2013 Explanatory Notes
National Institute of Food and Agriculture

Contents

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Purpose Statement

Section 7511(f)(2) of the Food, Conservation, and Energy Act of 2008 amends the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6971) by establishing an agency to be known as the National Institute of Food and Agriculture (NIFA). On October 1, 2009, all authorities administered by the Administrator of the Cooperative State Research, Education, and Extension Service were transferred to the Director of the National Institute of Food and Agriculture (NIFA). NIFA continues to advance knowledge for agriculture, the environment, human health and well-being, and communities.

Research and Education Activities

Research and Education programs administered by NIFA are the U.S. Department of Agriculture's principal entree to the university system of the United States for the purpose of conducting agricultural research and education programs as authorized by the Hatch Act of 1887, as amended (7 U.S.C. 361a-361i); the McIntire-Stennis Cooperative Forestry Act of 1962, as amended (16 U.S.C. 582a et seq.) (McIntire-Stennis Act); the Competitive, Special, and Facilities Research Grant Act, as amended (7 U.S.C. 450i) (the 1965 Act); the National Agricultural Research, Extension, and Teaching Policy Act of 1977, as amended (7 U.S.C. 3101 et seq.) (NARETPA); the Small Business Innovation Development Act of 1982 (Pub. L. 97-219, as amended (15 U.S.C. 638), Section 630 of the Act making appropriations for Agriculture, Rural Development and Related Agencies' programs for fiscal year ending September 30, 1987, and for other purposes, as made applicable by Section 101(a) of Pub. L. 99-591, 100 Stat. 3341, National Defense Authorization Act for Fiscal Year 2012 (Pub. L. 112-81); the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note) (the 1994 Act); the Agricultural Research, Extension, and Education Reform Act of 1998 (Pub. L. 105-185), as amended (AREERA); the Food, Agriculture, Conservation, and Trade Act of 1990 (Pub. L. 101-624) (FACT Act), the Farm Security and Rural Investment Act of 2002 (Pub. L. 107–171) (FSRIA), and the Food, Conservation, and Energy Act of 2008 (Pub. L. 110-246) (FCEA). Through these authorities, the U.S. Department of Agriculture (USDA) participates with State and other cooperators to encourage and assist the State institutions in the conduct of agricultural research and education through the State Agricultural Experiment Stations (SAES) of the 50 States and the territories; by approved Schools of Forestry; the 1890 Land-Grant Institutions and Tuskegee University and West Virginia State University; 1994 Land-Grant Institutions; by Colleges of Veterinary Medicine; and other eligible institutions. The appropriated funds provide Federal support for research and education programs at these institutions.

The State institutions conduct research on the problems continuously encountered in the development of a permanent and sustainable agriculture and forestry system, and in the improvement of the economic and social welfare of rural and urban families. Because of differences in climate, soil, market outlets, and other local conditions, each State has distinct problems in the production and marketing of crops and livestock. Farmers, foresters, and rural people in the individual States naturally look to their SAES, universities, and colleges for solutions to the State and local problems and request services to help meet changing conditions.

The Department's higher education mission is carried out in strong alliance with States, universities, and the private sector. NARETPA designated USDA as the lead Federal agency for higher education in the food and agricultural sciences. Through NIFA, USDA has implemented that charge with a broad array of initiatives to link teaching, research, and extension; to improve the training of food and agricultural scientists and professionals; and to strengthen the quality of education programs throughout the nation.

Appropriations and additional provisions for research and education activities are authorized under the following Acts:

1. Hatch Act - Payments to agricultural experiment stations under the Hatch Act of 1887 as amended (7 U.S.C. 361a-361i), the Agricultural Experiment Stations Act of August 11, 1955 (Pub. L. 84-352); the Education Amendments of 1972 (Pub. L. 92-318); District of Columbia Public Postsecondary Education Reorganization Act (Pub. L. 93-471); NARETPA (Pub. L. 95-113), as amended; Omnibus Territories Act of October 15, 1977 (Pub. L.

95-134); Act of March 12, 1980 (Pub. L. 96-205); Education Amendments of 1980 (Pub. L. 96-374); Act of December 24, 1980 (Pub. L. 96-597); Agriculture and Food Act of 1981 (Pub. L. 97-98); Act of December 8, 1983 (Pub. L. 98-213); Act of October 5, 1984 (Pub. L. 98-454); Food Security Act of 1985 (Pub. L. 99-198); Act of August 27, 1986 (Pub. L. 99-396); FACT Act; Federal Agriculture Improvement and Reform Act of 1996 (FAIR Act) (Pub. L. 104-127); AREERA; FSRIA; and FCEA.

Funds under the Hatch Act are allocated to the SAES of the 50 States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, Micronesia, American Samoa, and the Northern Mariana Islands for research to promote sound and prosperous agriculture and rural life.

Eligible State institutions are required to submit a Plan of Work to NIFA for approval before Hatch Act funds are distributed. The Hatch Act provides that the distribution of Federal payments to States for fiscal year 1955 shall become a fixed base, and that any sums appropriated in excess of the 1955 level shall be distributed in the following manner:

-20 percent equally to each State;
-not less than 52 percent to the States as follows: one-half in an amount proportionate to the relative rural population of each State to the total rural population of all States, and one-half in an amount proportionate to the relative farm population of each State to the total farm population of all States;
-not less than 25 percent for multi-State, multi-disciplinary, multi-institutional research activities to solve problems concerning more than one State; and
- 3 percent for the administration of the Act.

Federal funds provided under the Hatch Act to State institutions must be matched with non-Federal funding on a dollar-for-dollar basis. Matching requirements for the insular areas of the Commonwealth of Puerto Rico, the Virgin Islands, Guam, Micronesia, American Samoa, the Northern Mariana Islands, and the District of Columbia are subject to the matching requirements of an amount equal to not less than 50 percent of the formula funds distributed to each insular area and the District of Columbia as stated in the Hatch Act, as amended by section 7404 of the FCEA. These provisions also state that the Secretary may waive the matching funds requirement of an insular area and the District of Columbia for any fiscal year if the Secretary determines that the government of the insular area or the District of Columbia will be unlikely to meet the matching requirement for the fiscal year.

Section 7(c) of the Hatch Act allows unexpended funds to be carried over for use during the following fiscal year. In accordance with provisions of AREERA, at least 25 percent of available Hatch Act funds must be used to support multi-State research; States also must expend 25 percent, or two times the level spent in fiscal year 1997 (whichever is less), on activities that integrate cooperative research and extension.

The three percent of funds appropriated under the Hatch Act for administration includes the disbursement of funds and a continuous review and evaluation of the research programs of the SAES supported wholly or in part from Hatch funds. NIFA encourages and assists in the establishment of cooperation within and between the States, and also actively participates in the planning and coordination of research programs between the States and the Department at the regional and national levels.

2. McIntire-Stennis Act - The McIntire-Stennis Cooperative Forestry Act of October 10, 1962, (16 U.S.C. 582a et seq.) as amended by Section 7412 of FCEA; and subject to provisions of Pub. L. 96-374; Pub. L. 97-98; Pub. L. 99-198; FACT Act; and FAIR Act.

The Act authorizes funding of research in State institutions certified by a State representative designated by the governor of each State. The Act provides that appropriated funds be apportioned among States as determined by the Secretary after consultation with the legislatively mandated Forestry Research Advisory Council. The Council consists of not fewer than sixteen members representing Federal and State agencies concerned with developing and utilizing the Nation's forest resources, the forest industries, the forestry schools of the State-certified eligible institutions, SAES, and volunteer public groups concerned with forests and related natural resources. Determination of apportionments follows consideration of pertinent factors including areas of non-Federal commercial forest land, volume of timber cut from growing stock, and the non-Federal dollars expended on forestry research in the State. Section 7412 of FCEA amended the McIntire-Stennis Act to include 1890 Institutions (as defined in section 2 of

AREERA (7 U.S.C. 7601)) as eligible for consideration in these determinations. The Act also provides that payments must be matched by funds made available and budgeted from non-Federal sources by the certified institutions for expenditure on forestry research.

3. Payments to 1890 Colleges, including Tuskegee University and West Virginia State University - Section 1445 of NARETPA; Act of October 28, 1978, (Pub. L. 95-547); and subject to provisions of Pub. L. 97-98; Pub. L. 99-198; FACT Act; FAIR Act; AREERA; FSRIA, and FCEA authorizing support of continuing agricultural research at colleges eligible to receive funds under the Act of August 30, 1890, including Tuskegee University. The general provisions section 753 of Pub. L. 107-76 makes West Virginia State University eligible to receive funds under this program. Eligible State institutions are required to submit a Plan of Work to NIFA for approval before these formula funds are distributed. The agricultural research programs at the 1890 Land-Grant Colleges and Universities are designed to generate new knowledge which will assist rural underprivileged people and small farmers to obtain a higher standard of living. Therefore, there is a high concentration of research effort in the areas of small farms, sustainable agriculture, rural economic development, human nutrition, rural health, and youth and elderly. Congress authorized appropriations in an amount not less than 15 percent of the amounts appropriated each year under Section 3 of the Hatch Act. The Act allows 3 percent for administrative expenses by the Secretary. Distribution of payments made available under section 2 of the 1965 Act for fiscal year 1978 are a fixed base and sums in excess of the 1978 level are to be distributed as follows:

-20 percent equally to each State;
-40 percent in an amount proportionate to the rural population of the State in which the eligible institution is located to the total rural population of all States in which eligible institutions are located; and
-40 percent in an amount proportionate to the farm population of the State in which the eligible institution is located to the total farm population of all the States in which eligible institutions are located.

Section 1445(a)(2) of NARETPA (7 U.S.C. 3222(a)(2)), as amended by section 7122 of FCEA requires that funds appropriated for this program be not less than 30 percent of the Hatch Act appropriation. Section 1445(a) allows unexpended funds to be carried over for use during the following fiscal year. Section 1449 (7 U.S.C. 3222d), requires that Federal funds be matched by the State from non-Federal sources. For fiscal year 2007 and each fiscal year thereafter, not less than 100 percent of formula funds to be distributed must be matched. The Secretary of Agriculture may waive the matching funds requirement above the 50 percent level for any fiscal year for an eligible institution of a State if the Secretary determines the State will be unlikely to satisfy the matching requirement. Allotments to Tuskegee University and Alabama A&M University shall be determined as if each institution were in a separate State.

4. Animal Health and Disease Research - Section 1433 of NARETPA (7 U.S.C. 3195), provides for support of livestock and poultry disease research in accredited schools or colleges of veterinary medicine or SAES that conduct animal health and disease research. These funds provide support for new research initiatives and enhance research capacity leading to improved animal health, reduced use of antibacterial drugs and improved safety of foods of animal origin. These funds shall be distributed as follows:

-4 percent shall be retained by the Department of Agriculture for administration, program assistance to the eligible institutions, and program coordination;
-48 percent shall be distributed in an amount proportionate to the value of and income to producers from domestic livestock and poultry in each State to the total value of and income to producers from domestic livestock and poultry in all the States; and
-48 percent shall be distributed in an amount proportionate to the animal health research capacity of the eligible institutions in each State to the total animal health research capacity in all the States.

Eligible institutions must provide non-Federal matching funds in States receiving annual amounts in excess of $100,000 under this authorization.

5. Research Grants - Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended; and subject to provisions of NARETPA; Pub. L. 97-98; Critical Agricultural Materials Act, (Pub. L. 98-284); Pub. L. 99-198; FACT Act; FAIR Act; and AREERA authorizes Special Research Grants for periods not to exceed three years to SAES, all colleges and universities, other research institutions and organizations, Federal agencies, private organizations or

corporations, and individuals. Previously, grants were made available for the purpose of conducting research to facilitate or expand promising breakthroughs in areas of the food and agricultural sciences. However, AREERA expanded the purposes under this authority to include extension or education activities. Grants funded under this authority are only for research projects. Special Research Grants are awarded on a non-competitive or competitive basis involving scientific peer and merit review processes. Included in Special Research Grants are:

Expert Integrated Pest Management Decision Support System pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended supports key information systems that are used to diagnose pest management problems and identify appropriate management strategies that will reduce or eliminate negative impacts on production and profitability.

Integrated Pest Management and Biological Control pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended distributes funding through the Regional Integrated Pest Management Competitive Grants Program. The program supports the development of new integrated pest management tactics and systems, their on-farm validation, and the delivery of knowledge and information to agricultural producers and advisors through extension and outreach programs.

Minor Crop Pest Management pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended supports the work of the IR-4 program, which is the principal public program supporting the registration of pesticides and biological control agents for use on specialty crops. The IR-4 program provides coordination, funding, and scientific guidance for both field and laboratory research to develop data in support of registration packages to be submitted to the Environmental Protection Agency. Program investments are guided by a priority-setting process that engages commodity producers, State and Federal research scientists, and extension specialists.

Pest Management Alternatives pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended develops and implements pest management alternatives when regulatory action, voluntary action by the registrant, or other circumstances results in the unavailability of certain pesticides or pesticide uses. A competitive process is used to invest funding in developing new pest management tools and techniques that address critical pest problems identified by agricultural producers and other stakeholders.

Global Change UV-B Monitoring pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended supports a climatological network which includes 34 climatological sites: 31 in the U.S., two in Canada, and one in New Zealand. The program supports action items for informing decisions and modeling efforts as outlined in the U.S. Global Change Research Program strategic plan.

Potato Research pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended grants are awarded that develop and test improved potato varieties for commercial production. Targeted aspects of improvement include increased yields, quality, and market appeal; resistance to diseases, insects, and stress; and regional adaptability. The program also supports development of technologies to improve early generation and marker-assisted selection for resistance to critical and market-limiting insect pests and diseases.

Forest Products Research pursuant to Section 2(c) of the 1965 Act (7 U.S.C. 450i(c)), as amended for projects to create new and improved value-added products and renewable energy from U.S. wood in support of the forest products sector.

Critical Agricultural Materials pursuant to the Critical Agricultural Materials Act, Pub. L. 98-284, as amended research grants are awarded that support product development, demonstration, and validation of product performance under operational field conditions. Specific focus is on paints, coatings, adhesives for composites, and aerial delivery systems or components that are manufactured from domestically produced agricultural materials and are of strategic and industrial importance to benefit the economy, defense and general well-being of the Nation.

Aquaculture Centers grants pursuant to section 1475(d) of NARETPA support aquaculture research, development, demonstration, and extension education to enhance viable and profitable U.S. aquaculture production to benefit consumers, producers, service industries, and the American economy.

Supplemental and Alternative Crops pursuant to section 1473D of NARETPA grants are awarded to conduct fundamental and applied research related to the development of new commercial products derived from natural plant material for industrial, medical, and agricultural applications.

Sustainable Agriculture Research and Education pursuant to section 1621 of the FACT Act works to increase knowledge of and help farmers and ranchers to adopt practices that are profitable, environmentally sound, and good to communities. Competitive grants are awarded by four regional administrative councils. Projects address crop and livestock production and marketing, stewardship of soil and other natural resources, economics and quality of life.

Rangeland Research pursuant section 1480 of NARETPA provides U.S. agricultural producers, rural landowners, and land managers with integrated science strategies to make informed land management decisions with an emphasis on enhancing the restoration and sustainable integrity of U.S. rangelands.

6. Agriculture and Food Research Initiative - Subsection (b) of the 1965 Act (7 U.S.C. 450i(b)) as amended by section 7406 of FCEA establishes an Agriculture and Food Research Initiative (AFRI) to make competitive grants for fundamental and applied research, extension, and education to address food and agricultural sciences (as defined under section 1404 of NARETPA). The Secretary is authorized to award competitive grants to State agricultural experiment stations; colleges and universities; university research foundations; other research institutions and organizations; Federal agencies; national laboratories; private organizations or corporations; individuals; or any group consisting of two or more of the aforementioned entities. Grants will be awarded to address critical issues in United States agriculture in areas of global food security and hunger, climate change, sustainable bioenergy, childhood obesity, and food safety. Addressing these critical issues will engage scientists and educators with expertise in:
A) Plant health and production and plant products;
B) Animal health and production and animal products;
C) Food safety, nutrition, and health;
D) Renewable energy, natural resources, and environment;
E) Agriculture systems and technology; and
F) Agriculture economics and rural communities.

Of the amount of funds made available for research, no less than 60 percent shall be used for fundamental research and no less than 40 percent shall be used for applied research. No less than 30 percent of the amount allocated for fundamental research shall be made available to make grants for research to be conducted by multidisciplinary teams and no more than 2 percent may be used for equipment grants. In addition, awards may be made to assist in the development of capabilities in the agricultural, food, and environmental sciences (e.g., new investigator and strengthening awards). Eligible applicants include State agricultural experiment stations, colleges and universities, university research foundations, other research institutions and organizations, Federal agencies, national laboratories, private organizations or corporations, individuals, and any group consisting of two or more entities identified in this sentence.

To the maximum extent practicable, NIFA, in coordination with the Under Secretary for Research, Education, and Economics (REE), will make awards for high priority research, education, and extension, taking into consideration, when available, the determinations made by the National Agricultural Research, Extension, Education, and Economics Advisory Board. Integrated research, education and extension activities under this program are authorized pursuant to the authority found in section 406 of AREERA (7 U.S.C. 7626) and at an amount no less than 30 percent of the funds made available under this authority.

7. Small Business Innovation Research (SBIR) Program - The Small Business Innovation Development Act of 1982 (Pub. L. 97-219, as amended) (15 U.S.C. 638), Section 630 of the Act making appropriations for Agriculture, Rural Development and Related Agencies' programs for fiscal year ending September 30, 1987, and for other purposes, as made applicable by Section 101(a) of Pub. L. 99-591, 100 Stat. 3341authorizes a competitive program for SBIR. The Small Business Innovation Development Act was designed to strengthen the role of small, innovative firms in Federally funded research and development. Section 5102 of the National Defense Authorization Act for Fiscal Year 2012 (Pub. L. 112-81) amends the Small Business Innovation Development Act to allow the set aside of appropriations for extramural research and development for awards to eligible small firms as follows:

-Not less than 2.6 percent of appropriations in fiscal year 2012;
-Not less than 2.7 percent of appropriations in fiscal year 2013;
-Not less than 2.8 percent of appropriations in fiscal year 2014;
-Not less than 2.9 percent of appropriations in fiscal year 2015;
-Not less than 3.0 percent of appropriations in fiscal year 2016; and
-Not less than 3.2 percent of appropriations in fiscal year 2017 and each fiscal year thereafter.

The SBIR Program is a three-phased effort, but only Phase I and Phase II, the feasibility and follow-on research and development phases respectively, are eligible for support with USDA funds. Firms are encouraged to secure Phase III funding for the commercialization phase from other public or private sources. The research areas supported under the SBIR program address critical issues in U.S. agriculture in the areas of global food security and hunger, climate change, sustainable bioenergy, childhood obesity, and food safety. Addressing these critical issues will engage small businesses with expertise in a number of areas including plant and animal production and protection, forests and related resource sciences, soil and water resources, food and nutrition sciences, rural development, biofuels and biobased products, aquaculture, and small and mid-sized farms. NIFA administers the SBIR program for USDA, including the funds set aside for SBIR from other USDA agencies.

8. Biotechnology Risk Assessment Research Grants Program (BRAG) – Section 1668 of FACT Act and as amended in section 7210 of FSRIA authorizes competitively awarded research grants to identify and develop appropriate management practices to minimize physical and biological risks associated with genetically engineered animals, plants, and microorganisms. Under BRAG, at least 2 percent of appropriations for biotechnology related research is set aside for awards under this program. NIFA and the Agricultural Research Service jointly administer this program.

BRAG supports the generation of new information that assists Federal regulatory agencies in making science-based decisions about the effects of introducing into the environment genetically engineered organisms, including plants, microorganisms (including fungi, bacteria, and viruses), arthropods, fish, birds, mammals, and other animals excluding humans. The program also supports applied and/or fundamental risk assessment research, which is defined as the science-based evaluation and interpretation of factual information in which a given hazard, if any, is identified, and the consequences associated with the hazard are explored.

9. 1994 Institutions Research - The 1994 Act authorizes a competitive research grants program for institutions designated as 1994 Institutions. Section 7402 of FCEA amended the 1994 Act by adding a new institution, increasing the number of recipients eligible to receive funding under this program to 34. The program allows scientists at the 1994 Institutions to participate in agricultural research activities that address tribal, national, and multi-State priorities.

10. Farm Business Management and Benchmarking Program – Section 7208 of FCEA amended FACT Act by adding section 1672D which authorizes the competitive program to improve the farm management knowledge and skills of agricultural producers, and establish and maintain a national, publicly available farm financial management database to support improved farm management. Funds are awarded on a competitive basis under the program.

11. Sun Grant Program – Section 7526 of FCEA established this program for grants to sun grant centers and subcenter to enhance national energy through the development, distribution, and implementation of biobased energy technologies. Through biobased energy and product technologies, activities are supported that promote diversification, and the environmental sustainability of, agricultural production in the U.S., and economic diversification in rural areas of the U.S. Funds are also used to enhance the efficiency of bioenergy and biomass research and development programs through improved coordination and collaboration among USDA, Department of Energy, and land-grant colleges and universities.

12. Capacity Building for Non-Land Grant Colleges of Agriculture – Section 7138 of FCEA established this competitively awarded grants program to assist the institutions in maintaining and expanding the capacity of the NLGCA Institutions to conduct education, research, and outreach activities relating to agriculture, renewable resources, and other similar disciplines.

13. Policy Research Centers – Section 1419A of NAREPTA as amended by Section 7111 of FCEA authorizes this competitive grants program for centers to conduct research and education programs that are objective, operationally independent, and external to the Federal Government and that concern the effect of public policies and trade agreements on the farm and agricultural sectors including commodities, livestock, dairy, and specialty crops; environment; rural families, households, and economies; and consumers, food, and nutrition. Funding is provided for disciplinary and interdisciplinary research and education concerning policy research including activities that quantify the implications of public policies and regulations; develop theoretical and research methods; collect, analyze, and disseminate data for policymakers, analysts, and individual; and develop programs to train analysts.

14. Federal Administration (direct appropriation) - Authority for direct appropriations is provided in the annual Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Act. These funds are used to provide support services in connection with the planning and coordination of all research and education programs administered by NIFA, including the Research, Education, and Economics Data Information System and the Electronic Grants Administration System.

15. Higher Education - Section 1417 of NARETPA (7 U.S.C. 3152), was amended by section 7106 of FCEA to provide eligibility to the University of the District of Columbia to receive grants and fellowships for food and agricultural science education. This program is also subject to provisions found in NARETPA; Pub. L. 97-98; Pub. L. 99-198; Second Morrill Act of 1890; Act of June 17, 1988, (Pub. L. 100-339); FACT Act; Equity in Educational Land-Grant Status Act of 1994, (Pub. L. 103-382); FAIR Act; AREERA; Pub. L. 106-78, Aviation and Transportation Security Act of November 19, 2001, (Pub. L. 107-71), and National Veterinary Medical Service Act of December 6, 2003, (Pub. L. 108-161) (NVMSA).

Institution Challenge, Multicultural Scholars, and Graduate Fellowship Grants Program - Funds are awarded for grants and fellowships for food and agricultural sciences education as follows:

> Institution Challenge Grants pursuant to section 1417(b)(1) are designed to strengthen institutional capacities, including curriculum, faculty, scientific instrumentation, instruction delivery systems, and student recruitment and retention, to respond to identified State, regional, national, or international educational needs in the food and agricultural sciences, or in rural economic, community, and business development. All Federal funds competitively awarded under this program must be matched by the universities on a dollar-for-dollar basis from non-Federal sources.
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> The Higher Education Multicultural Scholars Program pursuant to section 1417(b)(5) increases the ethnic and cultural diversity of the food and agricultural scientific and professional workforce, and advances the educational achievement of minority Americans. This competitive program is designed to help the food and agricultural scientific and professional workforce achieve full participation by members of traditionally underrepresented racial and ethnic groups. It is open to all colleges and universities granting baccalaureate or higher degrees in agriculture, forestry, natural resources, home economics, veterinary medicine, and closely allied fields. Federal funds provide 75 percent of the four-year scholarship awards; the remaining 25 percent is contributed by the grantee institutions.
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> Higher Education-Graduate Fellowships Grants pursuant to section 1417(b)(6) are awarded on a competitive basis to colleges and universities to conduct graduate training programs to stimulate the development of food and agricultural scientific expertise in targeted national need areas. The program is designed to attract highly promising individuals to research or teaching careers in areas of the food and agricultural sciences where shortages of expertise exist. Typically graduate students in the food and agricultural sciences require a minimum of four years to complete a doctoral degree. The USDA fellowships program provides support for doctoral study for three years, and the universities are expected to support the student's fourth year of dissertation research.

The Secondary Education, Two-year Postsecondary Education, and Agriculture in the K-12 Classroom Program, authorized by section 1417(j) of NARETPA as amended (7 U.S.C. 3152 (j)), is designed to promote and strengthen secondary education in agribusiness and agriscience, and to increase the number and/or diversity of young Americans pursuing college degrees in the food and agricultural sciences. The intent of the program is to encourage teachers creatively to incorporate elements of agriscience and agribusiness into secondary education programs.

Section 7109 of FCEA amended section 1417(j) of NARETPA to include support for current agriculture in the classroom programs for grades K-12. Proposals address targeted need areas of curricula design and instructional materials development; faculty development and preparation for teaching; career awareness; linkages between secondary, 2-year post-secondary, and institutions of higher learning; or education activities promoting diversity in students seeking degrees in agribusiness and agriscience. All Federal funds competitively awarded under this program must be matched by the institution on a dollar-for-dollar basis from non-Federal sources.

The 1890 Institution Teaching, Research, and Extension Capacity Building Grants Program pursuant to 1417(b)(4) stimulates the development of high quality teaching, research, and extension programs at the 1890 Land-Grant Institutions and Tuskegee University and West Virginia State University to build their capabilities as full partners in the mission of the Department to provide more, and better trained, professionals for careers in the food and agricultural sciences. This competitive program is designed to strengthen institutional teaching, research, and extension capacities through cooperative programs with Federal and non-Federal entities, including curriculum, faculty, scientific instrumentation, instruction delivery systems, student experimental learning, student recruitment and retention, studies and experimentation, centralized research support systems, and technology delivery systems, to respond to identified State, regional, national, or international educational needs in the food and agricultural sciences, or rural economic, community, and business development. Section 7107 of FCEA amended section 1417(b)(4) of NARETPA (7 U.S.C. 3152(b)(4)) to expand extension capacity.

The USDA-Hispanic Serving Institutions Education Partnerships Grants Program pursuant to section 1455 of NARETPA (7 U.S.C. 3241) is the foundation for USDA efforts to better serve Hispanic Americans and to prepare them for careers in agriscience and agribusiness. This competitive program expands and strengthens academic programs in the food and agricultural sciences at Hispanic-serving colleges and universities, including two-year community colleges that have at least 25 percent Hispanic enrollment. Section 7128 of FCEA amended section 1455 to require that all grants made under this program be awarded on a fully competitive basis, and removed the requirement for consortia in subsection (b)(1).

The Native American Institutions Endowment Fund, authorized by the 1994 Act provides for the establishment of an endowment for the 1994 Institutions (34 Tribally-controlled colleges). The interest derived from the endowment is distributed to the 1994 Institutions on a formula basis. This program will enhance educational opportunities for Native Americans by building educational capacity at these institutions. The institutions are also able to use the funding for facility renovation and construction. On the termination of each fiscal year, the Secretary shall withdraw the income from the endowment fund for the fiscal year, and after making adjustments for the cost of administering the endowment fund, at 4 percent, distribute the adjusted income as follows. Sixty percent of the adjusted income is distributed among the 1994 Institutions on a pro rata basis, the proportionate share being based on the Indian student count. Forty percent of the adjusted income is distributed in equal shares to the 1994 Institutions.

The Tribal Colleges Education Equity Grants Program - The 1994 Act authorizes the use of funds to benefit those entities identified as the 1994 Land Grant Institutions. Funds may be used to support teaching programs in the food and agricultural sciences in the targeted need areas of: 1) curricula design and instructional materials development; 2) faculty development and preparation for teaching; 3) instruction delivery systems; 4) student experimental learning; 5) equipment and instrumentation for teaching; and 6) student recruitment and retention. Section 7402 of FCEA amended section 532 of the 1994 Act by adding Ilisagvik College, bringing the total number of eligible participants up to 34. Also FCEA amended section 534 to authorize that funds payable to a 1994 Institution be withheld and redistributed to other 1994 Institutions in the event that the Institution declines to accept funds or fails to meet the accreditation requirements of section 533.

The Alaska Native Serving and Native Hawaiian-Serving Institutions Education Grants Program, originally authorized by section 759 of Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2000, Pub. L. 106-78, and redesignated as section 1419B of NARETPA, is aimed at recruiting, supporting and educating minority scientists and professionals, and advancing the educational capacity of Native-serving institutions. Funds may be used to support projects in the targeted areas of: 1) enhancing educational equity for under-represented students; 2) strengthening educational capacities, including libraries, curriculum, faculty, scientific instrumentation, instruction delivery systems, and student recruitment and retention; 3) attraction and retention of undergraduate and graduate students; and 4) cooperative initiatives to maximize the development of resources such as faculty, facilities and equipment to improve teaching programs. Additionally, section 7112 of

FCEA permits consortia to designate fiscal agents for the members of the consortia and to allocate among the members funds made available under this program.

The Resident Instruction Grants for Insular Areas Program, authorized by section 1491 of NARETPA (7 U.S.C. 3363), as amended, is designed to enhance teaching programs in extension programs in food and agricultural sciences that are located in the insular areas of the Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, Micronesia, the Marshall Islands, or the Republic of Palau. Funds may be used that enhance programs in agriculture, natural resources, forestry, veterinary medicine, home economics, and disciplines closely allied to the food and agriculture production and delivery systems.

The Distance Education Grants for Insular Areas Program, authorized by section 1490 of NARETPA (7 U.S.C. 3362), as amended, is designed to strengthen the capacity of institutions that are located in the insular areas of the Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, Micronesia, the Marshall Islands, or the Republic of Palau. Funds may be used to enhance the capability of the institutions to carry out collaborative distance food and agricultural education programs using digital network technologies.

The Veterinary Medicine Loan Repayment Program, authorized by section 1415A of NARETPA (7 U.S.C. 3151a) as amended, provides for a loan repayment program for a specified payment amount of qualifying educational loans of veterinarians for geographical areas that have a shortage of veterinarians; and areas of veterinary practice that the Secretary determines have a shortage of veterinarians, such as food animal medicine, public health, epidemiology, and food safety. FCEA amended section 1415A to require NIFA to give priority to agreements with veterinarians for the practice of food animal medicine in veterinarian shortage situations and prohibits transfer of funds to the Food Safety and Inspection Service under the National Veterinary Medical Service Act.

Extension Activities

The mission of the Cooperative Extension System, a national educational network, is to help people improve their lives through an educational process that uses scientific knowledge focused on issues and needs. Cooperative Extension work was established by the Smith-Lever Act of May 8, 1914, as amended. This work is further emphasized in Title XIV of NARETPA to fulfill the requirements of the Smith-Lever Act, the Cooperative Extension Service in each State, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Northern Marianas and Micronesia, conduct educational programs to improve American agriculture, communities of all sizes, and strengthen families throughout the United States. This publicly funded, out-of-the classroom educational network combines the expertise and resources of Federal, State and local partners. The partners in this unique system are:

-NIFA of USDA;

-Cooperative Extension Services at land-grant universities throughout the United States and its territories; and

-Cooperative Extension Services in nearly all of the 3,150 counties in the United States.

Thousands of Extension employees and nearly 3 million volunteers support this partnership and magnify its impact. Strong linkages with both public and private external groups are also crucial to the Extension System's strength and vitality.

1. Smith-Lever 3 (b) & (c) - Smith-Lever 3 (b) & (c) formula funds of the Smith-Lever Act, 7 U.S.C. 343 (b)(3), as amended, comprise approximately two-thirds of the total Federal funding for extension activities. These funds are allocated to the States on the basis of the rural and farm population of each State and the territories. States can utilize funds for locally determined programs, as well as for high priority regional and national concerns.

In accordance with section 4 of the Smith-Lever Act, eligible State institutions are required to submit a Plan of Work to NIFA for approval before Smith-Lever 3 (b) & (c) formula funds are distributed. Of the funds authorized under section 3(c), four percent shall be allotted for Federal administrative, technical, and other services, and for

coordinating the extension work of the Department and the several States, Territories, and possessions. The remaining balance of funds formula distribution is:

-20 percent is divided equally among the States;
-40 percent is paid to the several States in the proportion that the rural population of each bears to the total rural population of the several States as determined by the census; and
-40 percent shall be paid to the several States in the proportion that the farm population of each bears to the total farm population of the several States as determined by the census.

States must expend 25 percent, or two times the level spent in fiscal year 1997 (whichever is less), on cooperative extension activities in which two or more States cooperate to solve problems that concern more than one State. This also applies to activities that integrate cooperative research and extension.

Smith-Lever 3(b) and (c) funding provided to an 1862 Land-Grant Institution must be matched with non-Federal funding on a dollar-for-dollar basis. Matching requirements for the insular areas of the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, Micronesia, American Samoa, and the Northern Mariana Islands are subject to the matching requirements of an amount equal to not less than 50 percent of the formula funds distributed to each insular area. These provisions also state that the Secretary may waive the matching funds requirement of an insular area for any fiscal year if the Secretary determines the government of the insular area will be unlikely to meet the matching requirement for the fiscal year.

