

(3) Minimizing soil and water losses and sustaining surface water and ground water quality;

(4) Global climate effects on agriculture;

(5) Forestry; and

(6) Biological diversity.

(e) Agriculture systems and technology. Engineering, products, and processes, including:

(1) New uses and new products from traditional and nontraditional crops, animals, byproducts, and natural resources;

(2) Robotics, energy efficiency, computing, and expert systems;

(3) New hazard and risk assessment and mitigation measures; and

(4) Water quality and management.

(f) Agriculture economics and rural communities. Markets, trade, and policy, including:

(1) Strategies for entering into and being competitive in domestic and overseas markets;

(2) Farm efficiency and profitability, including the viability and competitiveness of small and medium-sized dairy, livestock, crop and other commodity operations;

(3) New decision tools for farm and market systems;

(4) Choices and applications of technology;

(5) Technology assessment; and

(6) New approaches to rural development, including rural entrepreneurship.

§ 3430.310 Allocation of AFRI funds.

(a) *General.* The Secretary shall decide the allocation of funds among research, education, extension, and integrated multifunctional projects in an appropriate manner and in accordance with the allocation restrictions found in this section.

(b) *Integrated programs.* Not less than 30 percent of funds allocated to AFRI each fiscal year shall be used to fund integrated programs.

(c) *FASE awards.*

(1) Each fiscal year, a percentage of AFRI funding (no less than 10 percent of the available funding) will be awarded as FASE awards. This percentage requirement may be adjusted by the Secretary based upon priorities and stakeholder input.

(2) The Secretary shall use not less than 25 percent of the funds made available for FASE grants to provide fellowships to outstanding pre- and postdoctoral students for research in the agricultural sciences.

(d) *Rapid Response Food and Agricultural Science for Emergency Issues Awards.* The Secretary may allocate some funding to address emergency issues in the food and agricultural sciences as determined by the Secretary. Letters of intent and applications may be requested, as appropriate. Although the solicitation and award processes may be expedited for these awards, NIFA will adhere to AFRI peer review and competitive requirements of this subpart.

§ 3430.311 Allocation of research funds.

(a) *Fundamental research.* Of the amount allocated by the Director for research, not less than 60 percent shall be used to make grants for fundamental research (as defined in subsection (f)(1) of section 251 of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6971)).

(1) *Research by multidisciplinary teams.* Of the amount allocated by the Director for fundamental research under this paragraph (a), not less than 30 percent shall be made available to make grants for research to be conducted by multidisciplinary teams.

(2) *Equipment grants.* Of the amount allocated by the Director for fundamental research under this paragraph (a) not more than 2 percent shall be used for equipment grants.

(b) *Applied research.* Of the amount allocated by the Director for research, not less than 40 percent shall be made available to make grants for applied research.

§ 3430.312 Emphasis on sustainable agriculture.

NIFA shall ensure that grants made under this subpart are, where appropriate, consistent with the development of systems of sustainable agriculture as defined in section 1404 of NARETPA.