budget for APHIS Wildlife Services (WS) be increased by $1.0 million from $28.7 million to $29.7 million. This increase should be earmarked for the increased cost of maintenance and operations of the National Wildlife Research Center. WMI accepts the President's Budget request (a reduction of $2.7 million and $190,000 respectively) for the Operations and Aquaculture line items, provided that program cuts are only made in states that do not meet a 1:1 cost share match.

The WS program is a complex array of state and local partnerships that contribute financially to the overall program. These partnerships cooperate to control wildlife damage to agriculture, aquaculture, forest, range and other natural resources, and to protect public health and safety through control of wildlife-borne diseases and wildlife hazards at airports. The funding and support level should be governed by the cooperative agreements in place with the respective state agencies and be subject to the agreed to 50/50 cost share policy.

Providing a no net loss of funding for Methods Development is vital to continue the ongoing work of finding alternatives to existing control methods. New technology is the only answer to resolving the controversies surrounding some of the current control methods. Without the $1 million increase, the program. would be required to cut research efforts in order to pay for the increased maintenance for the research facility.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE (CSREES) U.S. DEPARTMENT OF AGRICULTURE

The Wildlife Management Institute (WMI) recognizes that the research and educational programs of the CSREES and its Land Grant Partners effect relevant, positive changes in attitudes and implementation of new technologies by private landowners, managers, community decision makers, and the public. This results in significant benefits to individuals and to the Nation through building and sustaining a more viable and productive natural resource base and a competitive and profitable agriculture. Since over two-thirds of our lands, approximately 1.35 billion acres, are controlled by over 10 million private landowners and managers, it is most appropriate that the CSREES-Land Grant System, with its grass roots credibility and delivery system, be adequately funded to translate and deliver research-based educational programs and new technologies to help the Nation's private landowners and managers move toward a more sustainable society. However, in the President's fiscal year 2001 budget, we see virtually no emphasis on natural resources research and education directed toward helping these clientele. In short, only about four percent of CSREES' proposed budget of $972,395,000 supports research and extension activities pertinent to the nation's forest and range lands and associated wildlife and fisheries resources. This amount is infinitesimal and needs to be significantly increased.

PURPOSE

The Institute recommends that the fiscal year 2001 budget for CSREES should redirect funding to accomplish the following goals:

WMI recommends that the Renewable Resources Extension Act be funded at a minimum level of $15.0 million in fiscal year 2001.—The RREA funds, which are apportioned to State Extension Services, effectively leverage cooperating partnerships at an average of about four to one, with a focus on the development and dissemination of useful and practical educational programs to private landowners (rural and urban) and continuing education of professionals. The increase to $15.0 million would enable the Extension System to accomplish the goals and objectives outlined in the 1991–1995 Report to Congress. The need for RREA educational programs is greater today than ever because of the fragmentation of ownerships, the diversity of landowners needing assistance, and the increasing environmental concerns of society about land use. An increase to $15.0 million would enable the Extension Service to expand its capability to assist over 500,000 private landowners annually to improve decision making and management on an additional 35 million acres while increasing productivity and revenue by $200 million.

WMI recommends that Smith-Lever 3(b)&(c) funding be increased five percent to $290,000,000, and that the increase be allocated to the Natural Resources and Environmental Management (NREM) base program.—WMI appreciates that Smith-Lever 3(b)&(c) base programs provide "Block Grant" type funds for land grant universities to provide essential educational outreach based on local need assessments. The re-

quested increase will enable NREM programs to develop a critical mass of expertise at the State and local levels to address natural resource and environmental issues that are directly affecting small landowners and farmers in both rural and urban communities nationwide. Expanding Extension public issues education programs on such issues as forest health, wetlands, endangered species, and human/wildlife interactions, as well as strengthening programs in urban and community forestry and environmental education as called for in the 1990 FACT Act is essential to the sustainability of these critical resources. Such an increase, targeted appropriately, would help producers better understand and implement the changes in the 1995 Farm Bill's Conservation Provisions and those conservation issues that are expected in the next Farm Bill. Moreover, we are concerned about declining natural resources staff in CSREES as well as at the Nation's Land Grant Universities including the predominantly Black and Tribal Institutions.

WMI encourages continuation of close cooperation between State Cooperative Extension Services and their State Fish and Wildlife agencies, as well as other appropriate State and Federal agencies and conservation organizations. Extension 4–H Youth natural resource program and projects continue to increase with over 1,350,000 youngsters presently enrolled from both urban and rural communities across the Nation. Increased Smith-Lever funds targeted appropriately will enable CSREES to carry out its environmental education and NREM National Strategic Plan obligations nationwide.

WMI recommends restoration of the Rangeland Research Grants $500,000 budget for fiscal year 2001.—The Institute is disappointed that the practical and applied problems addressed by the Rangeland Research Grants (RRG) program were zeroed out in the President's 1998 budget and totally ignored in the fiscal year 1999, 2000, and 2001 budgets. Over one half of the land area of the United States is rangeland; and elimination of the only federal competitive grants program for rangelands has serious implications for wildlife, watersheds, and other natural resources. Modest appropriations for RRG in the past have supported some of the most important rangeland research conducted over the past decade, and wildlife issues on rangelands will present some of the more critical rangeland research problems over the next decade. This would help increase the interdisciplinary capacity of research and educational programs to help landowners improve the adoption of forests and rangelands ecosystem management and the conservation of biodiversity on an ecoregion level.

WMI recommends that an appropriate portion of the total increased appropriation for Pest Management should be dedicated to educational programs for prevention and control of vertebrate pests in urban and rural communities.—WMI notes significant increases in the President's budget for Pest Management research and extension programs with no opportunity for addressing vertebrate pests. Yet, vertebrate pests have been identified in many States as posing the most significant problems that agricultural producers and other private landowners and managers need educational assistance with. The targeting of Pest Management funds for vertebrate pest research and educational programs would effectively advance the knowledge and capability of landowners and managers to significantly reduce the losses caused by these problem species.

WMI recommends that the Hatch funds be increased eleven percent to $200,000,000, and McIntire-Stennis funds fourteen percent to $25,000,000 and, if necessary, the increase be redirected from the proposed addition to NRI funding.—WMI is pleased that the Administration proposes an increase in basic research identified under the National Research Initiative (NRI) as Natural Resources and the Environment. However, what is proposed in the current version of the President's Budget does not address natural resource issues that the Natural Resource Community, the public, and the over 10 million private landowners are vitally concerned about. The Institute is extremely disappointed in the Goal 4 "Greater Harmony between Agriculture and the Environment" which is the only one of the 6 CSREES Strategic Goals that even purports to address natural resources. There is no mention of research or extension programs to address the erosion of the nation's natural resource base except that alluded to by the Integrated Research and Extension Water Quality Program. The others are totally focused on agriculture production. The nation's agricultural base cannot be sustained if its natural resource base is not sustained.

SUMMARY

The Wildlife Management Institute, based on the above considerations, recommends the following for the fiscal year 2001 budget of CSREES:

—The RREA budget be increased to $15.0 million;

—Smith-Lever 3(b)&(c) base program funding be increased to $290,000,000;
—Rangeland Research grants be restored at $500,000 level;
—A portion of the Pest Management and related increase be targeted to provide increased research and education programs to address vertebrate pest prevention and control; and
—McIntire-Stennis and Hatch Act funding be increased to $200,000,000 and $25,000,000 respectively.

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