2. Smith-Lever 3(d) - These funds are allocated to the States to address special programs or concerns of regional and national importance. Section 7403 of FCEA amends section 3(d) of the Smith-Lever Act (7 U.S.C. 343(d)) to expand eligibility to the 1890 Land-Grant Institutions and required that funds be awarded on a competitive basis with the exception of the Expanded Food and Nutrition Education Program in which funds are distributed on a formula basis. Section 7417 of FCEA provided eligibility for these programs to the University of the District of Columbia. The following extension programs are supported under the Smith-Lever 3(d) funding mechanism and other specific authorizations:

Expanded Food and Nutrition Education Program – These funds are awarded to the 1862 and 1890 Land-Grant Institutions according to a statutory formula provided in section 1425 of NARETPA (7 U.S.C. 3175) which is amended by section 7116 of FCEA. Funds are used to provide low-income youth and families with information to increase nutrition knowledge and improve nutritional practices. Funds are awarded to the eligible institutions as follows: (1) FY 1981 bases; (2) $100,000 to each institution; (3) a percentage of the increase in funding that exceeds the FY 2007 appropriated level (i.e., 11 percent for FY 2010, 12 percent for FY 2011, 13 percent for FY 2012, 14 percent for FY 2013, and 14 percent for FY 2014 and thereafter) distributed to the 1890 Land-Grant Institutions according to the prorata population for each institution at or below 125 percent of the poverty level; and the remainder to the 1862 Land-Grant Institutions according to the prorata population for each institution at or below 125 percent of the poverty level.

Pest Management – Competitively awarded projects facilitate development of extension programs at 1862 and 1890 land-grant institutions to raise the level of understanding and implementation of integrated pest management (IPM) principles by decision makers. Applications of IPM may be in production agriculture or other environments where insect pests, plant diseases, and weeds are an issue that limits profitability or adversely impacts the environment or human health due to exposure to pests or pesticides.

Farm Safety and Youth Farm Safety Education and Certification Program - The Rural Health and Safety Education Act of 1990, section 2390 of the FACT Act (7 U.S.C. 2661) – The Farm Safety program provides farm and ranch residents in all the States with information to assist in reducing and preventing agricultural related work incidents. Extension works with States and the National Easter Seal Society in conducting AgriAbility projects designed to assist farmers with disabilities to stay in farming. The competitively-awarded Youth Farm Safety Education and Certification Program provides funding to states to study training and certification needs of youth employed in agriculture.

Children, Youth, & Families At Risk - This program focuses on America's children, youth and families to help promote and provide positive, productive, secure environments and contributions to communities and the Nation.

Projects are awarded competitively to focus on child care, science and reading literacy, and building program and community capacity.

Federally-Recognized Tribes Extension Program (formerly Extension Indian Reservations) - Section 1677 of the FACT Act, 7 U.S.C. 5930 – Competitively awarded projects to State Extension Services are implemented by Federally Recognized Tribes to provide assistance and educational programs in agriculture, community development, youth development, and other societal issues facing Native Americans on reservations..

Sustainable Agriculture - Section 1629 of the FACT Act, 7 U.S.C. 5832 - Smith-Lever 3(d) funding for sustainable agriculture programs is used to address the activities described in section 1629 of the FACT Act. The purpose of the program is to provide education and training for Cooperative Extension System agents, and other professionals in the university system or other government agencies, involved in the education and transfer of technical information concerning sustainable agriculture. Funds are used for statewide planning of sustainable agriculture programs and competitively awarded projects on a regional basis.

New Technologies for Agricultural Extension - Competitively awarded projects that support an Internet-based tool that provides fast and convenient access to objective, peer-reviewed, and researched-based information, education, and guidance on subjects that include food safety, homeland security, natural resources and environment, youth development, families, nutrition and health, and other agricultural related topics.

3. Payments to 1890 Colleges and Tuskegee University and West Virginia State University - Section 1444 of NARETPA, (7 U.S.C. 321-329), provides support to the 1890 Land-Grant Colleges and Universities for fostering, developing, implementing and improving extension educational programs to benefit their clientele. The general provisions, section 753, of Pub. L. 107-76 designated West Virginia State University as eligible to receive funds under any Act of Congress authorizing funding to 1890 Institutions, including Tuskegee University. Eligible State institutions are required to submit a five-year Plan of Work to NIFA for approval before these formula funds are distributed. Section 7121 of FCEA amended section 1444(a)(2) (7 U.S.C. 3221(a)(2)) to require that at least 20 percent of the total appropriations for each fiscal year under the Smith-Lever Act be allocated for payments to 1890 Institutions for extension activities. Funds will be distributed as follows:

-4 percent to NIFA for administrative, technical, and other services;
-Payments to States in fiscal year 1978 are a fixed base. Of funds in excess of this amount:
- 20 percent is distributed equally to each State;
- 40 percent is distributed in an amount proportionate to the rural population of the State in which the eligible institution is located to the total rural population of all States in which eligible institutions are located; and
-40 percent is distributed in an amount proportionate to the farm population of the State in which the eligible institution is located to the total farm population of all States in which eligible institutions are located.

In accordance with section 1449(c) of NARETPA (7 U.S.C. 3222d), Federal funds provided under section 1444 must be matched by the State from non-Federal sources. Section 1449(c) provides that the Secretary of Agriculture may waive the matching funds requirement above the 50 percent level for any fiscal year for an eligible institution of a State if the Secretary determines that the State will be unlikely to satisfy the matching requirement.

Allotments to Tuskegee University and Alabama A&M University shall be determined as if each institution were in a separate State. Four percent of the funds appropriated under this program is set-aside for Federal Administration.

4. 1890 Facilities (Sec. 1447) - Section 1447 of NARETPA, 7 U.S.C. 3222b, funds are used to upgrade research, extension, and teaching facilities at the 1890 land-grant colleges, including Tuskegee University and West Virginia State University.

5. The Renewable Resources Extension Act - Renewable Resources Extension Act of 1978, 16 U.S.C. 1671-1676, provides funding for expanded natural resources education programs. Funds are distributed primarily by formula to 1862 and 1890 Land-Grant Institutions for educational programs, and a limited number of special emphasis national programs.

6. Rural Health and Safety - Rural Health and Safety Education Act of 1990, section 2390 of the FACT Act, 7 U.S.C. 2661 note - This program helps rural residents avoid the numerous obstacles to maintaining their health status. This program focuses on training health care professionals in rural areas.

7. Federal Administration (direct appropriation) - Provides a portion of the general operating funds for the Federal staff, and national program planning, coordination, and program leadership for the extension work in partnership with the States and territories. Agriculture in the Classroom (AITC) program is administered under the federal administration line. AITC advances agricultural literacy through a grassroots network of State coordinators, school teachers, agribusiness leaders, and other educators by supporting initiatives that include expanding outreach to underrepresented populations; regional demonstration projects; integration of information technology to reduce program delivery costs; and outstanding teacher recognition initiatives.

8. Extension Services at the 1994 Institutions - The 1994 Act authorizes appropriations for Native American communities and Tribal Colleges for extension activities as set forth in the Smith Lever Act. Funding is awarded on a competitive basis. Section 532 was amended to add Ilisagvik College, bringing the total number of eligible participants up to 34.

9. Food Animal Residue Avoidance Database Program (FARAD) – Section 7642 of AREERA authorizes the FARAD program. The program is a computer-based decision support system designed to provide livestock producers, extension specialists, and veterinarians with practical information on how to avoid drug, pesticide, and environmental contaminant residue problems.

10. Grants to Youth Serving Institutions - Section 410 of AREERA (7 U.S.C. 7630) provides grants to the Girl Scouts of the United States of America, Boy Scouts of America, National 4-H Council, and the National Future Farmers of America Organization to establish projects to expand the programs carried out by the organizations in rural areas and small towns. Section 7309 of FCEA amended section 410 by providing maximum flexibility in content delivery to each organization to ensure that the unique goals of each organization, as well as the local community needs, are fully met. Additionally, recipients of funds under section 410 may redistribute all or part of the funds received to individual councils or local chapters within the councils without further need of approval from the Secretary.

11. Women and Minorities in Science, Technology, Engineering, and Mathematics Fields - Section 7204 of FCEA amended section 1672 of the FACT Act which provides grants to increase participation by women and underrepresented minorities from rural areas in the field of science, technology, engineering, and mathematics. Additionally, priority will be given to eligible institutions that carry out continuing programs funded by the Secretary.

12. Beginning Farmer and Rancher Development Program - Section 7410 of FCEA amended section 7405 of FSRIA and made available $19,000,000 for FY 2010 through FY 2012. The purpose of this mandatory, competitive program is to support the nation's beginning farmers and ranchers by making competitive grants to new and established local and regional training, education, outreach, and technical assistance initiatives that address the needs of beginning farmers and ranchers. To be eligible for a grant under this authority, an applicant must be a collaborative State, tribal, local, or regionally-based network or partnership of public or private entities which may include a State cooperative extension service; a Federal, state, or tribal agency; a community-based and non-governmental organization; a college or university (including an institution offering associate's degree) or a foundation maintained by a college or university; or any other appropriate partner.

All grantees are required to provide a 25 percent match in the form of cash or in-kind contributions. The maximum amount of an award is $250,000 and the maximum project period is three years.

13. Biodiesel Fuel Education Program - The goals of this program as originally established in Section 9004 of FSRIA were to stimulate biodiesel consumption and the development of a biodiesel infrastructure. Congressionally mandated funding will support competitively awarded grants to address the need to balance the positive environmental, social, and human health impacts of biodiesel utilization with the increased per gallon cost to the

user. Biodiesel Education projects will focus on the development of practical indicators or milestones to measure their progress towards achieving the following objectives:
A) Enhance current efforts to collect and disseminate biodiesel information;
B) Coordinate with other biodiesel educational or promotional programs, and with Federal, State, and local programs aimed at encouraging biodiesel use, including the Energy Policy Act of 2005 program;
C) Create a nationwide networking system that delivers biodiesel information to targeted audiences, including users, distributors, and other infrastructure-related personnel;
D) Indentify and document the benefits of biodiesel (e.g., lifecycle costing); and
E) Gather data pertaining to information gaps and develop strategies to address the gaps.

Mandatory funding in the amount of $1,000,000 is to be made available for each of FY 2008 through FY 2012 to carry out this program.

14. Agriculture Risk Management Education Program - Section 133 of the Agricultural Risk Protection Act of 2000 amended the Federal Crop Insurance Act to establish a competitive grants program for educating agricultural producers on the full range of risk management activities. These activities include futures, options, agricultural trade options, crop insurance, cash forward contracting, debt reduction, production diversification, marketing plans and tactics, farm resources risk reduction, and other appropriate risk management strategies. This program brings the existing knowledge base to bear on risk management issues faced by agricultural producers and expands the program throughout the Nation on a regional and multi-regional basis. Mandatory funding in the amount of $5,000,000 is to be made available annually.

Integrated Activities

The following programs are included under the integrated activities account:

Section 7129 of FCEA amended section 406(b) of AREEERA (7 U.S.C. 7626(b)) by adding Hispanic-serving agricultural colleges and universities (HSACUs) to the eligibility for section 406 funds. HSACUs are defined in section 1404(10) of NARETPA as colleges and universities that (1) qualify as Hispanic-serving institutions; and (2) offer associate, bachelors, or other accredited degree programs in agriculture-related fields. The following programs are provided pursuant to the authority found in section 406. Funding for all programs is provided on a competitive basis.

1. Water Quality - This program assists the State Agricultural Experiment Stations and the Cooperative Extension System to become viable partners with other State and Federal agencies in addressing water quality problems of National importance.

2. Regional Pest Management Centers - Pest management centers are the focal point for team building efforts, communication networks, and stakeholder participation within a given region. The centers bring together and help focus the institutional and individual expertise needed to address successfully a range of pest management issues confronting farmers and other pest managers (e.g., regulatory restrictions, development of pest resistance, invasive species, and biotechnology).

3. Methyl Bromide Transition Program - This program is designed to support the discovery and implementation of practical pest management alternatives for commodities affected by the methyl bromide phase-out. The program focuses on short- to medium-term solutions for all commodities at risk using either combinations of presently available technologies or some newly developed practices.

4. Organic Transition Program - This program supports the development and implementation of biologically based pest management practices that mitigate the ecological, agronomic and economic risks associated with a transition from conventional to organic agricultural production systems.

Additional authorities for competitive integrated programs include:

1. Regional Rural Development Centers - Section 2(c)(1)(B) of the 1965 Act (7 U.S.C. 450i(c)(1)(B)) provides funds at four regional centers in Pennsylvania, Mississippi, Utah, and Iowa. Programs are designed to improve the

social and economic well-being of rural communities in their respective regions. These funds are distributed according to the extent of the problem that requires attention in each state.

2. Food and Agriculture Defense Initiative Program - Section 1484 of NARETPA provides support for the National Plant Diagnostic Network and the National Animal Health Laboratory Network to identify and respond to high risk biological pathogens in the food and agricultural system. The network will be used to increase the ability to protect the Nation from disease threats by identifying, containing, and minimizing disease threats. The Extension Disaster Education Network (EDEN) also is supported under this program. EDEN is a collaborative multi-state effort led by State extension services across the country to improve the delivery of services to citizens affected by disasters. Beginning in FY 2010, the program also will support the development of a pest risk management tool for Asian soybean rust and other pathogens of legumes.

3. Organic Agriculture Research and Extension Initiative - Section 7206 of FCEA amended section 1672B of the FACT Act to provide $20,000,000 for FY 2010 through FY 2012 for the Organic Agricultural Research and Extension Initiative. The purpose of this congressionally mandated program is to make competitive grants to support research and extension activities regarding organically grown and processes agricultural commodities.

4. Specialty Crop Research Initiative - Section 7311 of FCEA amended Title IV of AREERA (7 U.S.C. 7621 et seq.) to establish a specialty crop research and extension initiative to address the critical needs of the specialty crop industry by developing and disseminating science-based tools to address needs of specific crops and their regions. The Specialty Crop Research Initiative (SCRI) competitive grants program was established to solve critical industry issues through research and extension activities. Specialty crops are defined as fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops including floriculture. SCRI will give priority to projects that are multistate, multi-institutional, or trans-disciplinary; and include explicit mechanisms to communicate results to producers and the public. Projects must address at least one of the following five focus areas:

A) Research in plant breeding, genetics, and genomics to improve crop characteristics;
B) Efforts to identify and address threats from pests and diseases, including threats to pollinators;
C) Efforts to improve production efficiency, productivity, and profitability over the long term;
D) New innovations and technology, including improved mechanization and technologies that delay or inhibit ripening; and
E) Methods to prevent, detect, monitor control, and respond to potential food safety hazards in the production and processing of specialty crops.

Eligible applicants for grants under this authority include Federal agencies, national laboratories, colleges and universities, research institutions and organizations, private organizations or corporations, State agricultural experiment stations, individuals, and groups consisting of two or more entities defined in this sentence. Mandatory funding in the amount of $50,000,000 is to be made available for each of FY 2009 through FY 2012 to carry out the SCRI.

Biomass Research and Development Initiative

The purpose of this initiative, authorized under Section 9008 of FSRIA, is to competitively award grants, contracts, and financial assistance to eligible entities to carry out research and development and demonstration of: (1) Biofuels and biobased products; and (2) the methods, practices, and technologies, for the production of biofuels and biobased products. This program was transferred on October 1, 2008, from Rural Development to NIFA. Awardees are required to cost share at 20 percent. Waiver authority for the cost share requirement is provided to the Secretary. To be eligible for an award, an applicant must be an institution of higher education, a National Laboratory, a Federal research agency, a State research agency, a private sector entity, a nonprofit organization, or a consortium of two or more of the entities defined in this sentence. Mandatory funding is made available in the amount of $28,000,000 in FY 2010, $30,000,000 in FY 2011, and $40,000,000 in FY 2012.

This initiative requires the Secretary of Agriculture and the Secretary of Energy, in consultation with the Environmental Protection Agency and heads of other appropriate departments and agencies to direct the initiative in the following three areas:

A) Feedstocks development;
B) Biofuels and biobased products development; and

C) Biofuels development analysis.

Community Food Projects

Section 25 of the Food Stamp Act of 1977, as amended by Section 4125 of the Farm Security and Rural Investment Act of 2002, authorized funding in support of competitively awarded Community Food Projects (CFP). The objectives of the CFP Program are to increase the food self-reliance of communities; promote comprehensive responses to local food, farm, and nutrition issues; develop innovative linkages between the public, for-profit, and nonprofit food sectors; and encourage long-term planning activities and comprehensive multi-agency approaches. Projects are intended to bring together stakeholders from the distinct parts of the food system and to foster understanding of national food security trends and how they might improve local food systems. Mandatory funding in the amount of $5,000,000 is provided annually.

For NIFA program coordination and planning are carried out by staff located entirely in the Washington, D.C. area. As of September 30, 2011, there were 394 permanent full-time employees and 38 other.

Agency Audit Reports

OMB Circular A-133 Audits

The audits below are ongoing in fiscal year 2012.

Year	Audit Report Number	Name	Audit Period Year Ended
2002	02-1001	Arkansas Land and Farm Development Corp.	9/30/2002
2002	02-1002	Auburn University	9/30/2002
2002	02-1003	Brown University	6/30/2002
2002	02-1005	College of Micronesia Land Grant Program	9/30/2002
2002	02-1006	Commonwealth of Virginia - Department of Accounts	6/30/2002
2002	02-1007	Cornell University	6/30/2002
2002	02-1008	Howard University	6/30/2002
2002	02-1009	Institute of Paper Science and Technology, Inc.	6/30/2002
2002	02-1011	Miami University	6/30/2002
2002	02-1012	National Tribal Development Association	12/31/2002
2002	02-1013	Northern Marinas College	9/30/2002
2002	02-1014	Northwestern University	8/31/2002
2002	02-1015	Rural Action, Inc.	12/31/2002
2002	02-1016	South Carolina State University	6/30/2002
2002	02-1017	Southeastern Healthcare System, Inc./Memorial Hospital	9/30/2002
2002	02-1018	State of Colorado	6/30/2002
2002	02-1019	State of Florida	6/30/2002
2002	02-1020	State of Georgia	6/30/2002
2002	02-1021	State of North Carolina	6/30/2002
2002	02-1022	State of Texas c/o Comptroller of Public Accounts	8/31/2002
2002	02-1023	State of Wisconsin	6/30/2002
2002	02-1024	The General Hospital Corporation	9/30/2002
2002	02-1026	University of Alabama	9/30/2002
2002	02-1027	University of Massachusetts	6/30/2002
2002	02-1028	Thomas Jefferson Institute for Crop Diversification	12/31/2002
2002	02-1029	Tuskegee University	6/30/2002

2002	02-1030	University of Arkansas for Medical Sciences	6/30/2002
2002	02-1031	University of Georgia	6/30/2002
2002	02-1032	University of Missouri System	6/30/2002
2002	02-1033	University of New Mexico	6/30/2002
2002	02-1034	University of Pennsylvania	6/30/2002
2002	02-1036	University of the Virgin Islands	9/30/2002
2002	02-1037	University of Wyoming	6/30/2002
2002	02-1039	University of Arkansas for Medical Sciences	6/30/2002
2002	02-1042	America's Clean Water Foundation, Inc.	6/30/2002
2002	02-1043	Blackfeet Tribe of Blackfeet Indian Reservation	9/30/2002
2002	02-1044	Pascua Yaqui Tribe	9/30/2002
2002	02-1045	State of South Carolina	6/30/2002
2002	02-1046	University of Denver (Colorado Seminary)	6/30/2002
2004	04-1000	Rural Resources Community Action	2/29/2004
2004	04-1046	Delaware State University	6/30/2004
2004	04-1047	Kentucky State University	6/30/2004
2004	04-1048	Little Priest Tribal College, Inc.	6/30/2004
2005	05-1009	Georgia Tech Research Corp./Georgia Institute of Technology	6/30/2005
2005	05-1028	State of Texas c/o Comptroller of Public Accounts	8/31/2005
2005	05-1033	The University of Massachusetts	6/30/2005
2005	05-1034	Tuskegee University	6/30/2005
2005	05-1036	University of California	6/30/2005
2005	05-1037	University of Delaware	6/30/2005
2005	05-1038	University of Hawaii	6/30/2005
2005	05-1041	University of Medicine and Dentistry of New Jersey	6/30/2005
2005	05-1043	University of Pennsylvania	6/30/2005
2005	05-1045	University of Southern California	6/30/2005
2005	05-1046	University of the Virgin Islands	9/30/2005
2005	05-1047	University of Vermont	6/30/2005
2006	06-1007	College of Micronesia	9/30/2006
2006	06-1010	Georgia Tech Research Corp./Georgia Institute of Technology	6/30/2006
2006	06-1013	Illinois Institute of Technology	5/31/2006
2006	06-1020	Northern Marianas College	9/30/2006
2006	06-1027	South Carolina State University	6/30/2006
2006	06-1035	Confederated Tribes of the Goshute Reservation	9/30/2006
2006	06-1036	National tribal Development Association	12/31/2006
2006	06-1041	School District of Monroe	6/30/2006
2006	06-1048	University of Richmond and its Affiliates	6/30/2006
2006	06-1049	University of Southern California	6/30/2006
2006	06-1050	University of Wyoming	6/30/2006
2006	06-1056	State of North Dakota	6/30/2006
2006	06-1057	State of Wisconsin	6/30/2006
2006	06-1058	The Ohio State University	6/30/2006
2006	06-1059	Tuskegee University	6/30/2006
2006	06-1060	University of Missouri System	6/30/2006
2007	07-1000	Alabama A&M University	9/30/2007
2007	07-1001	Auburn University	9/30/2007
2007	07-1002	Battelle Memorial Institute	9/30/2007

2007	07-1003	Carnegie Institution of Washington	6/30/2007
2007	07-1004	Case Western Reserve University	6/30/2007
2007	07-1005	City of Hope Affiliates	9/30/2007
2007	07-1006	Cleveland Clinic	12/31/2007
2007	07-1007	College of Micronesia	9/30/2007
2007	07-1008	Community Alliance with Family Farmers	12/31/2007
2007	07-1009	Georgia Institute of Technology/Georgia Tech Research Corp.	6/30/2007
2007	07-1010	Keck Graduate Institute of Applied Life Sciences	6/30/2007
2007	07-1011	Massachusetts Institute of Technology	6/30/2007
2007	07-1012	New England Medical Center Hospitals, Inc.	9/30/2007
2007	07-1013	Northern Marianas College	9/30/2007
2007	07-1014	Rural Action, Inc.	12/31/2007
2007	07-1016	Sheldon Jackson College	6/30/2007
2007	07-1017	Smithsonian Institution	9/30/2007
2007	07-1019	Southern Illinois University	6/30/2007
2007	07-1020	St. Augustine College	6/30/2007
2007	07-1021	State of Colorado	6/30/2007
2007	07-1022	State of Florida	6/30/2007
2007	07-1023	State of Montana	6/30/2007
2007	07-1024	State of Tennessee	6/30/2007
2007	07-1025	State of Texas c/o Comptroller of Public Accounts	8/31/2007
2007	07-1026	State of Utah	6/30/2007
2007	07-1028	The Ohio State University	6/30/2007
2007	07-1029	University of Delaware	6/30/2007
2007	07-1030	University of Hawaii/State of Hawaii	6/30/2007
2007	07-1031	University of Medicine and Dentistry of New Jersey	6/30/2007
2007	07-1032	University of Missouri System	6/30/2007
2007	07-1033	University of Puerto Rico	6/30/2007
2007	07-1035	University of Vermont and State Agricultural College	6/30/2007
2007	07-1037	Waianae District Comprehensive Health and Hospital Board, Inc. & Subsidiary	6/30/2007
2007	07-1038	Wayne State University	9/30/2007
2007	07-1039	Youngstown State University	6/30/2007
2007	07-1045	Board of Regents Southwestern Indian Polytechnic	12/31/2007
2007	07-1046	Boise State University	6/30/2007
2007	07-1047	Donald Danforth Plant Science Center	12/31/2007
2007	07-1048	State of South Dakota	6/30/2007
2007	07-1049	Territory of American Samoa	9/30/2007
2008	08-1009	Georgia Tech Research Corp./Georgia Institute of Technology	6/30/2008
2008	08-1038	Board of Regents Southwestern Indian Polytechnic	12/21/2008
2008	08-1039	Elcho School District	6/30/2008
2008	08-1040	National Tribal Development Association	9/30/2008
2008	08-1041	Riverdale School District	6/30/2008
2008	08-1042	School District of Omro	6/30/2008
2009	09-1000	Abbotsford School District	6/30/2009
2009	09-1001	American Samoa Community College	9/30/2009
2009	09-1002	American University	4/30/2009
2009	09-1003	Archbold Expedition	12/31/2009

2009	09-1005	Auburn University	9/30/2009
2009	09-1006	Brown University	6/30/2009
2009	09-1007	Cleveland Clinic	12/31/2009
2009	09-1008	College of Micronesia	9/30/2009
2009	09-1009	Delaware State University	6/30/2009
2009	09-1010	Door County, Wisconsin	12/31/2009
2009	09-1011	Edgar School District	6/30/2009
2009	09-1012	Georgetown University	6/30/2009
2009	09-1013	Georgia State University Research Foundation, Inc. & Affiliate	6/30/2009
2009	09-1014	Gillett School District	6/30/2009
2009	09-1015	Hawaii Agriculture Research Center	6/30/2009
2009	09-1016	Illinois Institute of Technology	5/31/2009
2009	09-1017	Kaiser Foundation Hospital	12/31/2009
2009	09-1018	Keck Graduate Institute of Applied Life Sciences	6/30/2009
2009	09-1019	Lincoln County R-II School District	6/30/2009
2009	09-1020	Kentucky State University	6/30/2009
2009	09-1021	Little Big Horn College	9/30/2009
2009	09-1022	Marshall School District	6/30/2009
2009	09-1023	Nevada System of Higher Education	6/30/3009
2009	09-1024	Massachusetts Institute of Technology	6/30/2009
2009	09-1025	Northeastern University	6/30/2009
2009	09-1026	School District of Granton	6/30/2009
2009	09-1027	Northern Marianas College	9/30/2009
2009	09-1028	The Oceanic Institute	6/30/2009
2009	09-1029	Pecatonica Area School District	6/30/2009
2009	09-1030	Racine Unified School District	6/30/2009
2009	09-1032	State of Florida	6/30/2009
2009	09-1033	State of Montana	6/30/2009
2009	09-1034	State of Texas C/O Comptroller of Public Accounts	8/31/2009
2009	09-1036	State System of Higher Education	6/30/2009
2009	09-1037	Syracuse University	6/30/2009
2009	09-1038	Texas A&M Research Foundation	8/31/2009
2009	09-1039	The Ohio State University	6/30/2009
2009	09-1040	The University of Alabama	9/30/2009
2009	09-1041	University of Delaware	6/30/2009
2009	09-1042	University of Guam	9/30/2009
2009	09-1043	University of Idaho	6/30/2009
2009	09-1044	University of Illinois	6/30/2009
2009	09-1046	University of Puerto Rico	6/30/2009
2009	09-1047	University of Wyoming	6/30/2009
2009	09-1048	Woods Hole Research Center	6/30/2009
2010	10-1001	University of Wyoming	6/30/2010
2010	10-1002	Polytechnic Institute of New York University	6/30/2010
2010	10-1003	University of Nebraska	6/30/2010
2010	10-1004	State of Florida	6/30/2010
2010	10-1009	Christiana Care Health System, Inc.	6/30/2010
2010	10-1017	Illinois Institute of Technology	5/31/2010
2010	10-1018	Joslin Diabetes Center, Inc.	9/30/2010

2010	10-1020	Marshall Public Schools	6/30/2010
2010	10-1025	New Mexico Highlands University	6/30/2010
2010	10-1030	State of Connecticut	6/30/2010
2010	10-1037	University of Medicine and Dentistry of New Jersey	6/30/2010
2010	10-1039	Western Michigan University	6/30/2010
2010	10-1040	Wisconsin Heights School District	6/30/2010
2010	10-1041	Worchester Poly Institute	6/30/2010
2010	10-1046	University of Dayton	6/30/2010
2010	10-1047	College of Menominee Nation	6/30/2010
2010	10-1048	University of Alabama	9/30/2010
2010	10-1049	American Samoa Community College	9/30/2010
2010	10-1050	Seattle Children's Hospital	9/30/2010
2010	10-1051	Northern Marianas College	9/30/2010

OIG Reports (OIG Audit No. and Title)

50099-84-Hy USDA's Response to Colony Collapse Disorder. In process.
50601-16-Te Controls over Genetically Engineered Animal and Insect Research. In process.
50703-1-23 Trade Adjustment Assistance for Farmer's Program. In process.

GAO Studies (GAO Job Code and Title)

130924 Charter Schools Legal Status. Report was issued December 2010.
130975 Multiple Employment and Training Programs. Report was issued January 2011.
250574 Efficiency and Effectiveness of Fragmented Economic Development Programs. Report was issued May 2011.
361204 Homeland Security: Actions Needed to Improve Response to Potential Terrorist Attacks and Natural Disasters Affecting Food and Agriculture. Report was issued September 2011.
361223 Antibiotic Resistance: Agencies Have Made Limited Progress Addressing Antibiotic Use in Animals. Report was issued September 2011.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Available Funds and Staff Years
(Dollars in thousands)

Item	2010 Actual		2011 Actuals		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Detailed information for this section can be found in the Project Statement(s).								
Research and Education Activities:								
Discretionary Appropriations	$792,510	220	$704,447	234	$710,342	247	$737,775	249
Extension Activities								
Discretionary Appropriations	494,923	158	480,092	155	475,183	155	462,473	152
Mandatory Appropriations	25,000	0	25,000	0	24,000	0	5,000	0
Integrated Activities								
Discretionary Appropriations	60,022	10	37,000	8	21,482	8	43,542	9
Mandatory Appropriations	70,000	0	70,000	0	70,000	0	0	0
Biomass Research and Development Initiative	28,000	0	30,000	0	40,000	0	0	0
Rescission	0	0	-2,434	0	0	0	0	0
Adjusted Appropriation	1,470,455	388	1,344,105	397	1,341,007	410	1,248,790	410
Balance Available, Start of Year	200,808	0	233,482	0	219,410	0	33,912	0
Other Adjustments			23,983					
Total Available	1,671,263	388	1,601,570	397	1,560,417	410	1,282,702	410
Lapsing Balances	-70	0	-12,147	0	0	0	0	0
Balance Available, End of Year	-233,482	0	-219,410	0	-33,912	0	0	0
Obligations	1,437,711	0	1,370,013	0	1,526,505	0	1,282,702	0
Other Funding								
Improved Nutritional Delivery of Food Assistance Grants	4,000	0	0	0	0	0	0	0
Total Other Funding	4,000	0	0	0	0	0	0	0
Subtotal obligations, NIFA	1,441,711	0	1,370,013	0	1,526,505	0	1,282,702	0
Other Appropriations								
Biodiesel Fuel Education Program	1,000	0	1,000	0	1,000	0	0	0
Community Food Projects Program	5,000	0	5,000	0	5,000	0	5,000	0
Trade Adjustment Assistance for Farmers	17,150	0	0	0	0	0	0	0
Total, Other Appropriations	23,150	0	6,000	0	6,000	0	5,000	0
Total, Appropriations	1,464,861	0	1,376,013	0	1,532,505	0	1,287,702	0
Obligations under other USDA appropriations:								
Research and Education Activities:								
Agricultural Research Services:								
Biotechnology Risk Assessment (ARS)	1,810	0	1,667	0	1,726	0	1,726	0
Salary, Benefits, and Operating Expenses for Detailee	11	0	0	0	0	0	0	0
IR-4 Quality Assurance Program	313	0	338	0	338	0	338	0
Foreign Agricultural Service:								
Salary, Benefits, and Operating Expenses for Detailees	43	0	0	0	15	0	15	0

Item	2010 Actual		2011 Actuals		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Forest Service:								
Biotechnology Risk Assessment	63	0	63	0	63	0	63	0
Assessment of Carbon Stock	0	0	500	0	0	0	0	0
Graduate Training Joint Funding	250	0	150	0	250	0	250	0
National Atmospheric Deposition Program	198	0	206	0	223	0	223	0
Climate Change Ecosystem Program	0	0	500	0	0	0	0	0
Risk Management Agency:								
Integrated Pest Management Pest Information Platform for Exte	1,500	0	0	0	0	0	0	0
Salary, Benefits for Detailees-OSDFR	0	0	262	0	0	0	0	0
Farm Service Agency								
Tree Genome Research Under Ag./Food Research Initiative	10	0	0	0	0	0	0	0
Nitrogen Cycling AG Watersheds	0	0	1,000	0	0	0	0	0
Various agencies sharing cost of the USDA SBIR Program	3,020	0	2,391	0	1,874	0	1,952	0
Various research agencies sharing the cost of the Current Resear	444	0	640	0	640	0	640	0
Miscellaneous Reimbursements	0	0	52	0	0	0	0	0
Other Anticipated Reimbursements	0	0	0	0	3,500	0	3,500	0
Subtotal, Res./Ed. Other USDA Appropriations	7,664	0	7,769	0	8,629	0	8,707	0
Extension Activities:								
Foreign Agricultural Service:								
Afghanistan Extension Project	0	0	15,577	0	0	0	0	0
SAMS Project India	64	0	0	0	0	0	0	0
Animal and Plant Health Inspection Service								
Diagnostician Training	128	0	0	0	0	0	0	0
First Detector-Arthropod	118	0	0	0	0	0	0	0
Pest Detection Training for Underserved Audiences	123	0	0	0	0	0	0	0
People's Garden	0	0	200	0	200		200	0
Collaborative e-Learning	80	0	0	0	0	0	0	0
Botanical Gardens	300	0	0	0	0	0	0	0
National Atmospheric Deposition Program	0	0	0		100	0	100	
Small Farms Outreach	100	0	0	0	0	0	0	0
Food Safety and Nutrition Service								
People's Garden	0	0	250	0	250	0	250	0
Forest Service:								
Assessment of Carbon Stock	500	0	0	0	0	0	0	0
Climate Change Ecosystem	500	0	0	0	0	0	0	0
People's Garden	0	0	150	0				
Miscellaneous Reimbursements	0	0	302	0	0	0	0	0
Other Anticipated Reimbursements	0	0	0	0	16,000	0	16,000	0
Subtotal, Extension Other USDA Appropriations	1,912	0	16,479	0	16,550	0	16,550	0
Total, NIFA Other USDA Appropriations	9,576	0	24,248	0	25,179	0	25,257	0
Other Federal Funds:								
Research and Education Activities:								
Army Corps of Engineers:								
Multifunctional Water Resources Management program	55	0	0	0	100	0	100	0
Role of Internet in Knowledge Transfer Program	0	0	0	0	100	0	100	0
Support of USAC Mapping Program	0	0	198	0	0	0	0	0
Department of Commerce:								
NOAA National Atmospheric Deposition Program	187	0	207	0	207	0	207	0
Department of Defense:								
U.S. Army Environmental Center Liaison	215	0	0	0	0	0	0	0
Travel of Detailee	2	0	0	0	0	0	0	0
EFMP Benchmark Study	500	0	0	0	0	0	0	0
Medicaid Review Study	500	0	0	0	0	0	0	0

Item	2010 Actual		2011 Actuals		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Department of Interior								
Geological Survey, Atmospheric Deposition	617	0	715	0	0	0	0	0
National Park Service, Atmospheric Deposition	352	0	375	0	375	0	375	0
Fish and Wildlife Service National Trends Network	32	0	0	0	0	0	0	0
Bureau of Land Management, Atmospheric Deposition	42	0	0	0	0	0	0	0
Department of Health and Human Service:								
Foreign Animal Disease Countermeasure Program	1,353	0	0	0	0	0	0	0
Department of State								
Salary, Benefits, and Operating Expenses for Detailee	0	0	205	0	205	0	205	0
Environmental Protection Agency:								
NOAA National Atmospheric Deposition Program	187	0	431	0	207	0	207	0
Miscellaneous Reimbursements	0	0	117	0	0	0	0	0
Other Anticipated Reimbursements	0	0	0	0	2,100	0	2,100	0
Subtotal, Res/Educ. Other Federal Funds	4,042	0	2,248	0	3,294	0	3,294	0
Extension Activities:								
Department of Defense:								
Family Life Skills	3,951	0	2,017	0	1,524	0	1,524	0
Army Family Advocacy Program	0	0	1,630	0	1,630	0	1,630	0
Army Youth Development Project	3,000	0	0	0	1,000	0	1,000	0
Air Force 4-H Programs	790	0	1,700	0	1,500	0	1,500	0
Air Force Advocacy Program	810	0	950	0	500	0	500	0
Air Force Psychological Health	0	0	969	0	0	0	0	0
Child Care Lab School	0	0	500	0	500	0	500	0
Child and Youth Deployment Support	0	0	2,000	0	2,000	0	2,000	0
Evidence Based Program	0	0	228					
Family Education and Advocacy Programs	205	0	0	0	0	0	0	0
Family Readiness Program at University of AZ	0		2,000	0	0	0	0	0
Family Readiness Program at Purdue	500	0	500	0	500	0	500	
Autism Phase II Study	500	0	0	0	0	0	0	0
Internship for Child Care Centers, Purdue	0	0	414		400		400	
Extension Partnership	14,600	0	850	0	1,000	0	1,000	0
Military Internship Program	426	0	0	0	0	0	0	0
Military Community and Family Policy	0		1,000	0	1,000	0	1,000	0
Cornell-FMWRC Family Advocacy Program	517	0	0	0	400	0	400	0
Second Language and Culture (GWU)	0	0	2,000	0	0	0	0	0
Substance Abuse Program	0	0	226	0	226	0	226	0
Survivor Outreach Service Program	0	0	122	0	0	0	0	0
University of Georgia FMWRC Survivor Outreach Program	961	0	0	0	0	0	0	0
Youth Adventure Camps, Purdue	0	0	1,500	0	1,500	0	1,500	0
4-H Military Youth Program	26,199	0	11,592	0	11,590	0	11,590	0
4-H Military Partnership Project	0	0	936	0	700	0	700	0
Readiness at Penn State	0	0	1,000	0	500	0	500	0
Department of Housing and Urban Development:								
Healthy Homes Project	350	0	0	0	0	0	0	0
IPM Training to Public Housing Authorities	30	0	310	0	310	0	310	0
Department of Interior:								
Fish and Wildlife Service 4-H Awards Program	261	0	0	0	65	0	65	0
U.S. Department of Navy:								
Evaluation/Impact Assessment	250	0	0	0	0	0	0	0
Family Resiliency Conference	330	0	152	0	0	0	0	0
Environmental Protection Agency:								
Training for Pesticide Applicators	1,300	0	500	0	500	0	500	0
Clean Water Act	0	0	220	0	220	0	220	0
Other Anticipated Reimbursements	0	0	0	0	5,935	0	5,935	
Miscellaneous Reimbursements	0	0	285		0		0	
Subtotal, Extension Other Federal Funds	54,980	0	33,601	0	33,500	0	33,500	0
Total, NIFA Other Federal Funds	59,022	0	35,848	0	36,794	0	36,794	0
Total, NIFA Available Funds	1,533,459	388	1,436,109	397	1,594,478	410	1,349,753	410

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Permanent Positions by Grade and Staff Year Summary

Item	2010			2011			2012			2013		
	Wash D.C.	Field	Total	Wash D.C.	Field	Total	Wash D.C.	Field	Total	Wash D.C	Field	Total
Senior Executive Service	8	0	8	8	0	8	9	0	9	9	0	9
GS-15	75	0	75	80	0	80	77	0	77	77	0	77
GS-14	53	0	53	53	0	53	53	0	53	53	0	53
GS-13	55	0	55	52	0	52	61	0	61	61	0	61
GS-12	66	0	66	63	0	63	67	0	67	67	0	67
GS-11	24	0	24	22	0	22	25	0	25	25	0	25
GS-10	3	0	3	3	0	3	3	0	3	3	0	3
GS-9	24	0	24	24	0	24	29	0	29	29	0	29
GS-8	18	0	18	16	0	16	13	0	13	13	0	13
GS-7	46	0	46	56	0	56	56	0	56	56	0	56
GS-6	23	0	23	17	0	17	14	0	14	14	0	14
GS-5	10	0	10	6	0	6	6	0	6	6	0	6
GS-4	5	0	5	3	0	3	5	0	5	5	0	5
GS-3	1	0	1	1	0	1	1	0	1	1	0	1
GS-2	1	0	1	1	0	1	1	0	1	1	0	1
Total Permanent Positions	412	0	412	405	0	405	420	0	420	420	0	420
Unfilled Positions	-36	0	-36	-11	0	-11	-13	0	-13	-13	0	-13
Total, Permanent Full-Time Employment, end-of-year	376	0	376	394	0	394	407	0	407	407	0	407
Staff Year Estimate	388	0	388	397	0	397	410	0	410	410	0	410

Research and Education Activities

Appropriation Language

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets).

Research and Education Activities

For payments to agricultural experiment stations, for cooperative forestry and other research, for facilities, and for other expenses, [$705,599,000] $732,730,000, as follows: to carry out the provisions of the Hatch Act of 1887 (7 U.S.C. 361a-i), [$236,334,000] $234,834,000; for grants for cooperative forestry research (16 U.S.C. 582a through a-7), $32,934,000; for payments to eligible institutions (7 U.S.C. 3222), $50,898,000, provided that each institution receives no less than $1,000,000; for special grants

1/ (7 U.S.C. 450i(c)), [$4,000,000; for competitive grants on improved pest control (7 U.S.C. 450i(c)), $15,830,000] $1,405,000; for competitive grants (7 U.S.C. 450(i)(b)), [$264,470,000] $325,000,000, to remain available until expended; [for the support of animal health and disease programs (7 U.S.C. 3195), $4,000,000; for supplemental and alternative crops and products (7 U.S.C. 3319d), $825,000; for grants for research pursuant to the Critical Agricultural Materials Act (7 U.S.C. 178 et seq.), $1,081,000, to remain available until expended;] for the 1994 research grants program for 1994 institutions pursuant to section 536 of Public Law 103–382 (7 U.S.C. 301 note), $1,801,000, to remain available until expended; [for rangeland research grants (7 U.S.C. 3333), $961,000;] for the veterinary medicine loan repayment program under section 1415A of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3151a), $4,790,000, to remain available until expended; [for grants and fellowships for food and agricultural sciences education under paragraphs (1), (5), and (6) of section 1417(b) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3152(b)), $9,000,000,

2/ to remain available until expended;] for higher education graduate fellowship grants (7 U.S.C. 3152(b)(6)), $3,851,000, to remain available until expended (7 U.S.C. 2209b); for higher education challenge grants (7 U.S.C. 3152(b)(1)), $5,643,000; for a higher education multicultural scholars program (7 U.S.C.

3152(b)(5)), $1,239,000, to remain available until expended (7 U.S.C. 2209b); for an education grants program for Hispanic-serving Institutions (7 U.S.C. 3241), $9,219,000; for competitive grants for the purpose of carrying out all provisions of 7 U.S.C. 3156 to individual eligible institutions or consortia of eligible institutions in Alaska and in Hawaii, with funds awarded equally to each of the States of Alaska and Hawaii, $3,194,000; for a secondary agriculture education program and 2-year post-secondary education, (7 U.S.C. 3152(j)), [$900,000] $981,000; for aquaculture grants (7 U.S.C. 3322), $3,920,000; for sustainable agriculture research and education (7 U.S.C. 5811), $14,471,000; for a program of capacity building grants (7 U.S.C. 3152(b)(4)) to institutions eligible to receive funds under 7 U.S.C. 3221 and

3/ 3222, $19,336,000, to remain available until expended (7 U.S.C. 2209b); [for capacity building grants for non-land-grant colleges of agriculture (7 U.S.C. 3319i), $4,500,000, to remain available until expended; for competitive grants for policy research (7 U.S.C. 3155), $4,000,000, which shall be obligated within 120 days of the enactment of this Act;] for payments to the 1994 Institutions pursuant to section 534(a)(1) of

4/ Public Law 103-382, $3,335,000; for grants for insular areas under sections 1490 and 1491 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3362 and 3363), $1,650,000

5/ [resident instruction grants for insular areas under section 1491 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3363), $900,000; for distance education grants for insular areas under section 1490 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3362), $750,000; for a competitive grants program for farm business management and benchmarking (7 U.S.C. 5925f), $1,450,000; for a competitive grants program regarding biobased energy (7 U.S.C. 8114), $2,200,000]; and for necessary expenses of Research and Education Activities,

6/ [$10,500,000] $14,229,000, of which [$2,600,000 for the Research, Education, and Economics Information System and $2,000,000 for the Electronic Grants Information System, are] $7,830,000, to remain available until expended, are for grants management systems.

Hispanic-Serving Agricultural Colleges and Universities Endowment Fund

7/ For the Hispanic-Serving Agricultural Colleges and Universities Endowment Fund under section 1456(b) (7 U.S.C. 3243(b)) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, $10,000,000, to remain available until expended.

Native American Institutions Endowment Fund

For the Native American Institutions Endowment Fund authorized by Public Law 103–382 (7 U.S.C. 301 note), $11,880,000, to remain available until expended.

Explanation of Change

The first change eliminates language for several line items that are not proposed for 2013, including: Improved Pest Control, Animal Health, Supplemental and Alternative Crops, Critical Agricultural Materials, Joe Skeen Institute for Rangeland Restoration, and the Grants for Institution Challenge, Multicultural Scholars and Graduate Fellowships Grants Program.

The second change adds language in 2013 for administration of Graduate Fellowships, Institution Challenge, and Multicultural Scholar programs as individual programs under this account.

The third change eliminates language for several line items that are not proposed for 2013, including: Capacity Building Grants for Non-Land-Grant Colleges of Agriculture, and Policy Research.

The fourth change adds language to consolidate grants for insular areas.

The fifth change eliminates language for several line items that are not proposed for 2013, including: Resident Instruction Grants for Insular Areas, Distance Education Grants for Insular Areas, Farm Business Management and Benchmarking Program, and Sun Grants.

The sixth change eliminates language in 2013 for Research, Education, and Economics Information System (REEIS) and E-Government individual programs and adds Grants Management Systems which consolidates IT activities previously supported under REEIS and E-Government.

The seventh change adds the language for the Hispanic-Serving Agricultural Colleges and Universities Endowment Fund. Section 7129 of the Food, Conservation, and Energy Act of 2008, provides for the establishment of an endowment fund for Hispanic-Serving Agricultural Colleges and Universities (HSACU). The Hispanic/Latino community is the fastest growing sector of the American population. This investment in the Hispanic-Serving Agricultural Colleges and Universities is needed to ensure institutions can effectively compete for NIFA competitive grants.

This endowment fund for HSACU's will assist in the development of a skilled and marketable student population for employment in the food and agriculture sector from the Hispanic-Serving Agricultural Colleges and Universities. These funds will remain available until expended.

RESEARCH AND EDUCATION ACTIVITIES
Lead-Off Tabular Statement

Appropriation Act, 2012	$705,599,000
Budget Estimate, 2013	732,730,000
Change from 2012 Appropriation	27,131,000

RESEARCH AND EDUCATION ACTIVITIES
Summary of Increases and Decreases

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Discretionary Appropriation:					
Hatch Act	$215,000	$21,334	$0	-1,500	234,834
McIntire-Stennis Cooperative Forestry	29,000	3,934	0	0	32,934
Evans-Allen Program (1890 Colleges and Tuskegee University)	48,500	2,398	0	0	50,898
Animal Health and Disease (Sec. 1433)	2,950	-6	1,056	-4000	0
Joe Skeen Institute for Rangeland Management	983	-2	-20	-961	0
New Era Rural Technology Program	875	-2	-873	0	0
Aquaculture Centers (Sec. 1475)	3,928	-8	0	0	3,920
Critical Agricultural Materials Act	1,083	-2	0	-1,081	0
Agriculture and Food Research Initiative	262,482	1,988	0	60,530	325,000
Sustainable Agriculture	14,500	-29	0	0	14,471
Alternative Crops	835	-2	-8	-825	0
Farm Business Management and Benchmarking Program	1,500	-3	-47	-1,450	0
Policy Research	0	0	4,000	-4,000	0
Sun Grant Program	2,250	-4	-46	-2,200	0
Capacity Building for Non-Land-Grant Colleges of Agriculture	0	0	4,500	-4,500	0
Higher Education Programs:					
Graduate Fellowship Grants	3,859	-8	-3,851	3,851	3,851
Institution Challenge Grants	5,654	-11	-5,643	5,643	5,643
Multicultural Scholars Program	1,241	-2	-1,239	1,239	1,239
Fellowship Grants, Challenge Grants and Multicultural Scholars Program	0	0	9,000	-9,000	0
Native American Institutions (Equity Grants)	3,342	-7	0	0	3,335
Hispanic Education Partnership Grants	9,237	-18	0	0	9,219
Secondary/2-year Post-secondary	983	-2	-81	81	981
Capacity Building Grants (1890 Institutions)	18,250	1,086	0	0	19,336

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
1994 Research Program	1,805	-4	0	0	1,801
Alaska Native-serving and Native Hawaiian-serving Edu. Grants	3,200	-6	0	0	3,194
Resident Instruction Grants for Insular Areas	900	-2	2	-900	0
Distance Education Grants for Insular Areas	750	-1	1	-750	0
Resident Instruction Grants for Insular Areas and Distance Education Grants for Insular Areas	0	0	0	1,650	1,650
Veterinary Medical Services Act	4,800	-10	0	0	4,790
Federal Administration:					
Electronic Grants Administration System	2,136	-4	-132	-2,000	0
Data Information System (REEIS)	2,704	-5	-99	-2,600	0
Grants Management System	0	0	0	7,830	7,830
Office of Extramural Programs (Grants)	440	-1	-439	440	440
Pay Costs and FERS	5,576	-11	335	-337	5,563
Peer Panels	397	-1	-396	396	396
Other Federal Administration	33,869	-33,869	0	0	0
Special Research Grants					
Global Change, UV-B monitoring	1,408	-3	-105	105	1,405
Forest Products Research	0	0	1,350	-1,350	0
Potato Research	0	1,433	-83	-1,350	0
Minor Use Animal Drugs	429	-429	0	0	0
Other (Earmark Projects)	87,192	-87,192	0	0	0
Improved Pest Control:					
Expert IPM Decision Support System	156	0	-3	-153	0
Integrated Pest Management	2,415	-5	-48	-2,362	0
Minor Crop Pest Management (IR-4)	12,180	-24	-243	-11,913	0
Pest Management Alternatives	1,434	-3	-29	-1,402	0
Total, Research and Education Activities	788,243	-89,503	6,859	27,131	732,730
Endowment Funds:					
Hispanic -Serving Ag. Colleges and Universities Endowment Fund	0	0	0	10,000	10,000
Native American Institutions Endowment Fund	11,880	0	0	0	11,880
Total Endowment Funds	11,880	0	0	10,000	21,880
Total, Appropriation or Change	800,123	-89,503	6,859	37,131	754,610

RESEARCH AND EDUCATION ACTIVITIES

Project Statement by Program

(On basis of Appropriation)
(Dollars in Thousands)

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Discretionary Appropriations:										
Hatch Act	$215,000	0	$236,334	0	$236,334	0	-$1,500	0	$234,834	0
McIntire-Stennis Cooperative Forestry	29,000	0	32,934	0	32,934	0	0	0	32,934	0
Evans-Allen Program (1890 Colleges and Tuskegee University)	48,500	0	50,898	0	50,898	0	0	0	50,898	0
Animal Health and Disease (Sec. 1433)	2,950	0	2,944	0	4,000	0	-4,000	0	0	0
Special Research Grants:										
Global Change, UV-B Monitoring	1,408	0	1,405	0	1,300	0	105	0	1,405	0
Minor Use Animal Drugs	429	0	0	0	0	0	0	0	0	0
Other (Earmark Projects)	87,192	0	1,433	0	2,700	0	-2,700	0	0	0
Total Special Research Grants	89,029	0	2,838	0	4,000	0	-2,595	0	1,405	0
Improved Pest Control										
Expert IPM Decision Support System	156	0	156	0	153	0	-153	0	0	0
Integrated Pest Management	2,415	0	2,410	0	2,362	0	-2,362	0	0	0
Minor Crop Pest Management (IR-4)	12,180	0	12,156	0	11,913	0	-11,913	0	0	0
Pest Management Alternatives	1,434	0	1,431	0	1,402	0	-1,402	0	0	0
Total, Improved Pest Control	16,185	0	16,153	0	15,830	0	-15,830	0	0	0
Critical Agricultural Materials Act	1,083	0	1,081	0	1,081	0	-1,081	0	0	0
Aquaculture Centers (Sec. 1475)	3,928	0	3,920	0	3,920	0	0	0	3,920	0
Sustainable Agriculture	14,500	0	14,471	0	14,471	0	0	0	14,471	0
Agriculture and Food Research Initiative	262,482	0	264,470	0	264,470	0	60,530	0	325,000	0
Farm Business Management and Benchmarking Program	1,500	0	1,497	0	1,450	0	-1,450	0	0	0

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Sun Grant Program	2,250	0	2,246	0	2,200	0	-2,200	0	0	0
Joe Skeen Institute for Rangeland Management	983	0	981	0	961	0	-961	0	0	0
New Era Rural Technology Program .	875	0	873	0	0	0	0	0	0	0
1994 Institutions Research Program.....	1,805	0	1,801	0	1,801	0	0	0	1,801	0
Supplemental and Alternative Crops.....	835	0	833	0	825	0	-825	0	0	0
Capacity Building for Non-Land Grant Colleges of Agriculture.....	0	0	0	0	4,500	0	-4,500	0	0	0
Policy Research	0	0	0	0	4,000	0	-4,000	0	0	0
Federal Administration (direct approp):										
Peer Panels.....	397	0	396	0	0	0	0	0	0	0
Office of Extramural Programs (Grants)...	440	0	439	0	0	0	0	0	0	0
Pay Costs and FERS ..	5,576	0	5,565	0	0	0	0	0	0	0
General Administration	0	0	0	0	5,900	0	499	0	6,399	0
Grants Management Systems	0	0	0	0	0	0	7,830	0	7,830	0
Data Information System (REEIS).....	2,704	0	2,699	0	2,600	0	-2,600	0	0	0
Electronic Grants Administration System.....	2,136	0	2,132	0	2,000	0	-2,000	0	0	0
Other (Earmark Projects)	33,869	0	0	0	0	0	0	0	0	0
Total Federal Administration	45,122	0	11,230	0	10,500	0	3,729	0	14,229	0
Higher Education:										
Inst. Challenge, Multicultural Sch. & Grad. Fellowship Grants.....	0	0	0	0	9,000	0	-9,000	0	0	0
Grants for Insular Areas	0	0	0	0	0	0	1,650	0	1,650	0
Graduate Fellowship Grants.....	3,859	0	3,851	0	0	0	3,851	0	3,851	0
Institution Challenge Grants.....	5,654	0	5,643	0	0	0	5,643	0	5,643	0
Native American Institutions (Equity Grants)	0	0	0	0	0	0	0	0	0	0
Multicultural Scholars Program.....	1,241	0	1,239	0	0	0	1,239	0	1,239	0

Program	2010 Actual Amount	Staff Years	2011 Actual Amount	Staff Years	2012 Estimate Amount	Staff Years	Inc. or Dec. Amount	Staff Years	2013 Estimate Amount	Staff Years
Hispanic Education Partnership Grants...	9,237	0	9,219	0	9,219	0	0	0	9,219	0
Secondary/2-year Post-secondary.....	983	0	981	0	900	0	81	0	981	0
Capacity Building Grants (1890 Institutions).....	18,250	0	19,336	0	19,336	0	0	0	19,336	0
Payments to the 1994 Institutions (Tribal Colleges).....	3,342	0	3,335	0	3,335	0	0	0	3,335	0
Alaska Native-serving and Native Hawaiian-serving Edu. Grants	3,200	0	3,194	0	3,194	0	0	0	3,194	0
Resident Instruction Grants for Insular Areas.....	900	0	898	0	900	0	-900	0	0	0
Distance Education Grants for Insular Areas.....	750	0	749	0	750	0	-750	0	0	0
Veterinary Medical Services Act.....	4,800	0	4,790	0	4,790	0	0	0	4,790	0
Higher Education Agrosecurity Program.....	0	0	0	0	0	0	0	0	0	0
Total Higher Education Grants..	52,216	0	53,234	0	42,424	0	10,814	0	53,238	0
Subtotal.....	788,243	0	698,740	0	705,599	0	27,131	0	732,730	0
Endowment Funds										
Native American Institutions Endowment Fund....	(11,880)	0	(11,880)	0	(11,880)	0	0	0	(11,880)	0
Hispanic-Serving Agricultural Colleges and Universities Endowment Fund....	0	0	0	0	0	0	(10,000)	0	(10,000)	0
Native American Institutions Endowment Fund Interest Earned	4,267	0	4,307	0	4,743	0	302	0	5,045	0
Total Endowment Funds.....	4,267	0	4,307	0	4,743	0	302	0	5,045	0
Total Adjusted Approp.	792,510	0	703,047	0	710,342	0	27,433	0	737,775	0
Rescissions and Transfers (Net).....	0	0	1,400	0	0	0	0	0	0	0
Total Appropriations.....	792,510	0	704,447	0	710,342	0	27,433	0	737,775	0
Rescission.....	0	0	-1,400	0	0	0	0	0	0	0

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Balance Available, Start of Year	195,631	0	228,295	0	178,933	0	-178,933	0	0	0
Recoveries, Other(Net)	0	0	18,980	0	0	0	0	0	0	0
Total Available	988,141	220	950,322	234	889,275	247	-151,500	2	737,775	249
Lapsing Balances	-35	0	-1,538	0	0	0	0	0	0	0
Balance Available, End of Year	-228,295	0	-178,933	0	0	0	0	0	0	0
Total Obligations	759,811	220	769,851	234	889,275	247	-151,500	2	737,775	249

RESEARCH AND EDUCATION ACTIVITIES

Project Statement by Program
(On basis of Obligations)
(Dollars in Thousands)

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Discretionary Obligations:										
Hatch Act	$214,965	0	$234,796	0	$236,334	0	-$1,500	0	$234,834	0
McIntire-Stennis Cooperative Forestry	29,000	0	32,934	0	32,934	0	0	0	32,934	0
Evans-Allen Program (1890 Colleges and Tuskegee University)	48,500	0	50,898	0	50,898	0	0	0	50,898	0
Animal Health and Disease (Sec. 1433)	2,950	0	2,944	0	4,000	0	-4,000	0	0	0
Special Research Grants:										
Global Change, UV-B Monitoring	1,408	0	1,405	0	1,300	0	105	0	1,405	0
Minor Use Animal Drugs	429	0	0	0	0	0	0	0	0	0
Other (Earmark Projects)	87,192	0	1,433	0	2,700	0	-2,700	0	0	0
Total Special Research Grants	89,029	0	2,838	0	4,000	0	-2,595	0	1,405	0
Improved Pest Control										
Expert IPM Decision Support System	156	0	156	0	153	0	-153	0	0	0
Integrated Pest Management	2,415	0	2,410	0	2,362	0	-2,362	0	0	0
Minor Crop Pest Management (IR-4)	12,180	0	12,156	0	11,913	0	-11,913	0	0	0
Pest Management Alternatives	1,434	0	1,431	0	1,402	0	-1,402	0	0	0
Total, Improved Pest Control	16,185	0	16,153	0	15,830	0	-15,830	0	0	0
Critical Agricultural Materials Act	2,084	0	61	0	2,120	0	-2,120	0	0	0
Aquaculture Centers (Sec. 1475)	3,928	0	3,920	0	3,920	0	0	0	3,920	0
Sustainable Agriculture	14,500	0	14,471	0	14,471	0	0	0	14,471	0
Agriculture and Food Research Initiative	201,486	0	321,815	0	424,126	0	-99,126	0	325,000	0
Farm Business Management and Benchmarking Program	1,500	0	1,497	0	1,450	0	-1,450	0	0	0
Sun Grant Program	2,250	0	2,246	0	2,200	0	-2,200	0	0	0
Joe Skeen Institute for Rangeland Management	983	0	981	0	961	0	-961	0	0	0
New Era Rural Technology Program	875	0	873	0	0	0	0	0	0	0

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
1994 Institutions Research Program	1,343	0	1,552	0	2,512	0	-711	0	1,801	0
Supplemental and Alternative Crops	835	0	833	0	825	0	-825	0	0	0
Capacity Building for Non-Land Grant Colleges of Agriculture	0	0	0	0	4,500	0	-4,500	0	0	0
Policy Research	0	0	0	0	4,000	0	-4,000	0	0	0
Federal Administration (direct approp):										
Peer Panels	397	0	396	0	0	0	0	0	0	0
Office of Extramural Programs (Grants)	440	0	439	0	0	0	0	0	0	0
Pay Costs and FERS	5,576	0	5,554	0	0	0	0	0	0	0
General Administration	0	0	0	0	5,900	0	499	0	6,399	0
Grants Management Systems	0	0	0	0	0	0	7,830	0	7,830	0
Data Information System (REEIS)	2,883	0	2,699	0	2,600	0	-2,600	0	0	0
Electronic Grants Administration System	2,277	0	2,132	0	2,000	0	-2,000	0	0	0
Other (Earmark Projects)	33,869	0	0	0	0	0	0	0	0	0
Total Federal Administration	45,442	0	11,219	0	10,500	0	3,729	0	14,229	0
Higher Education:										
Inst. Challenge, Multicultural Sch. & Grad. Fellowship Grants	0	0	0	0	9,000	0	-9,000	0	0	0
Grants for Insular Areas	0	0	0	0	0	0	1,650	0	1,650	0
Graduate Fellowship Grants	7,888	0	3,851	0	0	0	3,851	0	3,851	0
Institution Challenge Grants	5,654	0	5,643	0	0	0	5,643	0	5,643	0
Multicultural Scholars Program	2,230	0	1,239	0	0	0	1,239	0	1,239	0
Hispanic Education Partnership Grants	9,237	0	9,219	0	9,219	0	0	0	9,219	0
Secondary/2-year Post-secondary	983	0	981	0	900	0	81	0	981	0
Capacity Building Grants (1890 Institutions)	36,123	0	19,336	0	19,336	0	0	0	19,336	0
Payments to the 1994 Institutions (Tribal Colleges)	3,342	0	3,335	0	3,335	0	0	0	3,335	0
Alaska Native-serving and Native Hawaiian-serving Edu. Grants	3,200	0	3,194	0	3,194	0	0	0	3,194	0
Resident Instruction Grants for Insular Areas	900	0	898	0	900	0	-900	0	0	0
Distance Education Grants for Insular Areas	750	0	749	0	750	0	-750	0	0	0
Veterinary Medical Services Act	9,382	0	4,790	0	4,790	0	0	0	4,790	0
Higher Education Agrosecurity Program	0	0	0	0	0	0	0	0	0	0
Carryover			12,277	0	17,527	0	-17,527	0	0	0
Total Higher Education Grants	79,689	0	65,511	0	68,951	0	-15,713	0	53,238	0
Subtotal	755,544	0	765,544	0	884,532	0	-151,802	0	732,730	0

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Endowment Funds										
Native American Institutions Endowment Fund	(11,880)	0	(11,880)	0	(11,880)	0	0	0	(11,880)	0
Hispanic-Serving Agricultural Colleges and Universities Endowment Fund	0	0	0	0	0	0	(10,000)	0	(10,000)	0
Native American Institutions Endowment Fund Interest Earned	4,267	0	4,307	0	4,743	0	302	0	5,045	0
Total Endowment Funds	4,267	0	4,307	0	4,743	0	302	0	5,045	0
Total Obligations	759,811	220	769,851	234	889,275	247	-151,500	2	737,775	249
Recoveries, Other(Net)	0	0	-18,980	0	0	0	0	0	0	0
Lapsing Balances	35	0	1,538	0	0	0	0	0	0	0
Balance Available, End of Year	228,295	0	178,933	0	0	0	0	0	0	0
Total Available	988,141	220	931,342	234	889,275	247	-151,500	2	737,775	249
Rescission	0	0	1,400	0	0	0	0	0	0	0
Balance Available, Start of Year	-195,631	0	-228,295	0	-178,933	0	178,933	0	0	0
Total Appropriation	792,510	220	704,447	234	710,342	247	27,433	2	737,775	249

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Justification of Increases and Decreases

1. An increase of $60,530,000 to Agriculture and Food Research Initiative (AFRI) ($264,470,000 available in 2012) as follows:

Need for Change

The requested funding is to support and enhance AFRI's investment in basic and applied research to advance knowledge in the food and agricultural sciences and to develop solutions to challenges in agriculture (including in biomass for biofuels), food production, and sustainable natural resources. Agriculturally-relevant discovery research will provide the foundation upon which current and future solutions are built and will sustain the disciplines needed to ensure that the agricultural sector of the economy remains vibrant and successful over time. This funding is expected to aid in bringing a wide array of U.S. agriculturally related disciplines back to positions of international leadership. This is in keeping with the President's long-term goal and guidance from the Office of Management and Budget (OMB) and Office of Science Technology Policy (OSTP) to increase the investment in research and development through transformational solutions to the nation's practical challenges. AFRI funding will support high risk, but potentially high reward, research of individual investigators and research teams. Funding at the requested level will continue to foster inter-agency collaborations to leverage greater investment in agriculturally-relevant areas of science, and attract new communities of scientists to agricultural issues. Utilizing AFRI, NIFA will continue to target high priority areas including bioenergy, adaptation of agriculture to climate variability, global food security, nutrition and health, and food safety.

The NIFA 2013 budget proposes to increase the AFRI program by $60,530,000, which includes a redirection of funding from small, stand-alone programs to AFRI to facilitate alignment of programmatic goals and to achieve efficiencies in management. The 2008 Farm Bill provides broad authority to the AFRI program to support single-function grants for research, education or extension, as well as grants to integrate these functions. It also allows for support of integrated research, extension, and education projects pursuant to Section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998. This very broad authority allows for maximum flexibility in supporting a wide range of activities, and makes possible the consolidation of small programs into AFRI without compromising programmatic functions, goals or impact.

The NIFA 2013 budget proposes to redirect funding to AFRI from the Section 406 Integrated Activities focused on food safety and water quality, as well as from the International Science and Education program. AFRI will continue to support food safety and water quality research, education, and extension in the AFRI Challenge area programs and the AFRI Foundational programs. AFRI programs will include language to support work with a focus on enhancing the capabilities of American colleges and universities to conduct international collaborative research, extension and teaching. These redirections will allow efficiency in management and alignment of medium to long-term research, education, and extension goals relevant to these program areas.

Outcomes

For each of the challenge areas described below, base funding supports ongoing work initiated in 2010, 2011, and 2012. The challenge area programs were designed to support discrete programmatic elements each year. Results from 2010, 2011, and 2012 projects, when combined with results from work initiated in 2013, will allow for the fuller achievement of program goals in support of OMB/OSTP's priorities. Flexible use of program dollars across fiscal years allows the program to maximize impact while ensuring rigorous oversight of ongoing projects. Therefore, sustained base funding is necessary to complete work initiated in earlier years, while increases are necessary to address the major facets of each problem area.

BIOENERGY: Base funding in this area will advance ongoing research, education, and extension in support of the Administration's priority to have "a comprehensive plan to invest in alternative and renewable energy." Meeting the Congressional mandate to produce 36 billion gallons of biofuels by 2022 and the President's goal of 60 billion gallons by 2030 requires a substantial investment in the sustainable production of high-quality, cost-effective feedstocks for biofuel production. This priority supports the Department's goals of assisting rural communities to create wealth so they are self-sustaining, repopulating, and economically thriving while helping America promote sustainable agricultural production and biotechnology exports as America works to increase food security. Sustained funding will support five regional projects with activities in 22 states involving 32 Universities plus nine federal and eight industrial partners. These regional projects link research for sustainable biomass production, logistics of handling feedstocks for biofuels, and education programs to create the needed skilled workforce. Sustained funding will go to ongoing targeted research on enhanced value co-products and crop protection; land-use changes resulting from feedstock production and conversion; and identification of socioeconomic impacts of biofuels in rural communities in order to enhance sustainable rural economies. New support will be used to support genomics work with the goal of optimizing dedicated biofuels feedstocks. An increase also will be used to support the creation of one new multi-state regional project that will catalyze development of sustainable bioenergy production systems in a region of the country not covered by previous multi-state regional awards.

CLIMATE VARIATION EFFECTS ON PRODUCTION: Base funding in this area will support ongoing research, education, and extension on adaptive capacities and mitigation potentials of agricultural and natural resource systems to climate variables such as drought, temperature, and flood. This includes traditional breeding, germplasm phenotyping, and genomics work to support the development of plant and animal varieties, cropping systems, and breeding systems that are responsive to climatic challenges including drought, limits on irrigation water supplies, floods, and temperature extremes. Sustained funding will continue to support the adaptation of major agriculture and forestry production systems to climate variables. Dramatic climate effects during 2011, including significant droughts and floods, made it clear that USDA needs to extend research knowledge associated with advanced extension and education efforts to assist farmers, forest owners, and rural communities in identifying changes in regional cropping and forest systems that should be made to crop, farming/production practices, and forest management practices so that they may be sustainable and profitable in the face of variable climates. New funding will be used to address the adaptation of production systems to climate variables which have not been covered by previous grant awards. Scientific work will support coordinated research, education, and extension efforts.

FOOD SECURITY: Base funding will support ongoing research, education, and extension focused on sustainable plant and animal production systems, including improving feed efficiency of agriculturally relevant animals, utilizing genomic approaches to protect animals from disease, including extension to producers to enhance prevention and control of disease; enhancing reproductive fertility in food animals; minimizing crop plant losses from oomycete pathosystems and fungal diseases; management of plant insect pests, including integrated pest management, and enhancing food systems to provide increased productivity and profitability for producers. NIFA will fund targeted work addressing the problems of U.S. agriculture, creating mutual benefits domestically and abroad, and allowing for new opportunities for interdepartmental initiatives as appropriate. This is a top priority of the President and supports the Department's goal of helping America promote sustainable agricultural production and biotechnology exports as America works to increase global food security. Increased funding will support research to improve understanding of existing genomic information and breeding to develop new and improved animal breeds and crop cultivars for increased food production and quality.

NUTRITION AND HEALTH: Obesity is the number one nutritional problem in America. Base funding will support ongoing research, education, and extension focused on children ages 2 – 19 by identifying the behavioral factors that influence obesity; developing valid behavioral and environmental instruments for measuring progress in obesity prevention efforts; and, nutrition research that leads to the development and evaluation of effective programs to prevent obesity. Increased funding will support research and outreach efforts to develop and increase consumption of healthy foods that are low in energy (fats and sugars) and salt, and high in nutrient density and that are appealing (to children).

FOOD SAFETY: Base funding will support ongoing research, education, and extension to improve the safety of the U.S. food supply through new and improved rapid detection methods, pre- and post-harvest epidemiological studies, and improved food harvesting and processing technologies. This challenge area supports critical environmental and ecological research to improve our understanding of disease-causing microorganisms, antibiotic resistance, food allergies, and naturally occurring contaminants in meats, poultry, seafood, and fresh fruits and vegetables. This priority supports the Department's goal of ensuring that all in America have access to safe, nutritious, and balanced meals. Increased funding will support work to: 1) minimize antibiotic resistance transmission through the food chain, and 2) minimize microbial food safety hazards of fresh and fresh-cut fruits and vegetables.

FOUNDATIONAL SCIENCE: Increased funding will allow substantive research investments in each of AFRI's congressionally-established priority areas, as follows: 1) Plant health and production and plant products, which will support work in areas such as genomics, genetics, breeding, biochemistry, entomology, pathology, physiology, and weed biology; 2) Animal health and production and animal products, which will support work in areas such as genomics, genetics, breeding, reproduction, animal nutrition, physiology, well-being and disease-related specialties such as immunology and virology; 3) Food safety, nutrition, and health, which will support work in areas such as nutrition, microbiology, food science and engineering; 4) Renewable energy, natural resources, and environment, which will support work in areas such as soil science, hydrology, water quality and quantity, air quality, forestry, and ecology; 5) Agriculture systems and technology, which will support work in areas such as precision agriculture, engineering, and nanotechnology; and 6) Agriculture economics and rural communities, which will support work in areas such as economics, rural sociology, family sciences, youth development, and geography.

NIFA FELLOWS: In 2010, NIFA established the NIFA fellows program through AFRI which directly supports graduate and post-graduate education in priority program areas including sustainable bioenergy production, climate variability and change, food safety, food security, and the prevention of childhood obesity. Awards will be made to individuals based upon their qualifications and interest in pursuing research careers in areas consistent with NIFA priorities.

2. A decrease of $1,500,000 to Hatch Act ($236,334,000 available in 2012) as follows:

Need for Change

Base funding under this program supports research on all aspects of agriculture, including soil and water conservation and use; plant and animal production, protection, and health; processing, distribution, safety, marketing, and utilization of food and agricultural products; forestry, including range management and range products; multiple use of forest rangelands, and urban forestry; aquaculture; home economics and family life; human nutrition; rural and community development; sustainable agriculture; molecular biology; and biotechnology. Funding at the requested level will continue to support research to address problems of local, State, regional, or national concern. In light of constrained budget levels, funding is requested at a reduced level.

3. A net decrease of $18,425,000 for Special Research Grants ($19,830,000 available in 2012) as follows:

   a. An increase of $105,000 for Global Change, UV-B Monitoring ($1,300,000 available in 2012) as follows:

   Need for Change

   The climatological network supported by the Global Change, UV-B Monitoring grant program includes 34 climatological sites - 31 in the United States, two in Canada and one in New Zealand. The research and monitoring network has been supported by USDA for over 20 years. This program supports action items for informing decisions and modeling efforts as outlined in the U.S. Global Change Research Program strategic plan.

   Outcomes

Base funding will support the climatological network. Increased funding will continue to provide support for these activities. This work provides the only source of data directly tied to agricultural systems. Data is used to support climate forecasting models.

b. A decrease of $15,830,000 to consolidate funding for Integrated Pest Management Programs ($15,830,000 available in 2012) as follows:

	FY 2012 ($000)	Increase or Decrease ($000)	FY 2013 ($000)
Expert IPM Decision Support System	$153	-$153	0
Integrated Pest Management & Biological Control	2,362	-2,362	0
Minor Crop Pest Management, IR-4	11,913	-11,913	0
Pest Management Alternatives	1,402	-1,402	0
Total	$15,830	-$15,830	0

Need for Change

A decrease is proposed so funding can be directed to support a new consolidated program on pest management activities under the Integrated Activities Account. The new program, called Crop Protection, will provide a more comprehensive approach to developing alternatives for crop pest management. The consolidation will enhance NIFA's ability to support research, education, and extension activities needed to ensure global food security and respond to other major societal challenges.

c. A decrease of $1,350,000 to eliminate Forest Products Research ($1,350,000 available in 2012) as follows:

Need for Change

A decrease is proposed so funding can be directed to support higher priority activities, and is consistent with the Administration's policy to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities. Alternative funding from other NIFA programs, State and local governments, and private sources can be used to support aspects of the program deemed to be of priority at State and/or local levels. Support for forest products science activities can be supported at the State level through formula funding programs and as components of AFRI and other competitive programs supporting plant science, bioproducts, and bioenergy production.

d. A decrease of $1,350,000 to eliminate Potato Breeding ($1,350,000 available in 2012) as follows:

Need for Change

A decrease is proposed so funding can be directed to support higher priority activities, and is consistent with the Administration's policy to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities. Alternative funding from other NIFA programs, State and local governments, and private sources can be used to support aspects of the program deemed to be of priority at State and/or local levels.

4. A net increase of $3,729,000 to Federal Administration ($10,500,000 available in 2012) as follows:

a. An increase of $499,000 for Other Federal Administration ($5,900,000 available in 2012) as follows:

Need for Change

These programs are managed at the national level by a staff of about 394 at the end of FY 2011 and with a number of temporary and intermittent employees. Grants management includes developing program regulations, establishing broad program goals, reviewing proposals, preparing grant documents, post-award review of progress, and similar activities necessary to achieve program goals. Between 0 and 4 percent of funds provided for programs may be used to support administration of the programs as established by law.

Outcomes

Funds will provide partial support of pay costs, peer panel and grants administration costs. The pay cost increase of $95,930 will be offset by equal reductions in printing, supplies, and travel costs. The NIFA budget consists of numerous programs that award thousands of individual grants to colleges and universities and other eligible recipients.

b. An increase of $7,830,000 to Federal Administration for Grants Management Systems ($0 available in 2012) as follows:

In 2012 $4,600,000 under individual grants management systems supported these activities.

Need for Change

These systems support the entire business lifecycle required to award competitive and formula grants. Systems also support the data, trends, and analytics required to perform NIFA's mission of advancing knowledge for agriculture, the environment, human health and well-being, and communities by supporting research, education, and extension programs. NIFA's grant systems support OMB's management agenda for shared first services, data center consolidation, and research performance progress reporting. NIFA remains an active Grants.gov partner. Our systems are fully integrated with Grants.gov and support the Grants Management shared services line of business. This effort includes support for IT activities that collect, consolidate, and store data on the research, education, and extension programs, projects, and activities of USDA and its partner institutions. This effort integrates the query and reporting capabilities of NIFA business systems into one cohesive investment. Increased funding will continue to support the IT modernization of NIFA's grant applications systems and processes.

Outcomes

Base funding will support the information technology (IT) modernization of NIFA's grant applications systems and processes. The increase will support new and existing business needs and migration to state-of-the art technology to the grant systems used to track, award, manage, and report on grant activities to include the research progress reporting initiative. Increased funding also will address requirements such as the creation of an electronic jacket for grant processing, participation in the Grants Management Line of Business, improvements to the peer review IT application, design of an automated award amendment process, electronic post-award management and business intelligence.

c. A decrease of $4,600,000 to consolidate Research, Education, and Economics Information System and Electronic Government ($4,600,000 available in 2012) as follows:

	FY 2012 ($000)	Increase or Decrease ($000)	FY 2013 ($000)
Research, Education, and Economic Information System	$2,600	-$2,600	0
Electronic Government	2,000	-2,000	0
Total	$4,600	-$4,600	0

Need for Change

A decrease is proposed so funding can be directed to support a new program, called Grants Management Systems, to consolidate activities for grants management systems. The consolidation will enhance NIFA's efficiencies in management of the program.

5. A decrease of $19,017,000 to eliminate funding for research programs ($19,017,000 available in 2012) as follows:

	FY 2012 ($000)	Increase or Decrease ($000)	FY 2013 ($000)
Animal Health and Disease, Section 1433	$4,000	-$4,000	0
Critical Agricultural Materials	1,081	-1,081	0
Supplemental and Alternative Crops	825	-825	0
Joe Skeen Institute for Rangeland Restoration	961	-961	0
Farm Business Management and Benchmarking Program	1,450	-1,450	0
Sun Grant Program	2,200	-2,200	0
Competitive Grants for Policy Research	4,000	-4,000	0
Capacity Building of Non-Land Grant Colleges	4,500	-4,500	0
Total	$19,017	-$19,017	0

Need for Change

A decrease is proposed so funding can be directed to support higher priority activities, and is consistent with the Administration's policy to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities. Alternative funding from other NIFA programs, State and local governments, and private sources can be used to support aspects of the program deemed to be of priority at State and/or local levels.

6. A net increase of $1,814,000 to Higher Education programs ($11,550,000 available in 2012) as follows:

   a. A decrease of $9,000,000 to separate the Institution Challenge, Multicultural Scholars, and Graduate Fellowship Grants Program ($9,000,000 available in 2012) as follows:

      Need for Change

      This action separates this program which consolidated the Institution Challenge, Multicultural Scholars and Graduate Fellowship Grants Programs as one program. In FY 2013, NIFA proposes to administer these programs individually in support of the Administration's priority to make science, technology, engineering, and mathematics (STEM) a national priority.

   b. An increase of $3,851,000 for Graduate Fellowships Grants ($0 available in 2012) as follows:

      In 2012 about $3,240,000 under the Institution Challenge, Multicultural Scholars, and Graduate Fellowship Grants Program supported these activities.

      Need for Change

      The NIFA Higher Education programs enhance an existing partnership that NIFA has established among institutions for many years. The programs complement our investments in research and extension through our entire portfolio of formula and competitively awarded grants programs. With the establishment and reorganization of NIFA, an increased emphasis has been placed on integrating education with research and extension. Many of these programs are supporting initiatives to build capacity at minority serving institutions.

The National Center for Science and Engineering Statistics released in November 2011 the statistics on the number of doctorates awarded in the United States. According to their report, the year 2010 showed the first decline in doctorates awarded in the U.S. since 2002. The area of agricultural sciences doctorates had the largest decrease at -15.7% from 2009. The need for programs that target the agricultural and natural resources science areas is evident. Fellowship and scholarship programs supported by NIFA ensure that a workforce of graduates at the baccalaureate, masters and doctorate levels are trained to work in the biotechnology, food systems, economics and other growing fields of agriculture.

USDA is the leader for agricultural literacy and agriculture and natural resources education. The best way to leverage these investments is through the relationship of these programs to the existing network of stakeholders that partner with NIFA in research, education and extension. Increases are proposed for Graduate Fellowships Grants, Institution Challenge Grants, and Multicultural Scholar Programs. These programs support the Administration's priority to make STEM education a national priority and help improve the rural economy through targeted research and education programs. These programs will be administered separately in support of the STEM priority.

Outcomes

This program will conduct graduate training programs to stimulate the development of food and agricultural scientific expertise in targeted national need areas. The program plan is to attract highly promising individuals to research or teaching careers in areas of the food and agricultural sciences where shortages of expertise exist.

c. An increase of $5,643,000 for Institution Challenge Grants ($0 available in 2012) as follow:

In 2012 about $4,770,000 under the Institution Challenge, Multicultural Scholars, and Graduate Fellowship Grants Program supported these activities.

Outcomes

Funding will be used to strengthen institutional capacities to respond to identified State, regional, national or international educational needs to formulate and administer programs to enhance college and university teaching in agriculture, natural resources, forestry, veterinary medicine, human and family and consumer sciences, disciplines closely allied to the food and agricultural system, and rural economic, community and business development.

d. An increase of $1,239,000 for Multicultural Scholar Program ($0 available in 2012) as follows:

In 2012 about $990,000 under the Institution Challenge, Multicultural Scholars, and Graduate Fellowship Grants Program supported these activities.

Outcomes

The Multicultural Scholars Program is designed to help the food and agricultural scientific and professional workforce achieve full participation by members of traditionally underrepresented racial and ethnic groups.

Funds will support an additional grant/institution for activities to increase the ethnic and cultural diversity of the food and agricultural scientific and professional workforce, and advance the educational achievement of minority Americans.

e. An increase of $81,000 for Secondary/2-year Post Secondary Education, and Agriculture in the K-12 Classroom Program ($900,000 available in 2012) as follows:

Need for Change

Base funding promotes and strengthens secondary education in agribusiness and agriscience, and increases the number and/or diversity of young Americans pursuing college degrees in the food and agricultural sciences.

Outcomes

The program encourages teachers to creatively incorporate elements of agriscience and agribusiness into secondary education programs. Increased funding will continue to provide support for these activities.

f. An increase of $1,650,000 for Grants for Insular Areas Program ($0 available in 2012) as follows:

In 2012 $1,650,000 under the individual insular area programs supported these activities.

Need for Change

In 2013, NIFA proposes to consolidate the Resident Instruction Grants for Insular Areas and Distance Education Grants for Insular Areas programs into a single program to support activities in insular areas of Puerto Rico the U.S. Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, Micronesia, the Marshall Islands, or the Republic of Palau. This action streamlines NIFA budget portfolio and achieves efficiencies in management of the program.

Outcomes

Funding will enhance resident instruction, curriculum, and teaching programs in food and agricultural sciences that are located in insular areas. It also will support activities to strengthen the capacity of institutions in insular areas to carry out collaborative distance food and agricultural education programs using digital network technologies.

g. A decrease of $1,650,000 to consolidate Resident Instruction Grants for Insular Areas and Distance Education Grants for Insular Areas in a new program ($1,650,000 available in 2012) as follows:

	FY 2012 ($000)	Increase or Decrease ($000)	FY 2013 ($000)
Resident Instruction for Grants for Insular Areas	$900	-$900	0
Distance Education Grants for Insular Areas	750	-750	0
Total	$1,650	-$1,650	0

Need for Change

A decrease is proposed so funding can be directed to support a new program, called Grants for Insular Areas, to consolidate activities for grants for insular areas. The consolidation will enhance NIFA's efficiencies in management of the program.

7. An increase of $302,000 to Native American Institutions Endowment Interest ($4,743,000 available in 2012) as follows:

Need for Change

The Native American Institutions Endowment Fund, authorized by the 1994 Act provides for the establishment of an endowment for the 1994 Institutions (34 Tribally-controlled colleges). The interest derived from the endowment is distributed to the 1994 Institutions on a formula basis. On the termination of each fiscal year, the Secretary shall withdraw the income from the endowment fund for the fiscal year,

and after making adjustments for the cost of administering the endowment fund, at 4 percent, distribute the adjusted income as follows. Sixty percent of the adjusted income is distributed among the 1994 Institutions on a pro rata basis, the proportionate share being based on the Indian student count. Forty percent of the adjusted income is distributed in equal shares to the 1994 Institutions.

Outcomes

This program will enhance educational opportunities for Native Americans by building educational capacity at these institutions. The institutions are also able to use the funding for facility renovation and construction. An increase in the estimated interest earned on the Tribal Colleges Endowment Fund is requested, based on revised investment data.

8. An increase of $10,000,000 for the Hispanic-Serving Agricultural Colleges and Universities Endowment Fund ($0 available in 2012) as follows:

Need for Change

Section 7129 of the Food, Conservation, and Energy Act 2008, provides for the establishment of an endowment fund for Hispanic-Serving Agricultural Colleges and Universities (HSACU). The Hispanic/Latino community is the fastest growing sector of the American population.

Outcomes

This investment in the Hispanic-Serving Agricultural Colleges and Universities is needed to ensure the institutions can effectively compete for NIFA competitive grants. This endowment fund for HSACU's will assist in the development of a skilled and marketable student population for employment in the food and agriculture sector from the HSACU. The $10 million will remain at Treasury and be invested in Treasury securities, with the cumulative interest provided to the program.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Small Business Innovation Research Program

The Small Business Innovation Development Act (SBIR), Public Law 97-219, July 22, 1982, as amended by Public Law 99-443, October 6, 1986, was designed to strengthen the role of small, innovative firms in Federally funded research and development. Under this program, small firms receive at least a fixed minimum percentage of research and development awards made by Federal agencies with sizable research and development budgets. The Small Business Research and Development Enhancement Act of 1992 (Public Law 102-564, October 28, 1991) as amended mandates that 2.6 percent of all extramural research and development funds within the Department are set-aside and used to fund the SBIR program.

Agency	FY 2011 Actual	FY 2012 Budget	FY 2013 Estimate
Agricultural Research Service	$ 1,250,023	$ 811,416	$ 975,416
Animal and Plant Health Inspection Service	14,306	24,401	19,922
National Institute of Food and Agriculture.	16,812,919	17,426,211	19,305,893
Economic Research Service	145,000	108,654	107,082
Foreign Agricultural Service …….	0	3,959	4,111
Forest Service	973,694	910,000	837,000
National Agricultural Statistics Service	8,000	15,030	9,450
Total	$19,203,942	$19,299,671	$21,258,874

The staff functions of USDA's SBIR program (solicitation, review and evaluation of proposals) have been centralized in CSREES in order to serve the SBIR community most effectively and efficiently. Eleven research topic areas have been established:

1. Forests and Related Resources. Research proposals are solicited to develop environmentally sound techniques to increase productivity of forest land and to increase the utilization of materials and resources from forest lands.

2. Plant Production and Protection. Research proposals are solicited that employ either biological or engineering approaches to examine means of enhancing crop production by reducing the impact of destructive agents, developing effective crop systems that are economically and environmentally sound, enhancing the impact of new methods of plant manipulation, and developing new crop plants and new uses for existing crops.

3. Animal Production and Protection. Research proposals are solicited to find ways to enable producers of food animals to increase production efficiency and to assure a reliable and safe supply of animal protein and other animal products while conserving resources and reducing production costs.

4. Air, Water and Soils. Research proposals are solicited to develop technologies for conserving air, water and soil resources while sustaining agricultural productivity.

5. Food Science and Nutrition. Research proposals are solicited to develop new knowledge and a better understanding of the characteristics of foods and their nutritional impact; to apply new knowledge to improve our foods and diets; and to apply new knowledge to the production of useful new food products, processes, materials, and systems, including the application of nutritional information to consumer foods and food service systems.

6. Rural Development. Research proposals are solicited to develop knowledge and technology that will promote, foster, or improve the well-being of rural Americans.

7. Aquaculture. Research proposals are solicited to develop new technologies to promote the aquaculture production of animal and plant species in both freshwater and marine environments.

8. Biofuels and Biobased Products. Research proposals are solicited to develop new or improved technologies that will lead to increased production of industrial products from agricultural materials.

9. Small and Mid-Size Farms. Research proposals are solicited that will promote and improve the sustainability and profitability of small and mid-sized farms and ranches.

TABLE 1 - FISCAL YEAR 2011
DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRICULTURAL EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS

	HATCH ACT AS AMENDED										
STATE	HATCH FORMULA	REGIONAL RESEARCH	TOTAL	COOP FORESTRY RSH (MS)	1890 UNIV & TUSK UNIV (EA)	ANIMAL HEALTH & DIS RSCH	SPECIAL AND OTHER GRANTS	COMPETITIVE RESEARCH GRANTS	HIGHER EDUCATION GRANTS	FED ADMIN DIRECT APPROP	TOTAL FEDERAL FUNDS
ALABAMA	3,883,827	1,136,658	5,020,485	1,038,744	5,233,937	56,690	140,081	3,494,834	2,638,820	0	17,623,591
ALASKA	1,059,334	185,159	1,244,493	680,720	0	0	0	435,733	1,769,897	0	4,130,843
AMER SAMOA	877,494	28,108	905,602	44,236	0	0	0	0	0	0	949,838
ARIZONA	1,498,885	979,017	2,477,902	481,819		31,330	271,668	3,064,324	687,498	0	7,014,541
ARKANSAS	3,292,309	943,588	4,235,897	919,401	2,254,037	57,571	0	8,150,349	150,000	0	15,767,255
CALIFORNIA	4,618,090	2,120,701	6,738,791	859,732	0	211,087	3,918,864	35,052,802	2,870,403	0	49,651,679
COLORADO	2,104,361	1,298,889	3,403,250	422,149	0	195,261	1,493,834	3,299,758	373,694	0	9,187,946
CONNECTICUT	1,577,055	639,483	2,216,538	342,588	0	18,215	45,027	4,327,750	379,917	0	7,330,035
DELAWARE	1,129,407	478,360	1,607,767	123,797	1,226,238	10,485	0	7,232,802	827,856	0	11,028,945
DISTRICT OF COLUMBIA	749,677	138,106	887,783	0	0	0	0	302,304	0	0	1,190,087
FLORIDA	2,973,395	940,037	3,913,432	859,731	2,080,800	47,035	2,124,400	18,180,114	3,353,495	0	30,559,007
GEORGIA	4,408,182	1,606,281	6,014,463	1,098,414	3,004,511	85,350	3,588,035	7,196,723	805,480	0	21,792,976
GUAM	919,934	158,541	1,078,475	44,236	0	0	187,920	0	0	0	1,310,631
HAWAII	1,108,957	496,451	1,605,408	263,028	0	1,064	752,582	10,792,543	1,804,562	0	15,219,187
IDAHO	1,918,658	771,873	2,690,531	660,831	0	42,306	150,000	9,037,225	249,000	0	12,829,893
ILLINOIS	5,441,139	1,364,824	6,805,963	521,600	0	54,026	19,186	5,847,455	574,687	0	13,822,917
INDIANA	5,159,830	1,108,133	6,267,963	561,380	0	46,614	185,923	5,969,442	234,000	0	13,265,322
IOWA	5,412,718	2,213,965	7,626,683	461,929	0	101,187	388,485	27,094,755	833,660	0	36,506,699
KANSAS	3,300,244	1,018,785	4,319,029	342,588	0	87,447	365,000	7,188,355	511,712	0	12,814,131
KENTUCKY	5,184,347	1,313,168	6,497,515	680,720	3,589,729	48,863	0	1,959,597	1,441,125	0	14,217,549
LOUISIANA	2,983,572	890,661	3,874,233	959,184	1,997,921	31,788	0	9,276,396	1,478,779	0	17,618,301
MAINE	1,678,318	666,504	2,344,822	839,841	0	5,853	254,609	1,022,244	45,516	0	4,512,885
MARYLAND	2,199,324	838,630	3,037,954	402,259	1,507,211	22,274	1,624,914	5,261,429	885,634	0	12,741,675
MASSACHUSETTS	1,847,182	818,618	2,665,800	422,149	0	46,329	0	6,815,644	234,000	0	10,183,922
MICHIGAN	5,190,091	1,251,804	6,441,895	939,292	0	66,851	2,690,312	18,595,839	215,180	0	28,949,369
MICRONESIA	949,301	0	949,301	0	0	0	0	0	0	0	949,301
MINNESOTA	5,114,429	1,162,807	6,277,236	780,171	0	145,122	3,499,515	5,487,620	1,149,988	0	17,339,652
MISSISSIPPI	3,781,622	1,088,755	4,870,377	1,018,853	2,486,626	52,249	733,851	2,220,016	442,678	0	11,824,650
MISSOURI	5,021,735	1,038,792	6,060,527	700,611	3,542,062	98,403	1,202,371	4,838,158	2,083,092	0	18,525,224
MONTANA	1,842,281	864,450	2,706,731	640,940	0	33,272	400,000	130,000	766,363	0	4,677,306
NEBRASKA	3,060,396	1,178,807	4,239,203	302,808	0	98,676	170,626	6,579,049	243,213	0	11,633,575
NEVADA	1,055,840	473,309	1,529,149	163,577	0	4,790	0	333,276	0	0	2,030,792
NEW HAMPSHIRE	1,353,509	479,360	1,832,869	481,819	0	2,366	0	347,500	0	0	2,664,554
NEW JERSEY	1,837,677	1,449,913	3,287,590	322,698	0	8,581	3,500,648	6,039,997	0	0	13,159,514
NEW MEXICO	1,531,522	520,754	2,052,276	342,588	0	22,438	71,667	0	1,145,528	0	3,634,497
NEW YORK	4,803,434	2,077,203	6,880,637	919,402	0	110,858	1,477,534	14,731,404	140,584	0	24,260,419
NORTH CAROLINA	6,364,387	1,543,917	7,908,304	1,058,633	4,131,278	102,038	606,079	16,357,628	2,015,808	0	32,179,768
NORTH DAKOTA	2,164,275	782,762	2,947,037	183,467	0	18,567	864,395	3,127,479	697,950	0	7,838,895
NORTHERN MARIANAS	868,505	0	868,505	0	0	0	0	0	0	0	868,505
OHIO	6,226,707	1,260,152	7,486,859	581,269	0	51,295	281,509	2,165,475	172,080	0	10,738,487
OKLAHOMA	3,234,219	774,228	4,008,447	601,160	2,307,162	61,295	734,224	683,480	1,184,000	0	9,579,768
OREGON	2,483,427	1,224,351	3,707,778	1,078,523	0	42,341	653,741	8,008,889	180,000	0	13,671,272
PENNSYLVANIA	5,900,684	1,616,975	7,517,659	720,501	0	104,861	317,035	9,155,912	388,225	0	18,204,193
PUERTO RICO	3,394,310	958,708	4,353,018	103,906	0	7,116	0	0	1,947,892	0	6,411,932
RHODE ISLAND	1,022,401	496,371	1,518,772	143,686	0	1,689	0	627,616	7,400	0	2,299,163
SOUTH CAROLINA	3,328,669	889,152	4,217,821	800,062	2,237,090	16,266	281,852	2,274,202	599,767	0	10,427,060
SOUTH DAKOTA	2,321,599	789,429	3,111,028	203,357	0	37,153	631,136	2,358,381	603,111	0	6,944,166

STATE	HATCH FORMULA	REGIONAL RESEARCH	TOTAL	COOP FORESTRY RSH (MS)	1890 UNIV & TUSK UNIV (EA)	ANIMAL HEALTH & DIS RSCH	SPECIAL AND OTHER GRANTS	COMPETITIVE RESEARCH GRANTS	HIGHER EDUCATION GRANTS	FED ADMIN DIRECT APPROP	TOTAL FEDERAL FUNDS
	HATCH ACT AS AMENDED										
TENNESSEE	4,863,018	1,102,365	5,965,383	740,391	3,273,094	31,265	431,136	11,937,671	2,301,380	0	24,680,320
TEXAS	6,914,619	1,568,111	8,482,730	879,623	4,879,146	182,373	303,554	21,653,465	4,172,512	0	40,553,403
UTAH	1,326,945	952,222	2,279,167	282,918	0	19,216	3,564,907	1,217,761	236,000	0	7,599,969
VERMONT	1,405,484	420,317	1,825,801	481,819	0	6,291	3,147,346	922,902	0	0	6,384,159
VIRGIN ISLANDS	895,013	154,240	1,049,253	84,017	0	0	0	0	0	0	1,133,270
VIRGINIA	4,149,819	1,008,611	5,158,430	899,510	2,790,350	38,797	0	5,689,214	2,193,195	0	16,769,496
WASHINGTON	2,711,207	1,546,318	4,257,525	998,964	0	82,381	1,409,660	42,893,854	107,590	0	49,749,974
WEST VIRGINIA	2,539,348	698,524	3,237,872	621,051	1,477,711	5,249	0	4,974,133	584,386	0	10,900,402
WISCONSIN	5,137,373	1,256,801	6,394,174	760,281	0	60,176	0	6,119,020	378,303	0	13,711,954
WYOMING	1,260,982	689,709	1,950,691	243,137	0	18,308	0	1,145,692	0	0	3,357,828
OTHER	0	15,000	15,000	0	0	0	58,963	2,787,000	244,622	0	3,105,585
SBIR	4,360,119	1,376,880	5,736,999	798,650	1,234,277	70,658	1,030,845	6,347,280	154,690	0	15,373,399
REIMBURSABLE	0	0	0	0	0	0	148,662	0	0	0	148,662
FEDERAL ADMIN	5,209,360	1,645,061	6,854,421	988,020	1,526,940	117,764	1,867,777	10,578,800	1,774,404	11,240,174	34,948,300
SUBTOTAL	178,950,546	56,510,698	235,461,244	32,896,780	50,780,120	2,919,480	45,589,873	401,331,291	48,279,676	11,240,174	828,498,638
UNOBLIG BAL	0	0	0	0	0	0	1,750,062	131,389,060	17,526,334	0	150,665,456
SUBTOTAL	178,950,546	56,510,698	235,461,244	32,896,780	50,780,120	2,919,480	47,339,935	532,720,351	65,806,010	11,240,174	979,164,094
TRIBAL ENDOW		0	0	0	0	0	0	0	11,880,000	0	11,880,000
BIOTECH RISK ASSESSMENT	663,586	209,554	873,140	37,220	117,880	24,620	101,458	647,700	0	0	1,746,280
TOTAL	179,614,132	56,720,252	236,334,384	32,934,000	50,898,000	2,944,100	47,441,393	533,368,051	77,686,010	11,240,174	992,790,374

Data may include 2011 obligations posted in 2012.

TABLE 2 - FISCAL YEAR 2012
DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRICULTURAL EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS

STATE	HATCH ACT	COOP FORESTRY RSH (MS)	1890 UNIV & TUSK UNIV (EA)	ANIMAL HEALTH & DIS RSCH	SPECIAL AND OTHER GRANTS	COMPETITIVE RESEARCH GRANTS	HIGHER EDUCATION GRANTS	FED ADMIN DIRECT APPROP	TOTAL FEDERAL FUNDS
FEDERAL ADMIN	6,854,000	988,000	1,527,000	160,000	793,000	10,579,000	2,211,000	10,500,000	33,612,000
SUBTOTAL, OBLIGATIONS	6,854,000	988,000	1,527,000	160,000	793,000	10,579,000	2,211,000	10,500,000	33,612,000
UNOBLIGATED BALANCE	229,480,000	31,946,000	49,371,000	3,840,000	54,246,000	253,891,000	49,213,000	0	671,987,000
TOTAL	236,334,000	32,934,000	50,898,000	4,000,000	55,039,000	264,470,000	51,424,000	10,500,000	705,599,000

TABLE 3 - FISCAL YEAR 2013
DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRIC EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS

STATE	HATCH ACT	COOP FORESTRY RSH (MS)	1890 UNIV & TUSK UNIV (EA)	ANIMAL HEALTH & DIS RSCH	SPECIAL AND OTHER GRANTS	COMPETITIVE RESEARCH GRANTS	HIGHER EDUCATION GRANTS	FED ADMIN DIRECT APPROP	TOTAL FEDERAL FUNDS
FEDERAL ADMIN	6,899,000	988,000	1,527,000	0	702,000	13,000,000	2,283,250	14,229,000	39,583,250
									0
SUBTOTAL,									0
OBLIGATIONS	6,899,000	988,000	1,527,000	0	702,000	13,000,000	2,283,250	14,229,000	39,583,250
									0
UNOBLIGATED									0
BALANCE	227,935,000	31,946,000	49,371,000	0	19,395,000	312,000,000	50,954,750	0	693,146,750
TOTAL	234,834,000	32,934,000	50,898,000	0	20,097,000	325,000,000	53,238,000	14,229,000	732,730,000

RESEARCH AND EDUCATION ACTIVITIES

Classification by Objects

(dollars in thousands)

Personnel Compensation:	2010 Actual	2011 Actual	2012 Estimate	2013 Estimate
Washington DC	$17,452	$21,836	$22,448	$22,537
11.1 - Full-time employees	17,074	19,466	21,970	22,059
11.3 - Other than full-time	189	576	239	239
11.5 - Other compensation	189	1,793	239	239
12 - Civilian Personnel Benefits	4,523	5,039	5,345	5,347
13 - Benefits for former personnel	5	4	5	5
Total pers. comp. & benefits	21,980	26,879	27,798	27,889
Other Objects:				
21 - Travel & Transportation of Persons	1,012	1,670	1,501	1,345
22 - Transportation of Things	5	35	5	6
23.1 - Rent to GSA	7	5	7	8
23.2 - Rent Paid to Others	39	1	40	41
23.3 - Comm., Util., Misc. Charges	308	343	316	322
24 - Printing and Reproduction	142	231	200	156
25.1 - Advisory and Assistance Services	139	5	143	145
25.2 - Other Services	2,510	4,416	1,950	1,744
25.3 - Purchases of Goods and Services	40	140	41	42
25.4 - Oper & Maintenance of Facilities	493	102	507	518
25.5 - Research & Development Contracts	2,537	4,052	2,600	2,650
25.6 - Medical Care	17	10	17	18
25.7 - Operation & Maint. of Equipment	52	145	53	54
25.8 - Subsistence & Support of Persons	38	65	39	40
25.9 Technical Services	0	473	0	0
26 - Supplies and Materials	133	118	155	138
31 - Equipment	167	191	172	175
41 - Grants, Subsidies & Contributions	730,191	730,972	853,731	702,484
Total other objects	737,831	742,973	861,477	709,886
Total, New Obligations	759,811	769,851	889,275	737,775
Position Data:				
Average Salary (dollars), ES positions	$172,090	$170,866	$170,866	$170,866
Average Salary (dollars), GS positions	$93,467	$94,404	$94,404	$94,758
Average Grade, GS positions	10.3	11.3	11.3	11.3

BIOMASS RESEARCH AND DEVELOPMENT INITIATIVE

Classification by Objects
(dollars in thousands)

Personnel Compensation:	2010 Actual	2011 Actual	2012 Estimate	2013 Estimate
Washington DC	$375	$264	$462	$462
11.1 - Full-time employees	375	235	462	462
11.3 - Other than full-time	0	6	0	0
11.5 - Other compensation	0	23	0	0
12 - Civilian Personnel Benefits	108	68	122	122
13 - Benefits for former personnel	0	0	0	0
Total pers. comp. & benefits	484	332	584	584
Other Objects:				
21 - Travel & Transportation of Persons	40	21	18	0
22 - Transportation of Things	0	0	0	0
23.1 - Rent to GSA	0	0	0	0
23.2 - Rent Paid to Others	1	0	0	0
23.3 - Comm., Util., Misc. Charges	12	4	4	0
24 - Printing and Reproduction	5	1	1	0
25.1 - Advisory and Assistance Services	7	0	0	0
25.2 - Other Services	610	62	0	0
25.3 - Purchases of Goods and Services	2	1	1	0
25.4 - Oper & Maintenance of Facilities	7	40	40	0
25.5 - Research & Development Contracts	129	36	40	0
25.6 - Medical Care	1	0	0	0
25.7 - Operation & Maint. of Equipment	2	0	0	0
25.8 - Subsistence & Support of Persons	1	0	0	0
26 - Supplies and Materials	9	2	2	0
31 - Equipment	6	2	3	0
41 - Grants, Subsidies & Contributions	26,684	1,575	36,307	33,328
Total other objects	27,516	1,743	36,416	33,328
Total, New Obligations	28,000	2,075	37,000	33,912
Position Data:				
Average Salary (dollars), ES positions	$172,090	$170,866	$170,866	$170,866
Average Salary (dollars), GS positions	$93,467	$94,404	$94,404	$94,758
Average Grade, GS positions	10.3	11.3	11.3	11.3

[1]Farm Bill programs are subject to reauthorization.
[2]Obligations shown in 2013 are for estimated 2012 carryover funds.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Status of Program

RESEARCH AND EDUCATION ACTIVITIES:

Current Activities:

1. Hatch Act. The Hatch Act provides formula funds to support research at the State Agricultural Experiment Stations which improves production, marketing, distribution, and utilization of crops and livestock for the food supply, health, and welfare of the American people, while conserving resources, enhancing nutrition and sustaining rural living conditions. Students are provided training opportunities to assist in scientific research projects conducted at the stations. Hatch Act formula funds are matched by non-Federal funds and are used to support research in forest and natural resources; crop resources; animal resources; people, communities, and institutions; competition, trade adjustment, price, and income policy; and food science and human nutrition. As a result of provisions contained in the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA), at least 25 percent of available Hatch funding must be used to support multi-State research; States must expend 25 percent, or two times the level spent in fiscal year (FY) 1997 (whichever is less), on integrated research and extension activities.

2. McIntire-Stennis Cooperative Forestry Research. The McIntire-Stennis Cooperative Forestry Research program provides formula funds to support research related to use of the Nation's forest resources. Timber production, forest land management, wood utilization, and the associated development of new products and distribution systems are some of the topics of this research. Additional areas of investigation include wildlife, recreation, water, range, and environmental quality, which are essential to the long-term productivity and profitability of the integrated system of forest resources.

3. Evans-Allen Program. The Evans-Allen formula funds research program for the 1890 Colleges and Tuskegee University was established in the Food and Agriculture Act of 1977, as amended. Beginning in FY 1979 annual appropriations have been used to support continuing agricultural research at the 1890 Colleges and Tuskegee University. The general provisions section 753 of Public Law 107-76 makes West Virginia State University eligible to receive funds under this program. Appropriations under this authority are the primary source of support for the food and agricultural research programs at the 1890 Colleges, Tuskegee University and West Virginia State University. Section 1445(a)(2) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) (7 U.S.C. 3222(a)(2)), as amended by section 7122 of the Food, Conservation, and Energy Act of 2008 (FCEA), requires that funds appropriated for this program be not less than 30 percent of the Hatch Act appropriation. Evans-Allen funds require a 100 percent non-Federal match. These programs place emphasis on small-scale agriculture, human nutrition, rural development and quality of living, crop resources, and animal resources. In addition, this program supports the development of agricultural expertise by providing training opportunities for students to assist in the research projects being conducted at these institutions.

4. Animal Health and Disease Research. The Animal Health and Disease Research formula program provides funding to accredited schools or colleges of veterinary medicine and/or State Agricultural Experiment Stations that conduct animal health and disease research. State Comprehensive Plans for animal health research, approved by NIFA, are being followed by the eligible institutions. Provisions of Section 1433 permit selection of studies within each State based on the highest-priority needs and the capabilities of the institutions to conduct the needed research.

5. Special Research Grants. The Special Research Grants Program concentrates on problems of national, regional, and local interest beyond the normal emphasis in the formula programs. Program objectives

are to facilitate or expand promising breakthroughs of importance to the Nation in areas of food and agricultural sciences and to facilitate or expand ongoing State-Federal food and agricultural research programs. Generally, funding requested in the President's budget is for projects that have regional and/or national impact, such as those projects addressing global change, pest control issues, aquaculture centers, sustainable agriculture, critical agricultural materials, supplemental and alternative crops, and rangeland research.

6. Agriculture and Food Research Initiative (AFRI). AFRI supports fundamental and applied research, extension, and education to address food and agricultural sciences (as defined under section 1404 of NARETPA). Competitive awards are made to eligible recipients to address critical issues in U.S. agriculture in the areas of global food security and hunger, climate change, sustainable bioenergy, childhood obesity, and food safety. Addressing these critical issues will engage scientists and educators with expertise in plant health and production and plant products; animal health and production and animal products; food safety, nutrition, and health; renewable energy, natural resources, and environment; agriculture systems and technology; and agriculture economics and rural communities. Of the amount of funds made available for research, not less than 60 percent is used for fundamental research and not less than 40 percent is used for applied research. No less than 30 percent of the amount allocated for fundamental research is available for research conducted by multidisciplinary teams and no more than 2 percent to be used for equipment grants. In addition, no less than 30 percent of AFRI funding may be used to carry out integrated research, education, and extension activities such as those provided for in section 406 of AREERA (7 U.S.C. 7626).

7. Small Business Innovation Research (SBIR) Program. The Small Business Innovation Development Act was designed to strengthen the role of small, innovative firms in Federally funded research and development. Under the SBIR program, 2.5 percent of appropriations for extramural research and development is set aside for awards to eligible small firms. The SBIR Program is a three-phased effort, but only Phase I and Phase II, the feasibility and follow-on research and development phases respectively, are eligible for support with USDA funds. Firms are encouraged to secure Phase III funding for the commercialization phase from other public or private sources. The research areas supported under the SBIR program address critical issues in U.S. agriculture in the areas of global food security and hunger, climate change, sustainable bioenergy, childhood obesity, and food safety. Addressing these critical issues will engage small businesses with expertise in a number of areas including plant and animal production and protection, forests and related resource sciences, soil and water resources, food and nutrition sciences, rural development, biofuels and biobased products, aquaculture, and small and mid-sized farms. NIFA administers the SBIR program for USDA, including the funds set aside for SBIR from other USDA agencies.

8. Tribal Colleges Research Grants Program. The Tribal Colleges Research Grants Program (authorized under the Equity in Educational Land-Grant Status Act of 1994, Public Law 103-382, as amended) is a competitive program for conducting agricultural research activities that address tribal, National, or multi-State priorities.

9. Farm Business Management and Benchmarking Program. The Farm Business Management and Benchmarking Program provides support to improve the farm management knowledge and skills of agricultural producers, and establish and maintain a national, publicly available farm financial management database to support improved farm management. Funds are awarded on a competitive basis under the program.

10. Sun Grant Program. The Sun Grant Program funds sun grant centers and subcenter to enhance national energy through the development, distribution, and implementation of biobased energy technologies. Through biobased energy and product technologies, activities are supported that promote diversification, and the environmental sustainability of, agricultural production in the U.S., and economic diversification in rural areas of the U.S. Funds are also used to enhance the efficiency of

bioenergy and biomass research and development programs through improved coordination and collaboration among USDA, Department of Energy, and land-grant colleges and universities.

11. Capacity Building for Non-Land Grant Colleges of Agriculture. The Capacity Building for Non-Land Grant Colleges of Agriculture (NLGCA) Program competitively awards grants to assist the institutions in maintaining and expanding the capacity of the NLGCA Institutions to conduct education, research, and outreach activities relating to agriculture, renewable resources, and other similar disciplines.

12. Policy Research Centers. The Policy Research Centers Program is a competitive program for centers to conduct research and education programs that are objective, operationally independent, and external to the Federal Government and that concern the effect of public policies and trade agreements on the farm and agricultural sectors including commodities, livestock, dairy, and specialty crops; environment; rural families, households, and economies; and consumers, food, and nutrition.

13. Higher Education Programs. The competitive Institution Challenge, Multicultural Scholars, and Graduate Fellowship Grants Program supports challenge grants to stimulate and enable colleges and universities to provide the quality of education necessary to produce graduates capable of strengthening the Nation's food and agricultural scientific and professional workforce. Institutions match USDA funds on a dollar-for-dollar basis. The program provides funding for multicultural scholars grants to institutions for scholarships to attract and educate more students from groups currently underrepresented in the food and agricultural sciences for careers in agriscience and agribusiness. Institutions must provide 25 percent in matching funds. Also supported are fellowship grants to colleges and universities to stimulate the development of food and agricultural scientific expertise in targeted areas of national need specifically to the recruitment and training of doctoral students for critical food and agricultural scientific positions. The competitive Secondary Education, Two-year Postsecondary Education, and Agriculture in the K-12 Classroom Program promotes and strengthens the ability of public secondary schools' education in agribusiness and agriscience and increases the number and/or diversity of young Americans pursuing college degrees in the food and agricultural sciences. The competitive 1890 Institution Capacity Building Grants Program serves as the crux of the Department's high-priority initiatives to advance the teaching and research capacity, and expand the competitiveness of the 1890 Land-Grant Institutions and Tuskegee University. The competitive Hispanic-Serving Institutions Education Grants Program promotes and strengthens the ability of Hispanic-Serving Institutions to carry out higher education teaching programs in the food and agricultural sciences. The Tribal Colleges Endowment Fund distributes interest earned by an endowment established for the 1994 Land-Grant Institutions (34 Tribally controlled colleges) as authorized in the Equity in Education Land-Grant Status Act of 1994, P.L. 103-382, as amended. The Endowment Fund enhances education in agricultural sciences and related areas for Native Americans by building education capacity at these institutions. The Tribal Colleges Education Equity Grants Program is a formula program designed to enhance educational opportunities for Native Americans by strengthening instructional programs in food and agriculture. The Alaska Native Serving and Native Hawaiian-Serving Institutions Education Grants Program is designed to recruit, support and educate minority scientists and professionals, and advance the educational capacity of these Native-serving institutions. The Resident Instruction Grants for Insular Areas Program is designed to enhance teaching programs at higher education institutions located in U.S. insular areas that focus on agriculture, natural resources, forestry, veterinary medicine, home economics, and disciplines closely allied to food and agriculture production and delivery systems. The Distance Education Grants for Insular Areas Program strengthens the capability of higher education institutions located in U.S. insular areas to carry out collaborative distance food and agricultural education programs using digital network technologies. The Veterinary Medicine Loan Repayment Program provides for a loan repayment program for a specified payment amount of qualifying educational loans of veterinarians for geographical areas that have a shortage of veterinarians; and areas of veterinary practice that the Secretary determines have a shortage of veterinarians, such as food animal medicine, public health, epidemiology, and food safety.

Selected Examples of Recent Progress:

1. Hatch Act. Small businesses, including those in the agriculture and biotechnology fields, constitute the backbone of Maine's economy. Value-added contributions from the agriculture community leverage these positive impacts, including increased revenues and several employment opportunities for rural workers. University of Maine food scientists are helping Maine's agricultural and biotechnology industries grow and find new markets for their products. Their work with a State biotechnology firm in the area of melamine/cyanuric acid analysis has helped the firm to refine its rapid assay kit and has lead to the creation of several scientific research jobs.

2. McIntire-Stennis Cooperative Forestry Research. Researchers at the University of Arkansas tested mathematical search techniques to develop management recommendations that will maximize financial return to landowners growing timber. Such computer simulations can study the effects of emerging markets for biomass feedstocks for biofuels and carbon sequestration markets. With training in carbon sequestration methods, the researchers will be able to assist forest landowners in accessing to carbon and biomass markets and obtain payment for ecosystem services from forest lands. Under existing carbon markets and prices, forest landowners in Arkansas can increase returns from a single crop of trees by as much as $150-$180 per acre.

3. Evans-Allen Program. Virginia State University researchers evaluated and identified grazing goats that show natural resistance and susceptibility to parasites. The ability to track genetic markers that render the animal resistant to disease could further increase market value of breeding stock. With proper marketing strategy, a purebred animal that exhibits disease resistance characteristics can increase the price of goat from $250 to $800 per head.

4. Animal Health and Disease Program. Bovine respiratory disease accounts for more cattle deaths than any other disease or dysfunction. To assist producers in the decision of proper disposition of highly stressed calves, scientists at Kansas State University studied if delaying an initial steroid implant in high-risk calves improves calf health and performance. Although results showed no value in delaying the implant, the research provided a sound basis for assisting producers in decision-making when processing and managing high risk calves.

5. Agriculture and Food Research Initiative (AFRI). Edwardsiella ictaluri is the causative agent of enteric septicemia of catfish (ESC), an economically important disease of farm-raised channel catfish. Mississippi State University is developing a safe, efficacious live attenuated ESC vaccine that is practical and economically beneficial to catfish producers. To date, two deletion mutant strains have been constructed (a carbon metabolism gene and a central metabolism gene). Two more gene deletions have been amplified and cloned. A fifth gene deletion is being constructed, and attenuation trials for the two deletion mutants are being conducted in catfish fingerlings.

   A project at the University of California is focusing on the factors affecting E. coli O157:H7 survival on lettuce. Researchers suggest the project outcome ban be used for improved control measures aimed at mitigating the risk of the organism surviving after a contamination event. Developers established a laboratory system to measure the growth and survival of virulent and attenuated E. coli O157:H7 isolates in the growth chamber on lettuce exposed to environmental regimes that mimic those found in the field. The identification of the factors influencing the survival of E. coli O157:H7 on lettuce is expected to develop agricultural practices that may reduce outbreaks associated with these economically valuable and otherwise healthy crops.

   The University of Wyoming partnered with the University of Nebraska-Lincoln, Colorado State University, Kansas State University, South Dakota State University, and USDA Agriculture Research Service to determine the effect of climate change on the growth and development of dryland winter wheat production systems. The study explored analysis of the effect of climate change on water balance, soil carbon, and soil nitrogen on dryland winter wheat production systems. Results showed

that the variability of the simulated yield was greater under a climate change scenario than under actual conditions.

6. Institution Challenge Grants Program. A multidisciplinary graduate program entitled, "Biobased Products and Bioenergy," utilizing high-quality instruction and distance delivery methods was developed and delivered through the efforts of the University of Arkansas, Kansas State University, Oklahoma State University and South Dakota State University. This collaborative, multi-university approach is impacting the quality of education in biomass technologies and bio-processing through students training by faculty from multiple universities in multiple disciplines, and networking with diverse experts in the field. In addition, faculty with specialized expertise is able to share their knowledge with more students from across the region, nation and ultimately the world.

7. Graduate Fellowship Grants. The University of Wisconsin, Madison, received funding to train a Master's student and a doctorate student for positions of scientific leadership in using genomic information (from DNA) to solve important agricultural problems. This project will lead to more scientists with a better understanding of biological systems, critical thinking and communication skills with the ability to solve research problems independently or as part of an interdisciplinary team.

8. Hispanic Serving Institutions Education Grants Program. Reedley College in California, partnered with California State University, Fresno; California Polytechnic State University, San Luis Obispo; University of California, Davis; California State University, Chico; the Kearney Agriculture Research Center (California) and USDA to develop and implement a competitive agricultural leadership and education program. The program supports undergraduate and graduate students from underrepresented groups to prepare them for careers in and related to the food, agriculture and natural resource system. As a result of this program, survey results revealed that 90 percent of the participants increased their knowledge of California agricultural issues. Also there was a 14 percent increase of freshmen declaring agricultural majors.

9. 1890 Institutions Capacity Building Grants Program. A Kentucky State University (KSU) teaching project implemented biotechnology training from middle school through post-secondary education. The project presented summer workshops for middle school and high school students, K-12 teachers, and non-traditional students, and enhanced current biotechnology-related courses at the university. This project had positive effects on the participating KSU undergraduate students. Students learned modern techniques, scientific thinking, and transferable skills in a laboratorial environment with the goal of enhancing their interests and confidence in science, technology, engineering, and mathematics fields.

10. Tribal Colleges Education Equity Grants Program. Educators at North Dakota's Turtle Mountain Community College are developing and implementing two new degree based curricula in Plant Sciences and Natural Resources. The project is expanding opportunities for Native American agricultural education in areas that address community needs. The Plant Sciences curriculum is focuses on the areas of Horticulture, Gardening and Greenhouse operations. The Natural Resources curriculum is enhances development in culturally appropriate areas that include Global Positioning System/Geographic Information Systems (GPS/GIS), fish and wildlife and environmental ecology. This project has impacted the community by providing gardening activities, entrepreneurship training, GPS/GIS training for secondary science teachers and computer technicians. Additionally, the entrepreneurship program provided ideas for cottage industries and small businesses for over 200 persons.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Extension Activities

Appropriation Language

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets).

Extension Activities

For payments to States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, Micronesia, the Northern Marianas, and American Samoa, [$475,183,000] $462,473,000, as follows: payments for cooperative extension work under the Smith-Lever Act, to be distributed under sections 3(b) and 3(c) of said Act, and under section 208(c) of Public Law 93–471, for retirement and employees' compensation costs for extension agents, [$294,000,000] $292,411,000; payments for extension work at the 1994 Institutions under the Smith-Lever Act (7 U.S.C. 343(b)(3)), $4,312,000; payments for the nutrition and family education program for low-income areas under section 3(d) of the Act, $67,934,000; [payments for the pest management program under section 3(d) of the Act, $9,918,000;] payments for the farm safety program and youth farm safety education and certification extension grants under section 3(d) of the Act, $4,610,000; payments for New Technologies for Agriculture Extension under section 3(d) of the Act, [$1,550,000] $1,750,000; payments to upgrade research, extension, and teaching facilities at institutions eligible to receive funds under 7 U.S.C. 3221 and 3222, $19,730,000, to remain available until expended; payments for youth-at-risk programs under section 3(d) of the Smith-Lever Act, [$7,600,000] $8,395,000; payments for carrying out the provisions of the Renewable Resources Extension Act of 1978 (16 U.S.C. 1671 et seq.), [$3,700,000] $4,060,000; payments for the federally recognized Tribes Extension Program under section 3(d) of the Smith-Lever Act, $3,039,000; payments for sustainable agriculture programs under section 3(d) of the Act, $4,696,000; [payments for rural health and safety education as authorized by section 502(i) of Public Law 92–419 (7 U.S.C. 2662(i)), $1,500,000;] payments for cooperative extension work by eligible institutions (7 U.S.C. 3221), $42,592,000, provided that each institution receives no less than $1,000,000; [for grants to youth organizations pursuant to 7 U.S.C. 7630, $750,000; payments to carry out the food animal residue avoidance database program as authorized by 7 U.S.C. 7642, $1,000,000;]

payments to carry out section 1672(e)(49) of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5925), as amended, $400,000; and for necessary expenses of Extension Activities, [$7,852,000] $8,544,000.

Explanation of Change

This change eliminates language for the following programs, which are not funded in 2013 through this account: Smith-Lever 3(d) Pest Management Centers, Rural Health and Safety Education, Grants to Youth Organizations, and Food Animal Residue Avoidance Database.

EXTENSION ACTIVITIES
Lead-Off Tabular Statement

Appropriation Act, 2012	$475,183,000
Budget Estimate, 2013	462,473,000
Change from 2012 Appropriation	-12,710,000

EXTENSION ACTIVITIES
Summary of Increases and Decreases

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Extension Activities:					
Smith-Lever Sections 3(b) and 3©	$297,500	-$3,589	$89	-$1,589	292,411
1890 Colleges, Tuskegee Univ. & WV State Univ	42,677	-85	0	0	42,592
Smith-Lever 3 (d):					
Farm Safety	4,863	-10	-4,853	0	0
Expanded Food and Nutrition Education Program	68,070	-136	0	0	67,934
Federally Recognized Tribes Extension	3,045	-6	0	0	3,039
New Technologies for Ag Extension	1,750	-4	-197	200	1,750
Pest Management	9,938	-20	0	-9,918	0
Sustainable Agriculture	4,705	-9	0	0	4,696
Youth at Risk	8,412	-17	-795	795	8,395
Youth Farm Safety Education and Certification	486	-1	-485	0	0
Farm Safety and Youth Farm Safety Education and Certification	0	0	4,610	0	4,610
Federal Administration	8,565	-17	-696	692	8,544
All Other	11,831	-11,831	0	0	0
Subtotal	461,842	-15,725	-6,936	-9,820	433,971
1890 Facilities Grants (Sec. 1447)	19,770	-40	0	0	19,730
Extension Services at the 1994 Institutions	4,321	-9	0	0	4,312
Food Animal Residue Avoidance Database (FARAD)	1,000	-2	2	-1,000	0
Grants to Youth Organizations	1,784	-4	-1,030	-750	0
Renewable Resources Extension Act (RREA)	4,068	-8	-360	360	4,060
Rural Health and Safety Education	1,738	-3	-235	-1,500	0
Women and Minorities in STEM Fields	400	-1	1	0	400
Total Available or Estimate	494,923	-15,791	-3,949	-12,710	462,473

EXTENSION ACTIVITIES

Project Statement by Program

(On basis of Appropriation)
(Dollars in Thousands)

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Discretionary Appropriations:										
Smith-Lever Sections 3(b) and 3(c)	$297,500	0	$293,911	0	$294,000	0	-$1,589	0	$292,411	0
1890 Colleges, Tuskegee Univ. & WV State Univ	42,677	0	42,592	0	42,592	0	0	0	42,592	0
Smith-Lever, Section 3d Programs:										
Expanded Food and Nutrition Education Program	68,070	0	67,934	0	67,934	0	0	0	67,934	0
Farm Safety	4,863	0	4,853	0	0	0	0	0	0	0
Farm Safety and Youth Farm Safety Education and Certification	0	0	0	0	4,610	0	0	0	4,610	0
Federally Recognized Tribes Extension	3,045	0	3,039	0	3,039	0	0	0	3,039	0
New Technologies for Ag Extension	1,750	0	1,746	0	1,550	0	200	0	1,750	0
Pest Management	9,938	0	9,918	0	9,918	0	-9,918	0	0	0
Sustainable Agriculture	4,705	0	4,696	0	4,696	0	0	0	4,696	0
Youth Farm Safety Education and Certification	486	0	485	0	0	0	0	0	0	0
Youth at Risk	8,412	0	8,395	0	7,600	0	795	0	8,395	0
Subtotal	101,269	0	101,066	0	99,347	0	-8,923	0	90,424	0
Federal Administration (direct approp.)										
General Administration	8,012	0	7,996	0	7,300	0	692	0	7,992	0
Ag in the Classroom	553	0	552	0	552	0	0	0	552	0
Other (Earmarked Projects)	11,831	0	0	0	0	0	0	0	0	0
Subtotal	20,396	0	8,548	0	7,852	0	692	0	8,544	0
Rural Health and Safety Education	1,738	0	1,735	0	1,500	0	-1,500	0	0	0
1890 Facilities Grants (Sec. 1447)	19,770	0	19,730	0	19,730	0	0	0	19,730	0
Grants to Youth	1,784	0	1,780	0	750	0	-750	0	0	0

Program	2010 Actual Amount	Staff Years	2011 Actual Amount	Staff Years	2012 Estimate Amount	Staff Years	Inc. or Dec. Amount	Years	2013 Estimate Amount	Staff Years
Organizations.....										
Renewable Resources Extension Act (RREA).....	4,068	0	4,060	0	3,700	0	360	0	4,060	0
Extension Services at the 1994 Institutions ..	4,321	0	4,312	0	4,312	0	0	0	4,312	0
Food Animal Residue Avoidance Database (FARAD).....	1,000	0	998	0	1,000	0	-1,000	0	0	0
Women and Minorities in STEM Fields.....	400	0	399	0	400	0	0	0	400	0
Mandatory Appropriations:										
Beginning Farmers and Ranchers Program.....	19,000	0	19,000	0	19,000	0	-19,000	0	0	0
Healthy Urban Food Enterprise Development Center	1,000	0	1,000	0	0	0	0	0	0	0
Risk Management Education	5,000	0	5,000	0	5,000	0	0	0	5,000	0
Subtotal	25,000	0	25,000	0	24,000	0	-19,000	0	5,000	0
Total Adjusted Approp.	519,923	158	504,132	155	499,183	155	-31,710	-3	467,473	152
Recessions and Transfers (Net).....	0	0	960	0	0	0	0	0	0	0
Total Appropriations.....	519,923	0	505,092	0	499,183	0	-31,710	0	467,473	0
Rescission.....	0	0	-960	0	0	0	0	0	0	0
Balance Available, Start of Year.....	5,016	0	1,040	0	9,150	0	-9,150	0	0	0
Recoveries, Other(Net)....	0	0	4,916	0	0	0	0	0	0	0
Total Available	524,939	158	510,088	155	508,333	155	-40,860	-3	467,473	152
Lapsing Balances.....	-35	0	-10,609	0	0	0	0	0	0	0
Balance Available, End of Year.....	-1,040	0	-9,150	0	0	0	0	0	0	0
Total Obligations.....	523,864	158	490,329	155	508,333	155	-40,860	0	467,473	152

EXTENSION ACTIVITIES

Project Statement by Program

(On basis of Obligations)
(Dollars in Thousands)

Programs	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Discretionary Obligations:										
Smith-Lever Sections 3(b) and 3(c)	$297,465	0	$283,302	0	$294,000	0	-$1,589	0	$292,411	0
1890 Colleges, Tuskegee Univ. & WV State Univ.	42,677	0	42,592	0	42,592	0	0	0	42,592	0
Smith-Lever, Section 3d Programs:										
Expanded Food and Nutrition Education Program	68,070	0	67,934	0	67,934	0	0	0	67,934	0
Farm Safety	4,863	0	4,853	0	0	0	0	0	0	0
Farm Safety and Youth Farm Safety Education and Certification	0	0	0	0	4,610	0	0	0	4,610	0
Federally Recognized Tribes Extension	3,045	0	3,039	0	3,039	0	0	0	3,039	0
New Technologies for Ag Extension	1,750	0	1,746	0	1,550	0	200	0	1,750	0
Pest Management	9,938	0	9,918	0	9,918	0	-9,918	0	0	0
Sustainable Agriculture	4,705	0	4,696	0	4,696	0	0	0	4,696	0
Youth Farm Safety Education and Certification	486	0	485	0	0	0	0	0	0	0
Youth at Risk	8,412	0	8,395	0	7,600	0	795	0	8,395	0
Subtotal	101,269	0	101,066	0	99,347	0	-8,923	0	90,424	0
Federal Administration (direct approp.)										
General Administration	8,012	0	7,996	0	7,300	0	692	0	7,992	0
Ag in the Classroom	553	0	552	0	552	0	0	0	552	0
Other (Earmarked Projects)	11,831	0	0	0	0	0	0	0	0	0
Subtotal	20,396	0	8,548	0	7,852	0	692	0	8,544	0
Rural Health and Safety Education	1,738	0	1,735	0	1,500	0	-1,500	0	0	0
1890 Facilities Grants (Sec. 1447)	18,938	0	16,674	0	28,680	0	-8,950	0	19,730	0

Programs	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Grants to Youth Organizations	1,784	0	1,780	0	750	0	-750	0	0	0
Renewable Resources Extension Act (RREA)	4,068	0	4,060	0	3,700	0	360	0	4,060	0
Extension Services at the 1994 Institutions	4,321	0	4,312	0	4,312	0	0	0	4,312	0
Food Animal Residue Avoidance Database (FARAD)	1,000	0	998	0	1,000	0	-1,000	0	0	0
Women and Minorities in STEM Fields	400	0	399	0	400	0	0	0	400	0
Subtotal…….	494,056		465,467		484,133		-21,660		462,473	
Mandatory Obligations:										
Beginning Farmers and Ranchers Program	19,000	0	19,000	0	19,000	0	-19,000	0	0	0
Healthy Urban Food Enterprise Development Center	1,000	0	1,000	0	0	0	0	0	0	0
Risk Management Education	9,808	0	4,800	0	5,200	0	-200	0	5,000	0
Subtotal	29,808	0	24,800	0	24,200	0	-19,200	0	5,000	0
Total Obligations	523,864	158	490,329	155	508,333	155	-40,860	-3	467,473	152
Recoveries, Other(Net)	0	0	4,016	0	0	0	0	0	0	0
Lapsing Balances	35	0	10,609	0	0	0	0	0	0	0
Balance Available, End of Year	1,040	0	9,150	0	0	0	0	0	0	0
Total Available	524,939	158	510,088	155	508,333	155	-40,860	-3	467,473	152
Recessions and Transfers (Net)	0	0	960	0	0	0	0	0	0	0
Balance Available, Start of Year	-5,016	0	-1,040	0	-9,150	0	+9,150	0	0	0
Other Adjustments (NET)	0	0	0	0	0	0	0	0	0	0
Total Appropriation	519,923	158	505,092	155	499,183	155	-40,660	-3	467,473	152

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Justification of Increases and Decreases

1. A decrease of $1,589,000 to Smith-Lever 3 (b) and (c) ($294,000,000 available in 2012) as follows:

   Need for Change

   Base funding under this program supports agricultural extension programs at 1862 Land-grant universities that develop practical applications of research knowledge and that give instruction and practical demonstrations of existing or improved practices or technologies in agriculture. Funding in 2013 will continue to support educational efforts that are central to the mission of the Cooperative Extension System (CES) and common to most extension units, such as agricultural production; nutrition, diet, and health; natural resources and environmental management; community resources and economic development; family development and resource management; 4-H and youth development; and leadership and volunteer development. In light of constrained budget levels, funding is requested at a reduced level.

2. A net decrease of $8,923,000 to Smith-Lever 3(d) ($19,068,000 available in 2012) as follows:

   a. An increase of $200,000 for New Technologies for Agricultural Extension ($1,550,000 available in 2012) as follows:

      Need for Change

      The New Technologies for Agricultural Extension (NTAE) Program aims to increase the capacity of each State to contribute expertise and content to the development of eXtension, a national web-based information and education delivery system. This initiative is intended to support CES with better communication with its customers and the general public. By creating web-based access to high quality, non-duplicative, research-based information, CES can better serve the needs of their anywhere-anytime generation of users and reach new audiences.

      Outcome

      Base funding supports a national web-based information and education delivery system that provides direct access to science-based educational resources from land-grant and other partner institutions about subjects of high importance to the general public. Increased funding will continue to support partial deployment activities for a web-based system by building and maintaining infrastructure, including hardware, software, staffing, training, and evaluation activities.

   b. An increase of $795,000 for Children, Youth, and Families at Risk ($7,600,000 available in 2012) as follows:

      Need for Change

      The program is designed to marshal resources of the Land-Grant and Cooperative Extension Systems to develop and deliver educational programs that equip limited resource families and youth who are at-risk for not meeting basic human needs with the skills they need to lead positive, productive, contributing lives.

      Outcome

      Base funding is used to improve the quality and quantity of comprehensive community-based programs for at-risk children, youth, and families supported by the Cooperative Extension System. Increased funding will be used to award additional sustainable communities projects, and expand statewide capacity for programs for at risk children, youth, and families.

c. A decrease of $9,918,000 to consolidate Pest Management Program into a new program ($9,918,000 available in 2012) as follows:

Need for Change

A decrease is proposed so funding can be directed to support a new program to consolidate integrated pest management activities. The consolidation will enhance NIFA's ability to support research, education, and extension activities needed to ensure a global food security and respond to other major societal challenges. Activities to support a comprehensive strategy in pest management are funded under the Crop Protection program under Integrated Activities.

3. An increase of $360,000 for Renewable Resources Extension Act ($3,700,000 available in 2012) as follows:

Need for Change

Base funding assists States in carrying out an extension program designed to assist forest and range landowners and managers in making resource management decisions based on research findings. Forest and rangeland resources include vegetation, water, fisheries and wildlife, soil, and recreation.

Outcome

Funds may support the following strategic issues: (a) forest stewardship and health; (b) rangeland stewardship and health; (c) wildlife and fisheries resources; (d) invasive species; (e) economic opportunities for individuals and communities; (f) public policy; and (g) land conversion, fragmentation, and parcelization. Increased funding will continue to provide support for these activities.

4. An increase of $692,000 for Federal Administration ($7,852,000 available in 2012) as follows:

Need for Change

These programs are managed at the national level by of staff of about 394 at the end of FY 2011 and with a number of temporary and intermittent employees. Grants management includes developing program regulations, establishing broad program goals, reviewing proposals, preparing grant documents, post-award review of progress, and similar activities necessary to achieve program goals. Between 0 and 4 percent of funds provided for programs may be used to support administration of the programs as established by law.

Outcomes

Funds will support grants management costs, including the partial support of pay costs, to award and administer a portfolio of research, education, and extension programs. The pay cost increase of $85,070 will be offset by equal reductions in printing, supplies, and travel costs. The NIFA budget consists of numerous programs that award thousands of individual grants to colleges and universities and other eligible recipients.

5. A decrease of $3,250,000 to eliminate funding for certain extension programs ($3,250,000 available in 2012) as follows:

	FY 2012 ($000)	Increase or Decrease ($000)	FY 2013 ($000)
Rural Health and Safety	$1,500	-$1,500	0
Grants for Youth Serving Institutions	750	-750	0
Food Animal Residue Avoidance Database	1,000	-1,000	0
Total	$3,250	-$3,250	0

Need for Change

A decrease is proposed so funding can be directed to support higher priority activities, and is consistent with the Administration's policy to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities. Alternative funding from other NIFA programs, State and local governments, and private sources can be used to support aspects of the program deemed to be of priority at State and/or local levels.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Table 1A for FY 2011
Distribution of Federal Payments for Extension Activities

STATE	SMITH-LEVER FORMULA	PEST MGMT	FARM SAFETY	1890's UNIV & TUSK UNIV	FEDERALLY-RECOGNIZED TRIBES	EENEP	YOUTH Farm Safety	YOUTH AT RISK	NEW TECHNOLOGIES AT AG EXT	1890 FACILITIES	RENEWABLE RESOURCES	INDIAN TRIBAL 1994 COLLEGES	SUSTAINABLE AGRICULTURE	OTHER	TOTAL FEDERAL FUNDS
ALABAMA	7,257,788	307,120	0	4,222,032	0	2,217,732	0	379,948	0	2,093,864	122,783	0	0	0	16,601,267
ALASKA	1,161,046	63,116	0	0	113,304	264,372	0	140,000	0	0	82,782	85,000	0	111,148	2,020,768
AMERICAN SAMOA	922,092	0	0	0	0	104,670	0	0	0	0	0	0	0	0	1,026,762
ARIZONA	2,134,242	175,000	0	0	648,022	706,066	0	445,808	0	0	72,203	175,000	0	675,750	5,032,091
ARKANSAS	6,086,710	218,815	180,000	1,850,666	0	1,417,636	0	0	0	970,123	97,493	0	0	1,168,912	11,990,355
CALIFORNIA	7,618,497	265,986	180,000	0	49,000	3,714,003	0	240,000	0	0	99,406	0	0	2,765,052	14,931,944
COLORADO	3,255,690	123,366	180,000	0	0	654,240	0	0	0	0	61,624	0	0	136,095	4,411,015
CONNECTICUT	2,131,815	87,802	0	0	0	541,302	0	280,000	0	0	46,511	0	0	0	3,087,430
DELAWARE	1,295,154	111,070	180,000	1,161,667	0	419,434	0	0	0	742,511	59,711	0	0	895,337	4,864,884
DISTRICT OF COLUMBIA	1,157,560	0	0	0	0	115,145	0	0	0	0	13,200	0	0	675,109	1,961,014
FLORIDA	4,765,113	377,105	0	1,810,517	80,000	2,374,511	0	372,797	0	980,451	99,004	0	0	190,080	11,049,578
GEORGIA	7,931,125	323,771	180,000	2,523,413	0	2,337,372	0	140,000	0	1,103,690	111,094	0	1,020,639	1,284,111	16,955,215
GUAM	985,529	0	0	0	0	104,920	0	140,000	0	0	13,200	0	0	0	1,243,649
HAWAII	1,342,841	154,776	0	0	0	350,797	0	140,000	0	0	46,512	0	0	265,000	2,299,926
IDAHO	2,855,276	138,361	0	0	258,444	385,762	0	280,000	0	0	54,068	0	0	200,000	4,171,911
ILLINOIS	9,762,419	147,907	0	0	0	2,195,829	0	0	0	0	55,579	0	0	177,348	12,339,082
INDIANA	8,941,163	350,448	734,362	0	0	1,271,083	0	140,000	0	0	52,556	0	0	595,000	12,084,612
IOWA	9,600,599	260,157	0	0	0	959,705	0	162,850	0	0	46,512	0	0	675,750	11,705,573
KANSAS	5,787,464	93,603	180,000	0	0	763,428	0	640,000	0	0	46,512	80,000	18,910	113,915	7,723,832
KENTUCKY	9,616,191	93,645	180,000	3,155,707	0	1,815,861	0	362,850	0	1,218,242	82,380	0	0	0	16,524,876
LOUISIANA	5,440,237	200,000	0	1,656,288	0	2,030,713	0	140,000	0	910,623	94,470	0	0	103,700	10,576,031
MAINE	2,321,736	218,678	161,919	0	0	501,412	0	140,000	0	0	66,158	85,000	0	532,045	4,026,948
MARYLAND	3,379,053	206,313	0	1,313,733	0	1,032,323	0	0	0	847,898	59,711	0	346,775	614,215	7,800,021
MASSACHUSETTS	2,636,897	159,865	0	0	0	1,049,043	0	130,000	0	0	46,511	0	0	250,062	4,272,378
MICHIGAN	9,100,333	206,009	0	0	90,000	1,856,417	0	0	0	0	79,759	195,000	0	0	11,527,518
MICRONESIA	1,031,117	0	0	0	0	108,773	0	0	0	0	0	0	0	0	1,139,890
MINNESOTA	9,353,770	307,446	177,271	0	96,000	1,054,977	0	324,382	0	0	60,113	365,183	1,020,639	591,652	13,351,433
MISSISSIPPI	6,969,275	87,500	0	1,975,772	79,000	1,847,570	0	0	0	975,502	106,561	0	0	479,841	12,521,021
MISSOURI	8,977,575	140,994	180,000	3,184,425	0	1,717,333	0	0	0	1,241,522	83,892	0	0	760,000	16,285,741
MONTANA	2,692,272	195,981	0	0	467,750	386,087	0	140,000	0	0	63,135	750,000	0	659,520	5,354,745
NEBRASKA	5,207,132	223,305	180,000	0	0	611,481	0	139,971	1,676,640	0	46,511	190,000	0	1,168,912	9,443,952
NEVADA	1,273,812	131,337	0	0	99,000	283,843	0	280,000	0	0	48,023	0	0	674,972	2,790,987
NEW HAMPSHIRE	1,758,430	167,237	0	0	0	325,458	0	0	0	0	46,511	0	0	211,261	2,508,897
NEW JERSEY	2,767,003	216,322	0	0	0	1,151,985	0	280,000	0	0	46,511	0	0	564,840	5,026,661
NEW MEXICO	2,209,792	67,270	0	0	150,000	603,766	0	0	0	0	67,669	465,000	0	0	3,563,497
NEW YORK	8,458,978	324,394	0	0	0	3,498,112	0	142,850	0	0	91,849	0	0	2,968,426	15,484,609
NORTH CAROLINA	11,917,461	248,771	179,048	3,576,769	96,000	2,671,114	0	239,962	0	1,233,775	218,300	0	0	1,658,054	22,039,254
NORTH DAKOTA	3,579,130	114,758	0	0	95,000	423,026	0	140,000	0	0	46,511	836,146	0	0	5,234,571
NORTHERN MARIANAS	905,770	0	0	0	0	104,472	0	140,000	0	0	0	0	0	0	1,150,242
OHIO	10,795,757	255,436	180,000	0	0	2,244,888	0	0	0	0	64,647	0	0	0	13,540,728
OKLAHOMA	5,653,495	216,658	180,000	1,950,705	95,000	1,236,154	0	0	0	1,030,825	70,290	0	0	742,526	11,175,653
OREGON	3,935,054	186,088	0	0	88,000	596,659	0	140,000	0	0	200,560	0	0	0	5,146,361
PENNSYLVANIA	10,202,134	306,995	0	0	0	2,717,621	200,399	139,959	0	0	87,316	0	0	342,080	13,996,504
PUERTO RICO	6,316,580	65,900	0	0	0	1,514,576	0	0	0	0	13,200	0	0	0	7,910,256
RHODE ISLAND	1,091,087	67,070	0	0	0	389,474	0	137,645	0	0	46,511	0	0	148,853	1,880,640
SOUTH CAROLINA	5,730,954	220,549	0	1,815,086	0	1,685,580	0	142,850	0	965,139	86,914	0	0	0	10,647,072
SOUTH DAKOTA	3,603,374	179,003	0	0	215,000	466,018	0	168,850	0	0	46,511	285,000	0	0	4,963,756
TENNESSEE	9,159,051	185,962	180,000	2,801,819	0	2,127,327	0	140,000	0	1,150,673	88,425	0	0	0	15,833,257
TEXAS	13,161,907	343,000	178,060	4,184,269	0	4,543,281	0	140,000	0	1,544,752	114,117	0	0	598,616	24,808,002
UTAH	1,826,884	158,482	180,000	0	0	406,300	0	0	0	0	49,534	0	1,080,164	0	3,701,364
VERMONT	1,862,503	189,506	180,000	0	0	320,604	170,339	0	0	0	46,511	0	1,020,639	659,784	4,449,886
VIRGIN ISLANDS	952,994	0	0	0	0	104,776	0	140,000	0	0	13,200	0	0	391,844	1,602,814
VIRGINIA	7,266,277	201,734	180,000	2,364,247	0	1,850,174	94,889	100,000	0	1,063,833	156,577	0	0	1,095,193	14,372,924
WASHINGTON	4,343,440	137,082	0	0	86,120	795,278	0	182,850	0	0	78,248	340,000	0	2,087,751	8,050,769
WEST VIRGINIA	4,191,229	38,209	180,000	1,340,865	0	1,141,421	0	380,000	0	866,702	71,801	0	0	0	8,210,227
WISCONSIN	8,887,557	188,511	180,000	0	0	1,027,454	0	140,000	0	0	76,737	275,000	0	1,617,188	12,392,447
WYOMING	1,633,627	60,481	167,797	0	97,000	277,828	0	0	0	0	51,045	0	0	670,890	2,958,668
OTHER*	695,069	0	0	0	0	0	0	0	0	0	0	0	0	0	695,069
PEER PANEL/CSAA	0	12,505	686	0	14,714	0	0	5,797	0	1,117	0	13,535	0	94,838	143,192
SUBTOTAL	285,897,060	9,521,399	4,659,143	40,887,980	2,917,354	67,417,186	465,627	8,059,369	1,676,640	18,941,242	3,897,469	4,139,864	4,507,766	29,615,670	482,603,769
FEDERAL ADMINISTRATION	8,013,940	396,725	194,131	1,703,666	121,556	516,674	19,401	335,807	69,860	298,883	162,395	172,494	187,824	9,644,356	21,837,712
SUBTOTAL OBLIGATIONS	293,911,000	9,918,124	4,853,274	42,591,646	3,038,910	67,933,860	485,028	8,395,176	1,746,500	19,240,125	4,059,864	4,312,358	4,695,590	39,260,026	504,441,481
UNOBLIGATED BALANCE	0	0	0	0	0	0	0	0	0	1,620,737	0	0	0	200,000	1,820,737
TOTAL	293,911,000	9,918,124	4,853,274	42,591,646	3,038,910	67,933,860	485,028	8,395,176	1,746,500	20,860,862	4,059,864	4,312,358	4,695,590	39,460,026	506,262,218

*Funds distributed for CSRS Workman Compensation Payments
Data may include 2011 obligations posted in 2012

OTHER

STATE	GRANTS TO YOUTH SERVING INSTITUTIONS	RURAL HEALTH & SAFETY	FEDERAL ADMN.	Food Animal Residue Avoidance Database	Women and Minorities In STEM Fields	Mandatory Programs a/	OTHER
ALABAMA	0	0	0	0	0	0	0
ALASKA	0	111,148	0	0	0	0	111,148
AMERICAN SAMOA	0	0	0	0	0	0	0
ARIZONA	0	0	0	0	0	675,750	675,750
ARKANSAS	0	0	0	0	0	1,168,912	1,168,912
CALIFORNIA	0	0	0	384,000	0	2,381,052	2,765,052
COLORADO	0	136,095	0	0	0	0	136,095
CONNECTICUT	0	0	0	0	0	0	0
DELAWARE	0	0	0	0	0	895,337	895,337
DISTRICT OF COLUMBIA	0	0	0	0	0	675,109	675,109
FLORIDA	0	0	0	190,080	0	0	190,080
GEORGIA	0	0	0	0	0	1,284,111	1,284,111
GUAM	0	0	0	0	0	0	0
HAWAII	0	0	0	0	265,000	0	265,000
IDAHO	0	0	0	0	0	200,000	200,000
ILLINOIS	0	177,348	0	0	0	0	177,348
INDIANA	595,000	0	0	0	0	0	595,000
IOWA	0	0	0	0	0	675,750	675,750
KANSAS	0	0	0	0	113,915	0	113,915
KENTUCKY	0	0	0	0	0	0	0
LOUISIANA	0	0	0	0	0	103,700	103,700
MAINE	0	0	0	0	0	532,045	532,045
MARYLAND	614,215	0	0	0	0	0	614,215
MASSACHUSETTS	0	250,062	0	0	0	0	250,062
MICHIGAN	0	0	0	0	0	0	0
MICRONESIA	0	0	0	0	0	0	0
MINNESOTA	0	193,725	0	0	0	397,927	591,652
MISSISSIPPI	0	0	0	0	0	479,841	479,841
MISSOURI	0	0	0	0	0	760,000	760,000
MONTANA	0	135,704	0	0	0	523,816	659,520
NEBRASKA	0	0	0	0	0	1,168,912	1,168,912
NEVADA	0	0	0	0	0	674,972	674,972
NEW HAMPSHIRE	0	132,372	0	0	0	78,889	211,261
NEW JERSEY	0	0	0	0	0	564,840	564,840
NEW MEXICO	0	0	0	0	0	0	0
NEW YORK	500,000	193,096	0	0	0	2,275,330	2,968,426
NORTH CAROLINA	0	0	0	384,000	0	1,274,054	1,658,054
NORTH DAKOTA	0	0	0	0	0	0	0
NORTHERN MARIANAS	0	0	0	0	0	0	0
OHIO	0	0	0	0	0	0	0
OKLAHOMA	0	0	0	0	0	742,526	742,526
OREGON	0	0	0	0	0	0	0
PENNSYLVANIA	0	0	0	0	0	342,080	342,080
PUERTO RICO	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	148,853	148,853
SOUTH CAROLINA	0	0	0	0	0	0	0
SOUTH DAKOTA	0	0	0	0	0	0	0
TENNESSEE	0	0	0	0	0	0	0
TEXAS	0	0	0	0	0	598,616	598,616
UTAH	0	0	0	0	0	0	0
VERMONT	0	0	0	0	0	659,784	659,784
VIRGIN ISLANDS	0	0	0	0	0	391,844	391,844
VIRGINIA	0	195,193	0	0	0	900,000	1,095,193
WASHINGTON	0	0	0	0	0	2,087,751	2,087,751
WEST VIRGINIA	0	0	0	0	0	0	0
WISCONSIN	0	135,366	0	0	0	1,481,822	1,617,188
WYOMING	0	0	0	0	0	670,890	670,890
OTHER*	0	0	0	0	0	0	0
PEER PANEL/CSAA	0	5,034	0	0	4,317	85,487	94,838
SUBTOTAL	1,709,215	1,665,143	0	958,080	383,232	24,900,000	29,615,670
FEDERAL ADMINISTRATION	71,217	69,381	8,547,870	39,920	15,968	900,000	9,644,356
SUBTOTAL OBLIGATIONS	1,780,432	1,734,524	8,547,870	998,000	399,200	25,800,000	39,260,026
UNOBLIGATED BALANCE	0	0	0	0	0	200,000	200,000
TOTAL	1,780,432	1,734,524	8,547,870	998,000	399,200	26,000,000	39,460,026

*Funds distributed for CSRS Workman Compensation Payments
Data may include 2011 obligations posted in 2012

Table 2A for FY 2012
Distribution of Federal Payments for Extension Activities

STATE	SMITH-LEVER FORMULA	PEST MGMT	FARM SAFETY YOUTH FARM SAFETY ED. AND CERTIFICATION	1890's UNIV & TUSK UNIV	FEDERALLY-RECOGNIZED TRIBES	EFNEP	YOUTH AT RISK	NEW TECHNOLOGIES AT AG EXT	1890 FACILITIES	
FEDERAL ADMINISTRATION	8,017,500	396,720	184,400	1,703,680	121,560	516,680	304,000	62,000	789,200	
SUBTOTAL OBLIGATIONS	8,017,500	396,720	184,400	1,703,680	121,560	516,680	304,000	62,000	789,200	
UNOBLIGATED BALANCE	285,982,500	9,521,280	4,425,600	40,888,320	2,917,440	67,417,320	7,296,000	1,488,000	27,890,800	
TOTAL	294,000,000	9,918,000	4,610,000	42,592,000	3,039,000	67,934,000	7,600,000	1,550,000	28,680,000	

	RENEWABLE RESOURCES	Grants to Youth Serving Organizations	SUSTAINABLE AGRICULTURE	RURAL HEALTH & SAFETY	FEDERAL ADM-SPECIAL PROJECTS	INDIAN TRIBAL 1994 COLLEGES	Food Animal Residue Avoidance Database	Women and Minorities in STEM Fields	Mandatory Programs a/	TOTAL FEDERAL FUNDS
FEDERAL ADMINISTRATION	148,000	30,000	187,840	60,000	7,852,000	172,480	40,000	16,000	960,000	21,562,060
SUBTOTAL OBLIGATIONS	148,000	30,000	187,840	60,000	7,852,000	172,480	40,000	16,000	960,000	21,562,060
UNOBLIGATED BALANCE	3,552,000	720,000	4,508,160	1,440,000	0	4,139,520	960,000	384,000	23,240,000	486,770,940
TOTAL	3,700,000	750,000	4,696,000	1,500,000	7,852,000	4,312,000	1,000,000	400,000	24,200,000	508,333,000

a/ Mandatory Programs includes: Beginning Farmer and Ranchers Development and Risk Management

Table 3A for FY 2013
Distribution of Federal Payments for Extension Activities

STATE	SMITH-LEVER FORMULA	1890's UNIV & TUSK UNIV	FARM SAFETY YOUTH FARM SAFETY ED. AND CERTIFICATION	FEDERALLY-RECOGNIZED TRIBES	EFNEP	YOUTH AT RISK	NEW TECHNOLOGIES AT AG EXT
FEDERAL ADMINISTRATION	11,696,440	1,703,680	184,400	121,560	2,717,360	335,800	70,000
SUBTOTAL OBLIGATIONS	11,696,440	1,703,680	184,400	121,560	2,717,360	335,800	70,000
UNOBLIGATED BALANCE	280,714,560	40,888,320	4,425,600	2,917,440	65,216,640	8,059,200	1,680,000
TOTAL	292,411,000	42,592,000	4,610,000	3,039,000	67,934,000	8,395,000	1,750,000

	1890 FACILITIES	RENEWABLE RESOURCES	SUSTAINABLE AGRICULTURE	FEDERAL ADM-SPECIAL PROJECTS	INDIAN TRIBAL 1994 COLLEGES	Women and Minorities in STEM Fields	Mandatory Programs a/	TOTAL FEDERAL FUNDS
FEDERAL ADMINISTRATION	789,200	162,400	187,840	8,544,000	172,480	16,000	200,000	26,901,160
SUBTOTAL OBLIGATIONS	789,200	162,400	187,840	8,544,000	172,480	16,000	200,000	26,901,160
UNOBLIGATED BALANCE	18,940,800	3,897,600	4,508,160	0	4,139,520	384,000	4,800,000	440,571,840
TOTAL	19,730,000	4,060,000	4,696,000	8,544,000	4,312,000	400,000	5,000,000	467,473,000

a/ Mandatory Programs includes: Risk Management

EXTENSION ACTIVITIES

Classification by Objects
(dollars in thousands)

Personnel Compensation:	2010 Actual	2011 Actual	2012 Estimate	2013 Estimate
Washington DC	$10,952	$12,809	$14,053	$14,141
11.1 - Full-time employees	10,685	11,866	13,724	13,812
11.3 - Other than full-time	134	236	165	165
11.5 - Other compensation	133	707	164	164
12 - Civilian Personnel Benefits	2,545	3,113	2,999	3,001
13 - Benefits for former personnel	5	0	5	5
Total pers. comp. & benefits	13,502	15,922	17,057	17,147
Other Objects:				
21 - Travel & Transportation of Persons	995	973	881	789
22 - Transportation of Things	6	1	6	6
23.1 - Rent to GSA	8	1	8	8
23.2 - Rent Paid to Others	44	0	45	46
23.3 - Comm., Util., Misc. Charges	347	528	356	360
24 - Printing and Reproduction	159	61	96	75
25.1 - Advisory and Assistance Services	247	69	254	258
25.2 - Other Services	2,593	2,456	1,939	1,712
25.3 - Purchases of Goods and Services	45	14	15	16
25.4 - Oper & Maintenance of Facilities	219	986	1,006	1,023
25.5 - Research & Development Contracts	1,574	790	900	1,000
25.6 - Medical Care	19	0	0	0
25.7 - Operation & Maint. of Equipment	59	0	0	0
25.8 - Subsistence & Support of Persons	43	0	0	0
26 - Supplies and Materials	265	130	195	174
31 - Equipment	188	69	194	196
41 - Grants, Subsidies & Contributions	503,550	468,327	485,381	444,663
Total other objects	510,362	474,407	491,276	450,326
Total, New Obligations	523,864	490,329	508,333	467,473
Position Data:				
Average Salary (dollars), ES positions	$172,090	$170,866	$170,866	$170,866
Average Salary (dollars), GS positions	$93,467	$94,404	$94,404	$94,758
Average Grade, GS positions	10.3	11.3	11.3	11.3

[1]Farm Bill programs are subject to reauthorization.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Status of Program

EXTENSION ACTIVITIES:

Current Activities:

1. Smith-Lever 3(b) and (c). Federal contributions for cooperative extension work are primarily derived from Section 3(b) and (c) formula funds appropriated under the Smith-Lever Act of 1914. These funds comprise about two-thirds of the total Federal funding for extension activities. Federal funds are matched by non-Federal sources, primarily States and counties, and support the major educational efforts that are central to the mission of the Cooperative Extension System and common to most extension units, such as agricultural production; nutrition, diet, and health; natural resources and environmental management; community resources and economic development; family development and resource management; 4-H and youth development; and leadership and volunteer development. Smith-Lever 3(b) and (c) funds must be matched by non-Federal funds. As a result of provisions contained in AREERA, States must expend 25 percent, or two times the level spent in FY 1997 (whichever is less), on cooperative extension activities in which two or more States cooperate to solve problems that concern more than one State. This also applies to activities that integrate cooperative research and extension.

2. Smith-Lever 3(d). Other sources of Federal funding for extension activities include the Smith-Lever section 3(d) or targeted funds, which are provided to the States to address special programs or concerns of regional and national importance and are distributed through administrative or non-statutory formulas and merit-reviewed projects. The following extension programs are funded under the Smith-Lever 3(d) funding mechanism: Expanded Food and Nutrition Education Program (EFNEP); Pest Management; Farm Safety and Youth Farm Safety Education and Certification; Children, Youth, and Families At Risk; Federally-Recognized Tribes Extension Program; Sustainable Agriculture; and New Technologies for Agricultural Extension. EFNEP funds are distributed on a formula basis and are not required to be matched. Funds under other Smith-Lever 3(d) programs are distributed on a competitive process.

3. Payments to the 1890 Land-Grant Institutions and Tuskegee University and West Virginia State University. Federal funding provides the primary support for the extension programs at the 1890 Land-Grant Institutions and Tuskegee University. The general provisions section 753 of Public Law 107-76 makes West Virginia State University eligible to receive funds under this program. This program primarily addresses the needs of small-scale and minority agricultural producers and other limited-resource audiences. Section 1444 of the 1977 Farm Bill provides that the funds made available to the 1890's for extension programs be distributed on the basis of a formula identical to the Smith-Lever 3 (b) & (c) formula. Section 7121of FCEA amended section 1444(a)(2) to require that funds appropriated for this program shall be not less than 20 percent of the Smith-Lever Act appropriation. The payment of funds under this program requires a 100 percent non-Federal match. These funds are used to maintain the extension infrastructure at the 1890 institutions and the partnership with the Cooperative Extension System.

4. 1890 Facilities Program. Federal funds provide the primary support for enhanced extension, research, and teaching facilities at all of the 1890 Land-Grant Institutions. Some examples of the use of funds include the renovation of office space and laboratories; much needed computer and equipment purchases; the acquisition of satellite downlinking and distance learning capabilities; and the construction of joint research and extension multi-purpose/conference centers. The 1890 Facilities Program enables the 1890 Land-Grant Institutions to improve their capacity and better address the needs of students, farmers, and rural populations with limited resources.

5. Renewable Resources Extension Act (RREA). RREA provides funding for expanded natural resource education programs. Funds are distributed primarily by an administratively-derived formula to all States for educational programs and projects and a limited number of special emphasis national programs. The Cooperative Extension System provides research-based education about renewable natural resources. Extension education enables the management of renewable natural resources in a way that better serves individual land owners, local communities, and the Nation.

6. Rural Health and Safety. The program helps rural residents avoid the numerous obstacles to maintaining their health status. The program focuses on training health care professionals in rural areas.

7. Ag in the Classroom. The program helps to advance agricultural literacy through a grassroots network of State coordinators, school teachers, agribusiness leaders, and other educators by supporting initiatives that include expanding outreach to underrepresented populations; regional demonstration projects; integration of information technology to reduce program delivery costs; and outstanding teacher recognition initiatives.

8. Extension Services at 1994 Institutions. The program provides funding for Native American communities and Tribal Colleges for extension activities as set forth in the Smith Lever Act. Funding is awarded on a competitive basis.

9. Food Animal Residue Avoidance Database Program. The program is a computer-based decision support system designed to provide livestock producers, extension specialists, and veterinarians with practical information on how to avoid drug, pesticide, and environmental contaminant residue problems.

10. Grants to Youth Serving Institutions. The program provides grants to the Girl Scouts of the United States of America, Boy Scouts of America, National 4-H Council, and the National Future Farmers of America Organization to expand the programs carried out by the organizations in rural areas and small towns.

11. Women and Minorities in Science, Technology, Engineering, and Mathematics (STEM) Fields. The program supports projects to increase the participation of women and underrepresented minorities from rural areas in STEM fields that are relevant to USDA. Priorities identified include: promotion of a safe, sufficient, and nutritious food supply for all Americans and for people around the world; sustainable agricultural policies that foster economic viability for small and mid-sized farms and rural businesses, protect natural resources, and promote value-added agriculture; national leadership in climate change mitigation and adaptation; building a modern workplace with a modern workforce; and support for 21st century rural communities.

Selected Examples of Recent Progress:

1. Smith-Lever 3(b) and (c). The total economic impact of one dairy animal is about $14,000, which includes the ripple effects from the milk production on the farm through the creation of products for human consumption. University of Missouri Extension provided educational programs to increase knowledge and understanding of pasture-based dairy systems, including classroom and on-farm workshops, discussion groups and mass media. In 2010, a new pasture-based dairy was started and several other producers began work toward establishing systems as the economy improves. As a result of such recent extension programs, growth in Missouri by new grazing dairies created $100 million in new investment, generated $40 million in annual milk sales, added $124 million in total output, and added 1,100 additional jobs to the State.

2. Smith-Lever 3(d). The Expanded Food and Nutrition Education Program (EFNEP) program continues to be highly effective in changing participants' behaviors, resulting in significant improvements in daily living skills. Ninety-four percent of adults reported improvements in their diets including consuming the equivalent of nearly one additional cup of fruits and vegetables, 84 percent of recent graduates improved food management practices, 89 percent improved nutrition practices, and 67 percent improved food safety practices. Multiple cost-benefit studies in past years show that every dollar invested in EFNEP results in $3.63 to $10.64 in saved health care costs and $2.48 saved in food expenditures. State success examples include: The University of Missouri's EFNEP reported over 86 percent of the EFNEP participants reported an increased knowledge of proper hand washing techniques. The University of Kentucky EFNEP reported that 98 percent of EFNEP program participants made an improvement in the nutritional quality of their diets. The University of Rhode Island EFNEP reported over 82 percent of its EFNEP families showed improvement in one or more nutritional practices.

3. Federally-Recognized Tribes Extension Program. Leech Lake Band of Ojibwe in Minnesota collaborated with the University of Minnesota Extension to identify problem septic systems and educate homeowners and wastewater professionals working on the Leech Lake Reservation. The project focused on the proper installation, maintenance and operation of septic systems. In particular, staff worked with homeowners to provide septic system education and site assessments which included establishing the Tribal Extension Advisory Council (consisting of community members, elders, tribal college students and staff from the Leech Lake Department of Resource Management); customized training for professionals for on-site sewage treatment systems; developing a small community wastewater process for Indian Country; and installing household water meters to collect accurate usage data.

4. 1890 Institutions. Research scientists and extension personnel at the Southern University Agricultural Center in Louisiana collaborated to inform the citizens of Louisiana the impacts of food borne illnesses. The goal was to help citizens, especially the elderly, low income, educationally disadvantaged and poor families, enhance their skills in proper food selection, storage and preparation. To ensure sustainable and safe food production practices, research and educational information was also directed at producers, food businesses and food handlers. Nutrition educators reached over 2,965 families with 95 percent of the participants learning how to make their own healthy snacks and adhering to food safety guidelines. Additionally, 90 percent of all participants can now correctly identify healthy foods, 89 percent can correctly read the nutrition facts label, 90 percent practice comparison shopping, and 70 percent plan meals.

5. Women and Minorities in Science, Technology, Engineering and Mathematics (STEM) Fields. The Maui Economic Development Board, Inc., in Hawaii, worked to increase the number of women, Asian-Americans, Native Hawaiians and Pacific Islanders in STEM fields. The project is engages the interest of secondary and post-secondary students in the real-world challenges of sustainable energy, current STEM-related career opportunities in food and agricultural sciences, and related education. These activities include career shadowing, mentoring, hands-on, and service-based learning for students, and professional development for teachers.

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Integrated Activities

Appropriation Language

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets).

Integrated Activities

For the integrated research, education, and extension grants programs, including necessary administrative expenses, [$21,482,000] $43,542,000, as follows: for competitive grants programs authorized under section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7626),

1/ [$14,496,000] $33,056,000, including [$4,500,000 for the water quality program, $4,000,000 for regional pest management centers, $1,996,000 for the methyl bromide transition program, and] $4,000,000

2/ for the organic transition program and $29,056,000 for crop protection; $998,000 for the regional rural

3/ development centers program; $3,500,000 for grants authorized under section 1623 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5813); and $5,988,000 for the Food and Agriculture Defense Initiative authorized under section 1484 of the National Agricultural Research,

4/ Extension, and Teaching Policy Act of 1977, to remain available until September 30, [2013] 2014.

Explanation of Change

The first change eliminates language for the water quality, regional pest management centers, and methyl bromide transition programs, which are not funded in 2013.

The second change adds language for the Crop Protection Program. The program consolidates integrated pest management (IPM) efforts and will support projects that respond to pest management challenges with coordinated region-wide and national research, education, and extension programs. It will serve as a catalyst for promoting further development and use of IPM approaches.

The third change adds language for grants authorized under section 1623 of the Food, Agriculture, Conservation, and Trade Act of 1990 which authorizes a Federal-State matching grant program to assist in the creation or enhancement of State sustainable agriculture research, extension, and education programs. The matching requirement will leverage State and/or private funds, and build the long-term capacity to guide the evolution of American agriculture to a more highly productive, sustainable system. Funding will support activities that: integrate sustainable agriculture in all State research, extension, and education projects; support new research at sustainable agriculture centers at the Nation's land grant and other

colleges and universities; build stronger Statewide farmer-to-farmer networks and outreach and technical assistance strategies; and incorporate sustainable agriculture studies and curriculum in undergraduate and graduate degree programs.

These competitive grants will integrate and elevate research, education and extension activities in order to more widely benefit American agriculture, ensuring it is of the highest quality and that it is profitable, protects the Nation's land and water, and is a force for a rewarding way of life for farmers and ranchers whose quality products and operations sustain their communities and society

The fourth change revises the fiscal year to allow for two year availability of 2013/2014 funding for the Food and Agriculture Defense Initiative.

INTEGRATED ACTIVITIES
Lead-Off Tabular Statement

Appropriation Act, 2012	$21,482,000
Budget Estimate, 2013	43,542,000
Change from 2012 Appropriation	22,060,000

INTEGRATED ACTIVITIES
Summary of Increases and Decreases

Item of Change	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Integrated Activities					
Water Quality	$12,649	-$3,667	-$4,482	-$4,500	0
International Science and Education Grants Program.	3,000	-2,002	-998	0	0
Crop Protection	0	0	0	29,056	29,056
Food Safety	14,596	-3,618	-10,978	0	0
Critical Issues Program	732	-732	0	0	0
Regional Pest Management Centers	4,096	-1,102	1,006	-4,000	0
Regional Rural Development Centers Program	1,312	-314	0	0	998
Crops at Risk from FQPA Implementation	1,365	-1,365	0	0	0
Sustainable Agriculture Federal-State Matching Grant Program	0	0	0	3,500	3,500
FQPA Risk Mitigation Program for Major Food Crop Systems	4,388	-4,388	0	0	0
Food and Agriculture Defense Initiative (Homeland Security)	9,830	-3,842	0	0	5,988
Methyl Bromide Transition Program	3,054	-1,058	0	-1,996	0
Organic Transition Program	5,000	-1,008	8	0	4,000
Total Available, Integrated Activities	60,022	-23,096	-15,444	22,060	43,542

INTEGRATED ACTIVITIES

Project Statement by Program

(On basis of Appropriations)
(Dollars in Thousands)

Program	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Discretionary Appropriation:										
Food and Agriculture Defense Initiative (Homeland Security)	$9,830	0	$5,988	0	$5,988	0	0	0	$5,988	0
Water Quality	12,649	0	8,982	0	4,500	0	-$4,500	0	0	0
Crop Protection	0	0	0	0	0	0	29,056	0	29,056	0
Food Safety	14,596	0	10,978	0	0	0	0	0	0	0
Regional Pest Management Centers	4,096	0	2,994	0	4,000	0	-4,000	0	0	0
Organic Transition Program	5,000	0	3,992	0	4,000	0	0	0	4,000	0
FQPA Risk Mitigation Program for Major Food Crop Systems	4,388	0	0	0	0	0	0	0	0	0
Crops at Risk from FQPA Implementation	1,365	0	0	0	0	0	0	0	0	0
Methyl Bromide Transition Program	3,054	0	1,996	0	1,996	0	-1,996	0	0	0
Sustainable Agriculture Federal-State Matching Grant Program	0	0	0	0	0	0	3,500	0	3,500	0
Critical Issues Program	732	0	0	0	0	0	0	0	0	0
Regional Rural Development Centers Program	1,312	0	998	0	998	0	0	0	998	0
International Science and Education Grants Program	3,000	0	998	0	0	0	0	0	0	0
Subtotal	60,022	0	36,926	0	21,482	0	22,060	0	43,542	0
Mandatory Appropriations:										
Specialty Crop Grant Programs Sec. 7311	50,000	0	50,000	0	50,000	0	-50,000	0	0	0
Organic Research Initiative Sec. 7206	20,000	0	20,000	0	20,000	0	-20,000	0	0	0
Subtotal	70,000	0	70,000	0	70,000	0	-70,000	0	0	0

Program	2010 Actual Amount	Staff Years	2011 Actual Amount	Staff Years	2012 Estimate Amount	Staff Years	Inc. or Dec. Amount	Years	2013 Estimate Amount	Staff Years
Total Adjusted Approp.	130,022	10	106,926	8	91,482	8	-47,940	1	43,542	9
Recessions and Transfers (Net)	0	0	74	0	0	0	0	0	0	0
Total Appropriations	130,022	10	107,000	8	91,482	8	-47,940	1	43,542	9
Rescission	0	0	-74	0	0	0	0	0	0	0
Balance Available, Start of Year	160	0	1,160	0	416	0	-416	0	0	0
Recoveries, Other(Net)	0	0	88	0	0	0	0	0	0	0
Total Available	130,182	10	108,174	8	91,898	8	-48,356	1	43,542	9
Lapsing Balances	0	0	0	0	0	0	0	0	0	0
Balance Available, End of Year	-1,160	0	-416	0	0	0	0	0	0	0
Total Obligations	129,022	10	107,758	8	91,898	8	-48,356	1	43,542	9

INTEGRATED ACTIVITIES

Project Statement by Program

(On basis of Obligations)
(Dollars in Thousands)

Programs	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Discretionary Obligations:										
Food and Agriculture Defense Initiative (Homeland Security)	$9,155	0	$5,898	0	$6,078	0	-$90	0	$5,988	0
Water Quality	12,649	0	8,982	0	4,500	0	-4,500	0	0	0
Crop Protection	0	0	0	0	0	0	29,056	0	29,056	0
Food Safety	14,571	0	10,978	0	0	0	0	0	0	0
Regional Pest Management Centers	4,096	0	2,994	0	4,000	0	-4,000	0	0	0
Organic Transition Program	5,000	0	3,992	0	4,000	0	0	0	4,000	0
FQPA Risk Mitigation Program for Major Food Crop Systems	4,388	0	0	0	0	0	0	0	0	0
Crops at Risk from FQPA Implementation	1,365	0	0	0	0	0	0	0	0	0
Methyl Bromide Transition Program	3,054	0	1,996	0	1,996	0	-1,996	0	0	0
Sustainable Agriculture Federal-State Matching Grant Program	0	0	0	0	0	0	3,500	0	3,500	0
Critical Issues Program	732	0	679	0	0	0	0	0	0	0
Regional Rural Development Centers Program	1,312	0	998	0	998	0	0	0	998	0
International Science and Education Grants Program	2,700	0	1,240	0	327	0	-327	0	0	0
Subtotal	59,022	0	37,758	0	21,898	0	21,644	0	43,542	0
Mandatory Obligations:										
Specialty Crop Grant Programs Sec. 7311	50,000	0	50,000	0	50,000	0	-50,000	0	0	0
Organic Research Initiative Sec. 7206	20,000	0	20,000	0	20,000	0	-20,000	0	0	0
Subtotal	70,000	0	70,000	0	70,000	0	-70,000	0	0	0

Programs	2010 Actual Amount	2010 Actual Staff Years	2011 Actual Amount	2011 Actual Staff Years	2012 Estimate Amount	2012 Estimate Staff Years	Inc. or Dec. Amount	Inc. or Dec. Staff Years	2013 Estimate Amount	2013 Estimate Staff Years
Total Obligations	129,022	10	107,758	8	91,898	8	-48,356	1	43,542	9
Recoveries, Other(Net)	0	0	-88	0	0	0	0	0	0	0
Lapsing Balances	0	0	0	0	0	0	0	0	0	0
Balance Available, End of Year	1,160	0	416	0	0	0	0	0	0	0
Total Available	130,182	10	108,086	8	91,898	8	-48,356	1	43,542	9
Rescission	0	0	74	0	0	0	0	0	0	0
Balance Available, Start of Year	-160	0	-1,160	0	-416	0	+416	0	0	0
Other Adjustments (NET)	0	0	0	0	0	0	0	0	0	0
Total Appropriation	130,022	10	107,000	8	91,482	8	-47,940	1	43,542	9

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Justification of Increases and Decreases

1. A decrease of $4,500,000 to eliminate Water Quality ($4,500,000 available in 2012) as follows:

   Need for Change

   In 2013, NIFA proposes that the activities formerly supported under the Water Quality program be supported under AFRI. This will allow efficiency in management and alignment of medium to long-term research goals with scientific opportunities and directions. The administration of the program activities under AFRI is a means to streamline the NIFA budget portfolio. This approach will facilitate the linking of agricultural science with broad biological science opportunities.

2. A decrease of $1,996,000 to eliminate Methyl Bromide Transition Program ($1,996,000 available in 2012) as follows:

   Need for Change

   A decrease is proposed so funding can be directed to support higher priority activities, and is consistent with the Administration's policy to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities. Alternative funding from other NIFA programs, State and local governments, and private sources can be used to support aspects of the program deemed to be of priority at State and/or local levels. Alternatives to methyl bromide research may be addressed through a comprehensive integrated pest management strategy funded under the Integrated Activities' Crop Protection program.

3. A decrease of $4,000,000 to consolidate Regional Pest Management Centers in a new program ($4,000,000 available in 2012) as follows:

   Need for Change

   A decrease is proposed so funding can be directed to support a new program, called Crop Protection, to consolidate integrated pest management activities. The consolidation will enhance NIFA's ability to support research, education, and extension activities needed to ensure a global food security and respond to other major societal challenges.

4. An increase of $29,056,000 for the Crop Protection Program ($0 available in 2012) as follows:

   In 2012 $29,748,000 under the individual integrated pest management (IPM) programs supported these activities.

   Need for Change

   Over the past 40 years, NIFA (and its predecessor agencies) has made key investments in research and extension efforts that resulted in the development and implementation of IPM strategies that revolutionized the way agricultural pests are managed in the United States. IPM strategies provide a holistic approach to managing pests that may include cultural, genetic, chemical and other methods applied as a suite of tactics that together minimize losses due to pests. The result is a reduction in chemical inputs leading to improved economics for the user and reduced risk to the environment and human health due to chemical exposure. Previously, these programs have provided fragmented support to address these as separate efforts. Stakeholder input and community feedback has indicated a need to create a more strategic approach to support for this area by establishing a consolidated program to improve coordination. By consolidating the Expert IPM Decision Support System, IPM and Biological Control, Minor Crop Pest Management, Pest Management Alternatives, Smith-Lever 3(d) Pest Management, and Regional Pest Management Centers

programs into a smaller number of programs, NIFA will enhance its ability to support research, education and extension activities needed to ensure global food security and respond to other major societal challenges.

Outcomes

The IPM program will provide support for projects that respond to pest management challenges with coordinated region-wide and national research, education and extension programs, and serve as a catalyst for promoting further development and use of IPM approaches. The program will also foster regional and national team building efforts, communication networks, and enhanced stakeholder participation.

The consolidated IPM program will provide support in five areas:

Plant Protection Tactics and Tools. This program area will support the development and introduction of new pest management tactics into agricultural production systems. In some cases, the program will develop new tactics that provide the breakthrough needed to fundamentally change a pest management system, resulting in greater profitability and smaller environmental and health risks. In other cases, the program will support the introduction of a new replacement tactic when a critical tactic is no longer available due to development of pest resistance, regulatory action or marketing decisions of manufacturers. The loss of a key management tactic can have devastating impacts on productivity, product quality and profitability. Examples include the impending loss of methyl bromide, the loss of effectiveness of glyphosate due to the development of resistant weed populations, and the endocrine disruptor issue associated with atrazine in runoff.

Diversified IPM Systems. Diversified IPM systems represent the long-term sustainable solution to many pest management problems. This program will support long-term projects focused on the development and implementation of innovative IPM systems on an area or landscape basis. The outcomes associated with IPM systems projects will be reduced reliance on single pest management tactics, the reduction of potential risks to human health and the environment caused by pests or the use of pest management practices, and increased economic benefits of adopting IPM practices. IPM systems projects will typically be multi-state or regional in scale and will involve multiple managed ecosystems with emphasis on enhanced stability and sustainability of IPM systems. The projects supported will be broad and systems-oriented efforts, with involvement of relevant disciplinary and subject matter experts in plant and animal sciences, water quality, food safety, and other relevant areas.

Enhancing Agricultural Biosecurity. This program area will support the development and maintenance of key information systems, networks, and decision support tools that provide the knowledge infrastructure needed for early detection and the application of science-based IPM systems for invasive, emerging and high-consequence pests that threaten U.S. agriculture. The program will support formal and informal education/training programs, and the development of pest management data and information needed by pest managers, regulatory agencies and policy makers to improve their ability to respond appropriately to endemic and exotic pests and diseases.

IPM for a Sustainable Society. Much of the IPM knowledge and expertise developed for agricultural systems has direct application in non-traditional settings. As IPM becomes more relevant in the areas that are fringe to agricultural crop production, much of what is learned can be applied to less traditional areas of food and quality of life on the rural-urban interface. For example IPM discoveries can be applied to urban pests (including Asian Long-horned Beetle, Emerald Ash Borer, and Laurel Wilt) and in community gardens. In addition, knowledge gained from IPM can be applied to pests/pesticides within living spaces in schools and homes.

Development of the Next Generation of IPM Scientists. This program area will support education programs needed to prepare the next generation of IPM scientists. Education efforts will focus on the training of interdisciplinary IPM scientists and IPM discipline experts such as new age systematists who are able to link to traditional methods. Support also will be provided for curriculum development, including web-based courses.

5. An increase of $3,500,000 to Sustainable Agriculture Federal-State Matching Grant Program ($0 available in 2012) as follows:

Need for Change

Section 1623 of the Food, Agriculture, Conservation, and Trade Act of 1990 authorizes a Federal-State matching grant program to assist in the creation or enhancement of State sustainable agriculture research, extension, and education programs. The matching requirement will leverage State and/or private funds, and build the long-term capacity to guide the evolution of American agriculture to a more highly productive, sustainable system.

Outcomes

Funding will support activities that: (1) Integrate sustainable agriculture in all State research, extension, and education projects; (2) Support new research at sustainable agriculture centers at the Nation's land grant and other colleges and universities; (3) Build stronger Statewide farmer-to-farmer networks and outreach and technical assistance strategies; and (4) Incorporate sustainable agriculture studies and curriculum in undergraduate and graduate degree programs.

These competitive grants will integrate and elevate research, education and extension activities in order to more widely benefit American agriculture, ensuring it is of the highest quality and that it is profitable, protects the Nation's land and water, and is a force for a rewarding way of life for farmers and ranchers whose quality products and operations sustain their communities and society.

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Geographic Tables

TABLE 1B - FISCAL YEAR 2011

STATE	Critical Issues - Plant and Animal Diseases	Homeland Security	Organic Research and Extension Initiative	International Science and Education Grants	Food Safety	Methyl Bromide	Organic Transition Risk Assessment	Regional Pest Management Centers	Rural Development Centers	Water Quality	Speciality Crop Research Initiative	TOTAL FEDERAL FUNDS
ALABAMA	0	0	931,715	0	100,000	0	0	0	0	0	1,542,160	2,573,875
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0
AMERICAN SAMOA	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	0	182,000	884,074	0	542,969	0	0	0	0	0	0	1,609,043
ARKANSAS	0	0	0	0	0	450,502	0	0	0	0	0	450,502
CALIFORNIA	124,296	682,000	2,608,205	0	0	0	0	712,036	0	234,865	4,168,946	8,530,348
COLORADO	0	182,000	0	0	0	0	0	0	0	531,000	0	713,000
CONNECTICUT	0	0	0	0	0	0	0	0	0	0	0	0
DELAWARE	0	0	0	150,000	0	0	0	0	0	595,000	0	745,000
DISTRICT OF COLUMBIA	0	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	131,122	682,000	0	0	0	272,226	0	0	0	793,800	2,486,817	4,365,965
GEORGIA	0	182,000	0	149,801	635,725	174,831	0	0	0	567,000	1,219,636	2,928,993
GUAM	0	0	0	0	0	0	0	0	0	0	0	0
HAWAII	109,955	0	0	0	0	0	0	0	0	0	0	109,955
IDAHO	0	0	0	0	0	0	0	0	0	0	0	0
ILLINOIS	0	0	2,097,770	0	0	0	0	712,036	0	0	1,332,040	4,141,846
INDIANA	0	510,575	0	0	0	0	0	0	0	395,000	0	905,575
IOWA	0	182,000	0	0	0	0	0	0	0	280,909	1,949,642	2,412,551
KANSAS	0	531,000	0	149,663	0	0	0	0	0	570,000	0	1,250,663
KENTUCKY	0	31,000	0	0	0	0	0	0	0	0	0	31,000
LOUISIANA	0	182,000	0	0	0	0	0	0	0	0	0	182,000
MAINE	0	0	0	0	0	0	0	0	0	0	0	0
MARYLAND	0	0	0	0	0	0	403,777	0	0	0	1,861,387	2,265,164
MASSACHUSETTS	0	0	0	0	424,878	0	0	0	0	0	3,318,651	3,743,529
MICHIGAN	0	606,425	473,656	0	2,895,758	0	749,106	0	237,524	0	7,682,250	12,644,719
MICRONESIA	0	0	0	0	0	0	0	0	0	0	0	0
MINNESOTA	0	31,000	380,923	0	0	0	0	0	0	0	903,909	1,315,832
MISSISSIPPI	0	31,000	0	0	0	499,701	0	0	237,524	445,000	0	1,213,225
MISSOURI	0	0	0	148,904	0	0	742,217	0	0	0	0	891,121
MONTANA	0	0	0	0	0	0	742,907	0	0	598,500	0	1,341,407
NEBRASKA	0	31,000	0	149,579	0	0	0	0	0	0	0	180,579
NEVADA	0	0	0	0	0	0	0	0	0	0	0	0
NEW HAMPSHIRE	0	0	2,863,915	0	0	0	0	0	0	0	0	2,863,915
NEW JERSEY	0	31,000	0	98,937	0	0	0	0	0	0	1,866,558	1,996,495
NEW MEXICO	0	31,000	36,102	0	0	0	0	0	0	0	0	67,102
NEW YORK	0	682,000	2,406,662	0	0	0	0	712,036	0	0	4,602,690	8,403,388
NORTH CAROLINA	0	182,000	0	0	541,621	496,962	399,745	712,036	0	595,000	2,490,839	5,418,203
NORTH DAKOTA	0	0	0	0	0	0	0	0	0	0	0	0
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0
OHIO	0	31,000	1,547,499	0	1,864,665	0	0	0	0	0	50,000	3,493,164
OKLAHOMA	113,649	0	0	0	543,000	0	0	0	0	0	0	656,649
OREGON	0	31,000	1,149,143	0	0	0	0	0	0	0	0	1,180,143
PENNSYLVANIA	0	31,000	2,967,650	0	542,607	0	0	0	237,524	0	6,062,168	9,840,949
PUERTO RICO	0	0	0	0	0	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	0	0	0	0	495,000	0	495,000
SOUTH CAROLINA	0	0	0	98,926	542,999	0	0	0	0	0	50,000	691,925
SOUTH DAKOTA	0	31,000	0	0	0	0	0	0	0	0	0	31,000
TENNESSEE	0	31,000	0	0	642,977	0	0	0	0	0	0	673,977
TEXAS	0	182,000	640,605	0	540,326	0	0	0	0	0	0	1,362,931
UTAH	0	31,000	0	0	0	0	0	0	237,524	0	0	268,524
VERMONT	0	0	0	0	0	0	0	0	0	0	0	0
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0	0	0	0
VIRGINIA	200,000	0	0	148,264	0	0	0	0	0	0	49,280	397,544
WASHINGTON	0	182,000	74,130	0	0	0	745,493	0	0	0	1,054,798	2,056,421
WEST VIRGINIA	0	0	50,000	0	0	0	0	0	0	0	0	50,000
WISCONSIN	0	182,000	0	0	541,313	0	0	0	0	2,400,000	3,773,367	6,896,680
WYOMING	0	31,000	0	0	0	0	0	0	0	0	0	31,000
BIOTECH	0	13,480	14,500	0	26,800	2,780	0	0	0	1,960	203,440	262,960
SBIR	0	0	0	0	87,824	15,968	31,936	23,952	7,984	71,856	1,200,000	1,439,520
PEER PANEL	0	0	73,451	26,545	65,418	3,190	17,139	2,144	0	47,830	131,422	367,139
FED ADMIN	0	150,000	800,000	39,920	439,120	79,840	159,680	119,760	39,920	359,280	2,000,000	0 4,187,520
SUBTOTAL	679,022	5,898,480	20,000,000	1,160,539	10,978,000	1,996,000	3,992,000	2,994,000	998,000	8,982,000	50,000,000	107,678,041
UNOBLIGATED BALANCE	0	97,104	0	161,993	0	0	0	0	0	0	0	259,097
TOTAL	679,022	5,995,584	20,000,000	1,322,532	10,978,000	1,996,000	3,992,000	2,994,000	998,000	8,982,000	50,000,000	107,937,138

Data may inclde 2011 obligations posted in 2012.

TABLE 2B - FISCAL YEAR 2012

STATE	Methyl Bromide	Organic Transistion Risk Assessment	Regional Pest Management Center	Rural Development Centers	Water Quality	Homeland Security	Organic Research Initiative Sec 7311	Specialty Crop	TOTAL FEDERAL FUNDS
SBIR	16,607	33,280	33,280	8,303	37,440	0	0	1,248,000	1,376,910
BIOTECH RISK	0	760	0	0	0	12,540	11,460	203,580	228,340
FEDERAL ADMIN OBLIGATED	79,840	160,000	160,000	39,920	180,000	239,520	800,000	2,000,000	3,659,280
UNOBLIGATED	1,899,553	3,805,960	3,806,720	949,777	4,282,560	5,735,940	19,188,540	46,548,420	86,217,470
TOTAL	1,996,000	4,000,000	4,000,000	998,000	4,500,000	5,988,000	20,000,000	50,000,000	91,482,000

TABLE 3B - FISCAL YEAR 2013
INTEGRATED ACTIVITIES

INTEGRATED PROGRAMS

STATE	Crop Protection	Organic Transistion Risk Assessment	Homeland Security	Rural Dev. Centers	Sustainable Ag. Fed.-State Matching Grant	TOTAL FEDERAL FUNDS
SBIR	251,044	34,560	0	8,303	30,240	324,147
BIOTECH RISK	0	0	0	0	0	0
FEDERAL ADMIN OBLIGATED	1,162	160,000	239,520	39,920	140,000	580,602
UNOBLIGATED	28,803,794	3,805,440	5,748,480	949,777	3,329,760	42,637,251
TOTAL	29,056,000	4,000,000	5,988,000	998,000	3,500,000	43,542,000

INTEGRATED ACTIVITIES

Classification by Objects
(dollars in thousands)

Personnel Compensation:	2010 Actual	2011 Actual	2012 Estimate	2013 Estimate
Washington DC	$1,491	$2,500	$1,921	$1,921
11.1 - Full-time employees	1,391	2,268	1,813	1,813
11.3 - Other than full-time	50	53	54	54
11.5 - Other compensation	50	179	54	54
12 - Civilian Personnel Benefits	685	620	814	814
13 - Benefits for former personnel	1	0	1	1
Total pers. comp. & benefits	2,178	3,120	2,736	2,736
Other Objects:				
21 - Travel & Transportation of Persons	253	203	180	160
22 - Transportation of Things	1	0	1	1
23.1 - Rent to GSA	2	0	2	2
23.2 - Rent Paid to Others	9	0	10	11
23.3 - Comm., Util., Misc. Charges	73	55	75	76
24 - Printing and Reproduction	34	7	10	8
25.1 - Advisory and Assistance Services	42	10	12	14
25.2 - Other Services	717	625	557	494
25.3 - Purchases of Goods and Services	9	1	1	1
25.4 - Oper & Maintenance of Facilities	46	347	350	355
25.5 - Research & Development Contracts	808	308	830	844
25.6 - Medical Care	4	22	22	23
25.7 - Operation & Maint. of Equipment	12	0	13	14
25.8 - Subsistence & Support of Persons	9	0	9	9
26 - Supplies and Materials	56	0	65	58
31 - Equipment	40	17	19	20
41 - Grants, Subsidies & Contributions	124,728	103,043	87,006	38,716
Total other objects	126,844	104,638	89,162	40,806
Total, New Obligations	129,022	107,758	91,898	43,542
Position Data:				
Average Salary (dollars), ES positions	$172,090	$170,866	$170,866	$170,866
Average Salary (dollars), GS positions	$93,467	$94,404	$94,404	$94,758
Average Grade, GS positions	10.3	11.3	11.3	11.3

[1]Farm Bill programs are subject to reauthorization.

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Status of Program

INTEGRATED ACTIVITIES:

Current Activities:

1. Programs currently funded under the Integrated Activities account are Water Quality, Regional Pest Management Centers (formerly Pesticide Impact Assessment), Methyl Bromide Transition Program, and Organic Transition Program. Per Section 406 of AREERA, grants are awarded on a competitive basis to support integrated, multifunctional agricultural research, extension, and education activities. The Regional Rural Development Centers program is administered under this account. The Regional Rural Development Centers programs are conducted under the authority of Section 2(c)(1)(B) of Public Law 89-106, as amended (7 U.S.C. 450i(c)), which enables the agency to support research, extension or education activities.

2. Food and Agriculture Defense Initiative (FADI). The FADI Program under the authority of Section 1484 of the Farm Security and Rural Investment Act of 2002 also is funded under this account. This program provides support for the National Plant Diagnostic Network and the National Animal Health Laboratory Network to identify and respond to high risk biological pathogens in the food and agricultural system. The network is used to increase the ability to protect the Nation from disease threats by identifying, containing, and minimizing disease threats. The funds also are used to support the Extension Disaster Education Network, and maintain and enhance pest risk management tools for Asian soybean rust and other pathogens of legumes.

Selected Examples of Recent Progress:

1. Water Quality Program. Faculty at the University of Nebraska are developing and delivering a multi-faceted extension education program. They are designing and implementing a multi-media enhanced curriculum and experiential learning based 4-H/Youth program; developing and delivering educational programs and hands-on learning opportunities for green industry professionals to help meet the growing demand for sustainable greenspace solutions and expand recognition of entrepreneurial opportunities. They also are integrating stormwater hydrology and green infrastructure topics in Master Gardener training programs and stormwater management and green infrastructure topics into existing university landscape architecture and design courses.

2. Methyl Bromide Transition Program. At the University of Georgia scientists are identifying, evaluating, demonstrating and recommending uses of non-fumigant pesticides in plastic-mulch vegetable beds as alternatives to traditional soil fumigants such as Methyl Bromide. The research is developing environmentally-safe best management strategies which will significantly reduce losses resulted from soilborne diseases and weeds in vegetable production. Results indicate that certain newer nematicide and fungicides have the promise of being alternatives to methyl bromide for control of root-knot nematodes and important soilborne diseases such as Phytophthora blight.

3. Organic Transition Program. Scientists in Iowa are encouraging organic transition by developing and establishing organic vegetable cropping systems that maximize soil quality, foster carbon sequestration, and minimize nutrient loss through cover crops, composting, and reduced tillage. They also are developing recommendations for methods to enhance ecosystem services and improve soil quality on organic vegetable farms based on results derived from horticultural, soil, gas flux, and soil water data in experimental sites. A goal of the project is to increase economic returns for organic vegetable growers by reducing costs of production in field operations and labor, decreasing dependence on external sources of applied fertility, lowering energy costs, and obtaining

carbon/emission credits. Another goal is to develop and offer educational programs on organic vegetable production and postharvest handling for farmers, students, and agricultural professionals to facilitate the transition to organic production.

4. Food and Agriculture Defense Initiative Program. The National Plant Diagnostic Network (NPDN) is a 50 State network of land grant university based plant diagnostic laboratories. The network is led by diagnostic laboratory centers at Cornell University (New York), University of Florida, Kansas State University, Michigan State University, and University of California at Davis. These institutions receive direct funding from NIFA and provide support to the other land grant plant diagnostic laboratories in their region through subcontracts, training, and leadership. Because of this, plant laboratories in every State receive Federal funding and other support from the five NPDN centers. All 50 States and many U.S. territories are connected to the NPDN through digital distance diagnostics, used throughout the Nation to speed early detection of high consequence plant pathogens and solve other agricultural problems. This web-based diagnostics system allows plant diagnosticians in one location to transmit a digital image across the country to someone with special expertise. Plant disease (and insect) detection criteria have been developed for soybean rust, sudden oak death, Ralstonia stem rot, plum pox virus, pink hibiscus mealybug, potato wart, huanglongbing (citrus greening), Potato Cyst Nematode, Late Blight, Beet Curly Top, Citrus Leprosis and Citrus Blackspot. Citrus Leprosis and Citrus Blackspot were added in Fiscal Year 2011.

   The National Animal Health Laboratory Network (NAHLN) is a national network of non-Federal public animal diagnostic laboratories; under the leadership of NIFA, Animal and Plant Health Inspection Service (APHIS), and the American Association of Veterinary Laboratory Diagnosticians. It has 12 core laboratories who receive NIFA support; which are located at Cornell University (New York), Louisiana State University, University of Georgia, Texas A&M, University of Wisconsin, Iowa State University, Colorado State University, Washington State University, University of California at Davis, University of Arizona, North Carolina Department of Agriculture and Consumer Services, and Florida Department of Agriculture and Consumer Services. In addition to these core laboratories, NIFA provides a reduced amount of funding for laboratories in 16 other States: Oregon, Utah, New Mexico, Wyoming, South Dakota, Nebraska, Kansas, Minnesota, Mississippi, Tennessee, Indiana, Michigan, Kentucky, Ohio, Pennsylvania, and New Jersey. Animal disease-detection criteria have been developed for the following high-consequence diseases: Foot-and-Mouth Disease, Exotic Newcastle Disease, Classical Swine Fever (or hog cholera), High Pathogen Avian Influenza, Low Pathogen Avian Influenza, Bovine Spongiform Encephalopathy, Scrapie, Chronic Wasting Disease, Rift Valley Fever, African Swine Fever, and Swine Influenza Virus surveillance. Swine Influenza Virus was added in Fiscal Year 2011. NAHLN is part of a national strategy to coordinate the Nation's Federal, State and university laboratory resources.

   The Extension Disaster Education Network (EDEN) is a collaborative multistate effort by extension services across the country to improve the delivery of services to citizens affected by disasters. NIFA leads this effort. For example, The Alabama EDEN site focused on the Gulf of Mexico oil spill. To assist local families in reducing the impact of the crisis, Extension launched an initiative to raise funds in support of the Bay Area Food Bank. This food bank supports more than 700 feeding programs in 550 agencies and serves 24 counties across three Gulf Coast States.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Summary of Budget and Performance
Statement of Agency Goals and Objectives

The mission of NIFA is to advance knowledge for agriculture, the environment, human health and well-being, and communities. It achieves this mission through two functions:

- Program leadership to identify, develop, and manage programs to sponsor university-based and other institutional education, research, and extension; and
- Fair, effective, and efficient administration of Federal assistance implementing education, research, and extension awards and agreements.

NIFA has six strategic goals and fourteen strategic objectives that contribute to the four USDA Strategic Goals and provide research, education, and extension to support the Department in meeting Agency Priority Goals (APGs).

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
USDA Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating and economically thriving.	**Agency Goal 2:** Enhance the Competitiveness and Sustainability of Rural and Farm Economies.	Objective 2.1: Provide Research, Education, and Extension to Expand Domestic Market Opportunities	Extension Research Integrated Higher Education	Key Outcome 2.1: Expanded science-based knowledge and technologies to generate high-quality products and processes by: (1) increasing knowledge of bioenergy and biomass conversion, (2) creating new commercially viable and marketable alternative crops, and alternative markets for non-food products from existing crops, and (3) establishing new integrated research and extension programs and multi-disciplinary graduate education training programs.

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
		Objective 2.2: Provide research, education, and extension to increase the efficiency of agricultural production and marketing systems Objective 2.3: Provide Risk Management and Financial Tools to Farmers and Ranchers	Extension Research Integrated Higher Education	Key Outcome 2.2: Increased efficiency of the agricultural production system by: (1) expanding information to model feed utilization for animal species, (2) releasing new or improved varieties or germplasm with enhanced pest or disease resistance, (3) further understanding the biological role of gene sequences in plants, animals, microbes and insects, (4) strengthening masters degree level courses in the food and agricultural sciences, particularly at minority-serving institutions, (5) increasing the number of minority students participating in the workforce by funding minority-serving projects at Hispanic serving institutions, 1890 institutions, 1994 institutions, Alaska-native serving, native-Hawaiian serving institutions, and (6) increasing the number of socially disadvantaged minority farmers and ranchers who are knowledgeable, eligible, and participating in USDA farm programs. Key Outcome 2.3: Increased producers' knowledge of principles and techniques of risk management.

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
	Agency Goal 3: Support Increased Economic Opportunities and Improved Quality of Life in Rural America.	Objective 3.1: Expand Economic Opportunities in Rural America by Providing Research, Education, and Extension to Create Opportunities for Growth Objective 3.2: Provide Research, Education, and Extension to Improve the Quality of Life in Rural Areas	Extension Research Integrated Higher Education	Key Outcome 3.1: Expanded economic opportunities in Rural America and increased knowledge pertaining to economic diversification, community planning, service infrastructure, local government, youth/adult workforce planning, and civic engagement through innovative integrated research and extension projects targeted to regional business, economic and business development. Key Outcome 3.2: Increased knowledge among county based staff and community leadership in order to provide research-based practices to encourage appropriate community capitol development which enhances business and economic development, the availability of appropriate education and health services, transportation networks and the vibrant community connections. Electronic deployment of information to increase the social, cultural, human and economic capitol available for more nimble and creative community responses to needs.

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
	Agency Goal 4: Enhance Protection and Safety of the Nation's Agriculture and Food Supply.	Objective 4.2: Develop and Deliver Research, Education, and Extension to Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks	Extension Research Integrated Higher Education	Key Outcome 4.2: Expanded science-based information and technologies and reduced number and severity of agricultural pest and disease outbreaks through: (1) connection and data exchange among national plant and animal disease diagnostic networks, (2) increased resource efficiency and decreased economic risk regarding the adoption of sustainable pest management tactics, (3) developed capacity to minimize or mitigate occupational and non-occupational human health risks associated with pest management, and (4) increased capacity in minimizing or mitigating environmental risk associated with pest management.
USDA Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored and made more resilient to climate change, while enhancing our water resources.	**Agency Goal 6:** Protect and Enhance the Nation's Natural Resource Base and Environment.	Objective 6.1: Ensure Clean, Abundant Water And Clean, Healthy Air Objective 6.2: Enhance Soil Quality to Maintain Productive Working Lands Objective 6.3: Protect Enhance, and Manage Forests and Rangelands Objective 6.4: Protect and Enhance Wildlife Habitat to Benefit Desired, at-Risk and Declining Species	Research Higher Education Extension Integrated	Key Outcome 6: Expanded and disseminated science-based knowledge and information for management of the nation's natural resources and environment, including soil, air and water, in agricultural, forest, and range working lands and ecosystems.

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
USDA Strategic Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security.	**Agency Goal 1:** Enhance International Competitiveness of American Agriculture.	Objective 1.2: Support International Economic Development and Trade Capacity Building	Extension Research Integrated Higher Education	Key Outcome 1.2: Expanded international economic development and trade capacity building through: (1) partnerships between U.S. and counterpart faculty in developing or transitioning countries to strengthen science applications and (2) technical assistance provided to these countries to support market and agricultural sector development.
	Agency Goal 3: Support Increased Economic Opportunities and Improved Quality of Life in Rural America.	Objective 3.1: Expand Economic Opportunities in Rural America by Providing Research, Education, and Extension to Create Opportunities for Growth	Extension Research Integrated Higher Education	Key Outcome 3.1: Expanded economic opportunities in Rural America and increased knowledge pertaining to economic diversification, community planning, service infrastructure, local government, youth/adult workforce planning, and civic engagement through innovative integrated research and extension projects targeted to regional business, economic and business development.
USDA Strategic Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals.	**Agency Goal 2:** Enhance the Competitiveness and Sustainability of Rural and Farm Economies.	Objective 2.1: Provide Research, Education, and Extension to Expand Domestic Market Opportunities	Extension Research Integrated Higher Education	Key Outcome 2.1: Expanded science-based knowledge and technologies to generate high-quality products and processes by: (1) increasing knowledge of bioenergy and biomass conversion, (2) creating new commercially viable and marketable alternative crops, and alternative markets for non-food products from existing crops, and (3) establishing new integrated research and extension programs and multi-disciplinary graduate education training programs.

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
	Agency Goal 3: Support Increased Economic Opportunities and Improved Quality of Life in Rural America.	Objective 3.2: Provide Research, Education, and Extension to Improve the Quality of Life in Rural Areas	Extension Research Integrated Higher Education	Key Outcome 3.2: Increased knowledge among county based staff and community leadership in order to provide research-based practices to encourage appropriate community capitol development which enhances business and economic development, the availability of appropriate education and health services, transportation networks and the vibrant community connections. Electronic deployment of information to increase the social, cultural, human and economic capitol available for more nimble and creative community responses to needs.
	Agency Goal 4: Enhance Protection and Safety of the Nation's Agriculture and Food Supply.	Objective 4.1: Reduce the Incidence of Foodborne Illnesses and Contaminants Through Research, Education, and Extension	Extension Research Integrated Higher Education	Key Outcome 4.1: Reduced incidence or prevalence of food borne illnesses and contaminants through increased knowledge and/or the development of mitigation, intervention, or prevention strategies via research or integrated research, education, and extension projects in the following food safety areas: pre-harvest food production and transportation, post-harvest processing and distribution, retail preparation and distribution, and consumer preparation, consumption, and behavior.
	Agency Goal 5: Improve the Nation's Nutrition and Health.	Objective 5.1: Ensure Access to Nutritious Food Objective 5.2: Promote Healthier Eating Habits and Lifestyles	Extension Research Integrated Higher Education	Key Outcome 5.1: New knowledge that clarifies dietary health relationships in order to support better dietary recommendations and improved food products

USDA Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating and economically thriving.

Key Outcome 2.1: Expanded science-based knowledge and technologies to generate high-quality products and processes by: (1) increasing knowledge of bioenergy and biomass conversion, (2) creating new commercially viable and marketable alternative crops, and alternative markets for non-food products from existing crops, and (3) establishing new integrated research and extension programs and multi-disciplinary graduate education training programs.

Long-term Performance Measure 2.1: Cumulative number of expanded commercially adaptable processes that convert biomass to fuels through the development of cost effective biochemical or thermochemical technologies, and used commercially

Selected Past Accomplishments toward Achievement of the Key Outcome:
Oklahoma State University is developing the practices and technologies necessary to ensure efficient, sustainable, and profitable production of cellulosic ethanol feedstocks. This project addresses the needs and concerns of diverse stakeholders both within the cellulosic biorefinery industry and within the public at large. Utilizing large-scale feedstock production research, the economic and environmental sustainability of switchgrass, mixed-species perennial grasses, and annual biomass cropping systems is being evaluated. Preliminary results show that biomass produced from the most cost efficient bermudagrass, lovegrass, and flaccidgrass systems would be from 20 to 26 percent more costly than biomass produced from the most cost efficient switchgrass system.

It is important to utilize biorefinery lignin to make high value products to improve the economics and environmental impact of energy production. The University of Tennessee researchers have been producing lignin from locally grown feedstocks. This lignin is being processed in a manner to tailor it to carbon fiber production, which can have immediate and meaningful effects on making biorefining economically feasible, having the potential to contribute an additional $4 billion annually to rural economies.

In support of developing new biofuel industries, a researcher at North Dakota State University initiated an energy beet development program. The program established regional energy beet yield trials, initiated a juice storage study, tested the conversion technology commercially, and conducted grower education meetings. To date, more than 20 presentations and workshops have been delivered across the state in cooperation with local Extension agents to inform producers, rural communicates and industry of the opportunity. Materials also have been drafted for national distribution on www.eXtension.org. Green Vision Group is now evaluating two sites for construction of demonstration plants. Construction of a commercial plant is expected in 2012. This plant will require 30,000 acres of energy beets providing growers with a $200 net income premium over competing crops. Each plant is expected to create 25 new jobs in rural communities. Positive encouragement and private funding support for the project has been received from MonDak sugarbeet growers, Syngenta, Beta Seed, Garrison Diversion, North Dakota Irrigation Association, Green Vision, Great River Energy, Amity, and AgCountry Farm Credit Services.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
An increase in AFRI will fund agriculturally-relevant discovery and applied research and provide the foundation upon which current and future solutions are built and will sustain the disciplines needed to ensure agricultural science remains vibrant and useful over time. This funding is expected to bring a wide array of agriculturally related disciplines back to international leadership by supporting the high risk, but potentially high reward, research of individual investigators and small teams.

Funding will be used to target vital topical areas related to the development of regional systems for the sustainable production of bioenergy, biopower and biobased products. The long-term outcome for this program is to implement regional systems that materially deliver liquid transportation biofuels to help meet the Energy Independence and Security Act (EISA) of 2007 goal of 36 billion gallons/year of biofuels by 2022 and reduce the National dependence on foreign oil and, as appropriate, produce biopower and biobased products. Projects are expected to employ a systems approach to address the stated program area priorities which collectively contribute to the achievement of the following goals:

- Deployment of superior genotypes of regionally-appropriate dedicated energy crops.
- Refinement and implementation of sustainable regional feedstock production practice.
- Seamless feedstock logistics.
- Scalable, sustainable conversion technologies that can accept a diverse range of feedstocks.
- Regional marketing and distribution systems.
- Regional sustainability analyses, data collection and management, and tools to support decision-making.
- A well trained workforce with the capacity to fill the cross-disciplinary needs of the biofuels industry.

Efficiency Measure 2.1(a): Proposal Review Time in days.

Efficiency Measure 2.1(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 2.2: Increased efficiency of the agricultural production system by: (1) expanding information to model feed utilization for animal species, (2) releasing new or improved varieties or germplasm with enhanced pest or disease resistance, (3) further understanding the biological role of gene sequences in plants, animals, microbes and insects, (4) strengthening masters degree level courses in the food and agricultural sciences, particularly at minority-serving institutions, (5) increasing the number of minority students participating in the workforce by funding minority-serving projects at Hispanic serving institutions, 1890 institutions, 1994 institutions, Alaska-native serving, native-Hawaiian serving institutions, and (6) increasing the number of socially disadvantaged minority farmers and ranchers who are knowledgeable, eligible, and participating in USDA farm programs.

Long-term Performance Measure 2.2: Cumulative number of new crops that have been developed and used commercially.

Selected Past Accomplishments toward Achievement of the Key Outcome:
Ohio State University research wheat breeding program released a new wheat cultivar called OH04-264-58. This cultivar has competitive yield in Ohio, good resistance to prevailing Ohio diseases, and has strong gluten. LOH04-264-58 has a unique gene that imparts strong gluten and stable gluten strength, so it is suitable for use by Ohio millers. One Ohio based miller used nearly 1,500,000 bushel of strong gluten wheat (Soft Red Winter Wheat) in 2010, with plans to expand the program to approximately 3,000,000 bushels annually with the right cultivar. Assuming a premium of $0.40 per bushel, then a strong gluten SRWW like OH04-264-58 is worth $600,000 to $1,200,000 annually to Midwest growers, primarily in Ohio. In addition, sourcing the strong gluten wheat locally will save the Ohio based miller millions of dollars annually in freight charges.

Carnegie Mellon University is working with the specialty crop industry to fulfill its vision of significantly reducing the cost of production of U.S. fruit. They are developing, integrating, testing, deploying, and assessing a carefully chosen set of information, mobility, manipulation and plant science technologies, assessing their socio-economic utility, and transferring results to the end users via commercialization and outreach. Among the numerous preliminary results include initial trials with harvest assist system showed 10 percent improvement in harvesting speed with 5 percent reduction in bruising; management efficiency trials in pilot orchards demonstrated increases in efficiency as high as 78 percent; and over 27 percent of Pennsylvania producers who attended field days are adopting trellised planting systems to increase efficiency and 65 percent of the producers plan to make this change.

A project being led by Michigan State University is creating a national, dynamic, sustained effort in research, infrastructure establishment, training, and extension for applying marker-assisted breeding (MAB) to deliver improved plant materials more efficiently and rapidly. This project will increase the likelihood of new cultivar adoption, enlarge market potential, and increase consumption of rosaceous fruits by using socio-economic knowledge of stakeholder values and consumer preferences to inform breeding. It will also establish sustainable technical infrastructure for an efficient MAB Pipeline.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
Priorities include:

- Reduce the economic, environmental, and social consequences of animal and plant pests and diseases with major impacts on food availability.

- Decrease the use of antibiotics and pesticides in agriculture and food production and associated health and environmental risks.
- Increase animal and plant products produced with the same or fewer resources.
- Increase the number of farms engaged in local and regional food systems that use sustainable practices.
- Increase food security, especially in vulnerable communities.
- Increase and strengthen local, regional, national, and international markets.
- Strengthen the sustainability and economic resilience of rural communities.
- Develop a cadre of well-trained, diverse groups of scientists, educators, extension specialists, and producers with expert skills and a breadth of knowledge to address sustainable global agricultural production and foster a similar corps globally through international partnerships.

Specific Goals targeted may include:

- Improve genetic resistance to one or more high priority diseases in agriculturally-relevant animal species (i.e., ruminants, poultry, aquaculture, swine, or equine).
- Reduce the impact of, or prevent the introduction or reintroduction of, economically important diseases that decrease the availability of animal protein products in one of the following:
  a) Dairy cattle mastitis reduction, including reduced use of antibiotics;
  b) Extension-producer collaborative partnerships to develop custom aquaculture farm plans designed to reduce the incidence and impact of aquatic infectious diseases on farms including implementation, verification of outcomes, and cost-benefit analysis of the plan's impact that can serve as demonstration models for regional application in the U.S.; or
  c) Elimination of Porcine Reproductive and Respiratory Syndrome (PRRS) virus from the U.S. with focus on regional control and elimination activities.
- Use an integrated approach to improve fertility of agriculturally-relevant animal species (i.e., livestock, dairy, poultry, or aquaculture). Proposed projects must address current major problems with fertility that negatively impact profitability and sustainability of livestock production enterprises.
- Develop novel methods of managing diseases of crop plants caused by fungal pathogens in one of the following genera: *Fusarium, Magnaporthe,* or *Aspergillus*.
- Develop integrated systems to manage arthropod- or nematode-vectored plant pathogens. Apply new knowledge and implement IPM programs on a larger scale.
- Develop and implement innovative IPM strategies for the management of high consequence vectored pathogens and their diseases in nationally important plant systems, to enable producers to make ecologically and environmentally sound management decisions that enhance global food security.

Efficiency Measure 2.2(a): Proposal Review Time in days.

Efficiency Measure 2.2(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 2.3: Increased producers' knowledge of principles and techniques of risk management.

Long-term Performance Measure 2.3: Benefits to farmers changing their risk management behavior per the net dollar cost of the Risk Management Education program.

Selected Past Accomplishments toward Achievement of the Key Outcome:
The Western Center for Risk Management Education's *Building Farmers in the West* program served over 100 new and beginning farmers this past year, 48 percent of whom developed a comprehensive business plan for their farming enterprise. Through the process, nearly all reported they experienced a significant shift in attitude concerning the need for a written plan, understood the business and marketing planning process, and understood the importance of the plan as an essential risk management strategy.

As a result of outreach activities at Alcorn State University in Mississippi, 102 borrowers received structured training to increase their knowledge and skills needed to complete a balance sheet, income statement and inventory analysis for their farming operations. Borrowers have gained knowledge of current farm practices, minimize farm risks. Borrowers also met their educational requirement according to the USDA-Farm Service Agency regulation and qualify to receive additional funds from USDA and have currently assisted in putting $2.5 million into the

Mississippi economy. There was a 100 percent passing rate. One hundred seventy-six small farmers now have the knowledge and skills to keep accurate farm records. Seventy-two small farmers have gained knowledge of legal issues associated with family farm operations and the risk management strategies. Five hundred thirty-one small farmers, ranchers and women and businesses are knowledgeable of new and innovative alternative enterprises that would have a greater return with less startup capital or input cost.

The Florida A&M University New and Beginning Farmer Training Program encourages farm entry by removing the barriers in four major areas that face the next generation farmers: 1) access to training, education, and technical assistance; 2) access to land; 3) access to capital and credit, and; 4) access to markets. This project uses non-traditional approaches in its extension training and assistance activities to reach the target African-American audience. These opportunities include the Young Farmer Entrepreneur Incubator; a business incubator model for agricultural production and marketing demonstrations that targets new and beginning farmers under the age of 25; and a beginning farmer demonstration/training website with various alternative enterprises, production management practices, and market development models. The demonstration site uses hands-on training activities in collard and green bean production and marketing to show the viability of alternative market opportunities, including institutions, retail, and direct-to-consumer outlets.

Workshops delivered to farmers in Minnesota illustrated the importance of planning, and provided concrete strategies for creating a transfer plan. A total of 95.4 percent of participants stated that as a result of attending one of the workshops, they were going to begin the process of developing and implementing a transfer and estate plan. A post-meeting follow-up evaluation showed that 68.5 percent had started their transition plan, and 27 percent had completed and implemented that plan. Therefore, the value of assets protected after receiving education from Extension was $1,689,609, including owned land, livestock equipment and machinery. Weighted average total for non-farm/ranch assets for participant families was $187,714. Total financial impact of protected rural poverty can be assessed at $384,300,000.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
The Agriculture Risk Management Education Competitive Grants Programs will fund four regional Risk Management Education (RME) centers nationwide; and an Electronic Risk Management Education Electronic Support Center (RMEESC). The Regional RME Centers are expected to address the risk management needs of agricultural producers and their families particularly with regard to the following five risk management categories: 1) production risk; 2) price or marketing risk; 3) human resource risk; 4) legal (including liability and environmental) risk; and 5) financial risk.

Efficiency Measure 2.3(a): Proposal Review Time in days.

Efficiency Measure 2.3(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 3.1: Expanded economic opportunities in Rural America and increased knowledge pertaining to economic diversification, community planning, service infrastructure, local government, youth/adult workforce planning, and civic engagement through innovative integrated research and extension projects targeted to regional business, economic and business development.

Long-term Performance Measure 3.1: The number of farmers and ranchers that gained an economic, environmental or quality-of-life benefit from a change in practice learned by participating in a Sustainable Agriculture Research and Education project.

Selected Past Accomplishments toward Achievement of the Key Outcome:

The Southern Sustainable Agriculture Research and Education (SARE) educates and helps the agriculture industry become more profitable, protect natural resources/the environment, and improves the quality of life for producers and consumers. Some of the Southern region's most respected sustainable agriculture experts lend their experiences and advice about approaches to systems research in a new video tutorial series developed by Southern SARE. For decades, they have supported the application of systems research in sustainable agriculture. The concept targets the interactions of agricultural components and how those components function together to help define the characteristics of a whole agricultural production system.

A national farm management benchmarking center at the Center for Farm Financial Management at the University of Minnesota is being created. Extension farm management associations and technical college farm business management education programs in 13 states cooperated to expand farm management assistance provided producers. The online FINBIN database at http://www.finbin.umn.edu includes benchmark data from eight states and over 3,400 farms. FINBIN is considered one of the largest, most accurate and consistent databases of farm financial benchmarks in the world. Over 3,400 farmers and ranchers in participating farm management educational programs now have the tools and capacity to directly benchmark their farms against a selected peer group for whole entity and enterprise level financial performance. Researchers, educators, and producers from throughout the country have access to the database and the summarized production and financial data stored in the database. In the past year, over 28,000 detailed benchmark reports have been generated by producers and educators.

Members of the nationwide Cooperative Extension network collaborated with local and national partners to celebrate America Saves Week for the sixth consecutive year during February 20-27, 2011. NIFA and several land-grant partners received special recognition for their work to promote America Saves Week, an initiative designed to increase financial literacy and effective money management practices among individuals and families. At the *National Forum to Encourage Lower-Income Household Savings* held in Washington, D.C., representatives from the Consumer Federation of America reported Cooperative Extension had 29 states involved with the initiative. NIFA staff was recognized for leadership in coordinating efforts among state partners in the system around America Saves Week. Nationwide 55,000 people participated in educational activities related to America Saves Week and media contacts were able to reach 5 million people.

The 4-H Study of Positive Youth Development longitudinal study indicates that 4-H youth were more than one and a half times more likely to expect to go on to college than non-4-H youth; had higher school grades and were more emotionally engaged in school than non-4-H youth; and scored significantly higher than those youth who did not participate in 4-H on six of eight factors related to civic identity and civic engagement.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
The NIFA-sponsored Cooperative Extension program will provide key leadership for "America Saves Week", designed to encourage all Americans, especially those of low to moderate means, to take financial action leading to achieving, personal wealth, not debt. America Saves Week activities coordinated by Extension expect to result in 20,000 savers signed up in 30 States who set an aggregate savings goal of $4 million. America Saves Week is a special emphasis effort of the overall program America Saves, which is offered by Extension via a partnership with the Consumer Federation of America.

Efficiency Measure 3.1(a): Proposal Review Time in days.

Efficiency Measure 3.1(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 3.2: Increased knowledge among county based staff and community leadership in order to provide research-based practices to encourage appropriate community capitol development which enhances business and economic development, the availability of appropriate education and health services, transportation networks and the vibrant community connections. Electronic deployment of information to increase the social, cultural, human and economic capitol available for more nimble and creative community responses to needs.

Long-term Performance Measure 3.2: The percentage of cooperative extension educators trained and using evidence based programming based on the seven community capitols to facilitate informed decisions that improve quality of life and increase economic viability.

Selected Past Accomplishments toward Achievement of the Key Outcome:
Retention of jobs is often more economical than replacing or creating new ones. Extension staff provided technical assistance programs in fundraising, cultural competency, financial planning, and volunteer management to help nonprofit organizations in Missouri leverage resources and increase the value of their dollar invested in employees. Projects with communities in several regions with a significant Hispanic immigrant population formed collaborations to provide services and support for those working in the area. An effort to revitalize a community betterment organization in one rural community resulted in the engagement of a new generation of business leaders

committed to making the community a better place to live with new programs that increase recreational opportunities and celebrate the heritage of the community. In northeast Missouri, $3,723,750 was generated through grants and contracts with local organizations creating and/or sustaining the equivalent of at least 90 jobs in the region.

The total economic impact (direct, indirect and induced effects) of agriculture (production and processing for crop, animal agriculture and forestry) on value added, employment and wage income was estimated in Arkansas for the latest year data are available for extensive analysis, 2008. Agriculture is responsible for the creation of 261,101 jobs, or 16.6 percent the State's jobs, $9.6 billion or 15.6 percent of the state labor income and $16.3 billion or 17 percent of the state's value added. While agriculture generates value added, employment and wages in all of the study sectors, roughly 48 percent of agriculture's contribution occurs in industries outside of agriculture such as Wholesale Trade, Real Estate and Rental, and Transportation and Warehousing. Individually, the crop, animal agriculture and forestry sectors provide the catalyst for the direct creation of $3.3 billion, $2.6 billion and $2.6 billion, respectively, in value added and 56,051 crop sector jobs, 57,601 animal agriculture sector jobs and 34,065 forest sector jobs. The vital importance of agriculture to Arkansas' economy, particularly rural areas of the state with limited alternatives for economic activity and growth is highlighted by the significant economic activity generated in associated industrial and human service sectors as a result of the indirect and induced impacts of agriculture research and extension activities.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
The Sustainable Agriculture Research and Education grant program to assist in the creation or enhancement of State sustainable agriculture research, extension, and education programs will leverage State and/or private money, and build the long-term capacity to guide the evolution of American agriculture to a more highly productive sustainable system. Funding will support activities that:

- •Integrate sustainable agriculture in all State research, extension, and education projects;
- •Support new research at sustainable agriculture centers at the nation’s land grant and other colleges and universities;
- •Build stronger Statewide farmer-to-farmer networks and outreach and technical assistance strategies;
- •Incorporate sustainable agriculture studies and curriculum in undergraduate and graduate degree programs.

Efficiency Measure 3.2(a): Proposal Review Time in days.

Efficiency Measure 3.2(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 4.2: Expanded science-based information and technologies and reduced number and severity of agricultural pest and disease outbreaks through: (1) connection and data exchange among national plant and animal disease diagnostic networks, (2) increased resource efficiency and decreased economic risk regarding the adoption of sustainable pest management tactics, (3) developed capacity to minimize or mitigate occupational and non-occupational human health risks associated with pest management, and (4) increased capacity in minimizing or mitigating environmental risk associated with pest management.

Long-term Performance Measure 4.2: The number of high-consequence pests, bacterial, parasitic, and vital pathogens, and disease threats detected and diagnosed by integrated the national plant diagnostic network and the national animal health laboratory network diagnostic labs.

Selected Past Accomplishments toward Achievement of the Key Outcome:
The Integrated Pest Management Pest Information Platform for Extension and Education (ipmPIPE) informs growers about seasonal development and spread of Asian soybean rust, a devastating disease of legumes. The Regional IPM Centers manage this program that has allowed soybean growers to save a conservative estimate of $1 billion or more since 2005. Most of the savings derive from the ability by growers of 98 percent of the crop to avoid unnecessary fungicide applications. USDA’s Economic Research Service estimated farmers avoided as much as 0.2 pounds of fungicide per acre per season, which works out to about 74 million pounds of fungicide avoided since 2005. Soybean growers in Gulf Coast states, where the disease is more prevalent, use the program to properly choose fungicides and time applications to protect their crop. In a similar program, pecan growers estimated gains of $268/acre from the ipmPIPE Pecan system representing a potential benefit of $77 million for the 288,000 acres in

participating states. Another ipmPIPE component for vine crops (cucumber, pumpkin, melons, etc.) saved many participants 2-3 fungicide sprays.

Washington State University (WSU) is leading a team of scientists in the western U.S. to improve the long-term sustainability of the apple, pear and walnut industries by enhancing biological control of pest insects and mites, and synthesize the information developed in this project along with existing information to provide the outreach tools needed to bring about change in grower practices. Preliminary results are encouraging and will be added to the WSU-Decision Aid System and University of California Integrated Pest Management web sites for easy access and will be very useful to apple, pear and walnut growers and pest control advisors. These recommendations will to lead to increased biological control in orchards, which should reduce pesticide inputs leading to higher grower profits and lower worker safety problems.

The National Plant Diagnostic Network (NPDN) developed links to laboratories in every State. NIFA funding has enabled the NPDN to increase the cumulative number of specific plant diseases labs within the network are prepared to detect from three in 2004 to eleven in 2011.

NIFA helped fund and provided leadership to establish the National Animal Health Laboratory Network (NAHLN) NIFA funding has helped enable the NAHLN to increase the cumulative number of specific animal diseases labs within the network are prepared to detect from six in 2004 to ten in 2011.

Selected Accomplishments Expected at the 2013 Proposed Resource Level: In addition to continuing risk reductions and increased efficiencies of traditional NIFA Integrated Pest Management Programs, the National Plant Diagnostic Network expects to make significant progress, which builds on past accomplishments and includes:

- Increasing the ability of laboratories in all 50 States to rapidly and accurately diagnose plant pathogens of regional and national interest through improved diagnostic equipment, training, and methods;
- Improving the biocontainment, biosafety, and biosecurity of regional diagnostic centers and other partner laboratories; and
- Increasing the utilization of non-public National Agricultural Pest Information Systems data for the early detection of bio-terrorism related, accidental, or natural outbreaks that have the potential to threaten the nation's plant resources, trade position, or consumer confidence.

Efficiency Measure 4.2(a): Proposal Review Time in days.

Efficiency Measure 4.2(b): Cumulative Dollars Saved for Grant Review.

USDA Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored and made more resilient to climate change, while enhancing our water resources.

Key Outcome 6: Expanded and disseminated science-based knowledge and information for management of the nation's natural resources and environment, including soil, air and water, in agricultural, forest, and range working lands and ecosystems.

Agency Priority Goal: NIFA provides research, extension, and education to support USDA work to accelerate the protection of clean, abundant water resources by implementing high impact targeted practices on 4 million acres of National Forest and private working lands in priority landscapes by September 30, 2013.

Long-term Performance Measure 6: Development and adoption of science-based technologies, education and management procedures such that production of agricultural goods and services are optimized while protecting our natural resources and environment.

Selected Past Accomplishments toward Achievement of the Key Outcome:
Because most irrigated land in central Wisconsin is sandy, there is potential for groundwater contamination by nitrates and pesticides if fields are overwatered. Also, proper irrigation can help prevent cropland becoming saturated and causing nitrogen to be converted to nitrous oxide, a greenhouse gas. Agricultural researchers evaluated the effectiveness of using portable soil moisture sensors to manage crop irrigation in central Wisconsin. Potato growers participating in a related summer project got hands-on experience with soil moisture sensors, and

280 vegetable growers and crop consultants increased their knowledge of managing groundwater with this method. Eliminating, through use of soil moisture sensors, the need to apply one inch of water to irrigated land would save 27,000 gallons of water for each acre of vegetables grown, or 5.3 billion gallons in central Wisconsin. Cost savings for not needing to pump that inch of water ($4.00 per acre-inch) would amount to around $785,000. If overwatering could be avoided, nutrient and pesticide leaching into the groundwater and nitrous oxide release into the atmosphere would be minimized.

Washington State University (WSU) Extension professionals design and deliver programs that lead to specific and measurable changes in management practices on land and water resources of the state. WSU Extension programs impacted 486,115 acres of land, reaching 2,882 landowners and managers that indicated increased knowledge of forest stewardship practices, and 2,190 landowners and managers who indicated they have implemented at least one new practice on their land. Program participants estimate execution of practices on 10 percent of their ownership, with a cost earnings or savings estimate of $26,406,000.

Researchers at the University of Tennessee studied the spread and ecology and of invading exotic plant species to minimize future losses of forest amenities and native diversity in Tennessee. Methods of increasing oak seedling success, factors that facilitate and slow the spread of exotic plants in Tennessee forests, and techniques for increasing the success of reforestation and rates of forest recovery on reclaimed mine sites were tested and evaluated. Results and knowledge gained from the study have the potential to decrease the nearly $137 billion annual cost of invasive species in the U.S. due to the loss of hundreds to thousands of dollars of long-term value per acre when forests cleared for surface mining are not successfully restored.

The Smith-Lever 3(d) Renewable Resources Extension Act (RREA) calls for "expanded extension programs for forest and rangeland resources" to enhance the sustainability of these renewable natural resources. With NIFA funding, 69 land-grant institutions educated private forestland and rangeland owners regarding forest and rangeland sustainability. As a result of these activities: 937 income-generating business were created or expanded, 2,390 new jobs were created, 27,300 landowners increased their awareness of forest or rangeland resources, 21,100 landowners implemented at least one new renewable resource practice, landowners either earned or saved an estimated $17,810,000, loggers either earned or saved $198,571,756 by adopting new harvesting technologies, and every RREA dollar leverages from $5 -$15 from state, county and other resources.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
AFRI research on Water and Watersheds funded by NIFA will seek to protect and enhance the natural resource base and environment by improving and maintaining healthy watershed habitat and water supply protection, and improve the quality of life in rural America through clean irrigation and livestock drinking water supplies. Research will focus on biotechnical improvements in water use efficiency of crop and horticultural plants to yield greater "crop per drop," and probe the human, social, and economic dimensions of agricultural water security with a focus on adoption-outreach.

AFRI research projects on Agriculture and Natural Resources Science for Climate Variability and Change focuses on the societal challenge to adapt agroecosystems and natural resource systems to climate variability and change and implement mitigation strategies in those systems. Specific program areas are designed to achieve the long-term outcome of reducing the use of energy, nitrogen, reducing greenhouse gas emissions from practices, and water in the production of food, feed, fiber, and fuel and increase carbon sequestration. Project types supported by AFRI include multi-function Integrated Research, Education, and/or Extension Projects and Food and Agricultural Science Enhancement (FASE) Grants.

Goals include:

- Develop or improve management options that will mitigate the impacts of agroecosystems on climate variability and change while maintaining or improving agroecosystem productivity.
- Develop or improve management strategies, models and technologies that facilitate adaptation to climate variability and change while maintaining or improving agroecosystem productivity.
- Develop or improve knowledge of how human behavior, decision, and choices affect carbon, nitrogen, water, and energy use and how that behavior may be effectively changed to advance sustainable outcomes.
- Create educational activities that develop human capital relevant to mitigation and adaption goals.

- Develop extension and outreach programs to deliver science-based knowledge and informal educational programs to various communities relevant to mitigation and adaptation goals.

Efficiency Measure 6(a): Proposal Review Time in days.

Efficiency Measure 6(b): Cumulative Dollars Saved for Grant Review.

USDA Strategic Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security.

Key Outcome 1.2: Expanded international economic development and trade capacity building through: (1) partnerships between U.S. and counterpart faculty in developing or transitioning countries to strengthen science applications and (2) technical assistance provided to these countries to support market and agricultural sector development.

Long-term Performance Measure 1.2: Higher participation of faculty, public and private sector professionals in international scientific, cultural and economic forums.

Selected Past Accomplishments toward Achievement of the Key Outcome:
An international team of scientists funded by the U.S. Department of Agriculture has published a draft sequence of the domestic apple genome in the current issue of ***Nature Genetics***. Washington State University (WSU) researchers sequenced and analyzed a double haploid version of the genome of the apple variety Golden Delicious. This information was used to validate the assembly of the heterozygous Golden Delicious apple. They also compared gene islands from the apple genome landscape with that of pear, peach and grape to identify genetic differences that make it possible to trace the lineages among these important fruit crops. Knowing the sequence of the apple genome will ultimately allow scientists to point to a specific gene and identify the responsible trait.

Aquaculture is expected to provide sources of income from new productions and add values to existing commodities in Micronesia. Extension agents in Micronesia facilitated public displays of products from aquaculture projects, hands-on training, on-site visits and broadcasted information via local radio stations. Communities have now been educated on the importance and contribution of aquaculture for the country's food security and economic development. Of special note are pearl and sea cucumber projects that have received immediate attention from domestic and overseas stakeholders and international journals on high quality products and skill training methodologies.

Relatively little attention has been given to the role of international trade and comparative advantage as it relates to climate change. A researcher at Oregon State University explored how global climate change will affect the location of agricultural production and patterns of trade. This activity identified various roles of certain countries in international trade transactions, with attention to making the transitions and alleviating the costs associated with climate change. This research found that countries' welfare would decline only very modestly if yield amounts decreased but variability was allowed in the international trade market. However, if trade barriers are enacted such that trade volumes are restricted to current volumes, it is predicted that a great deal of suffering would likely occur.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
Grants to higher education institutions will train students at the baccalaureate, masters and doctorate level to expand human capital development in emerging areas (i.e. biotechnology, food systems, economics and marketing, etc.). As a result, workforce ready graduates with core competencies in sustainable sciences will be able to respond to the national needs in the Economics and Trade arena through the Higher Education Multicultural Scholars Program and the Food and Agricultural Science National Needs Graduate and Post Graduate Fellowship Grants Program.

Efficiency Measure 1.2(a): Proposal Review Time in days.

Efficiency Measure 1.2(b): Cumulative Dollars Saved for Grant Review.

USDA Strategic Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals

Key Outcome 4.1: Reduced incidence or prevalence of food borne illnesses and contaminants through increased knowledge and/or the development of mitigation, intervention, or prevention strategies via research or integrated research, education, and extension projects in the following food safety areas: pre-harvest food production and transportation, post-harvest processing and distribution, retail preparation and distribution, and consumer preparation, consumption, and behavior.

Long-term Performance Measure 4.1: The number of methods that reduce food contamination and growth of foodborne organisms.

Selected Past Accomplishments toward Achievement of the Key Outcome:
Researchers at Washington State University (WSU) used thermal and non-thermal technologies to improve the food quality of selected processed foods while keeping them safe for consumption. In thermal processing, the study of microwave technology continued by comparing the advantages of this process with the conventional thermal treatment for processing salmon and mashed potatoes. The microwave sterilization process developed at WSU received formal approval by the U.S. Food and Drug Administration using salmon as the test product. Meanwhile in the area of non-thermal technologies, Pulsed Electric Fields (PEF) was explored in depth while testing milk, milk products, and grape juice. PEF is already accepted as a method to pasteurize fruit juices. Microwave thermal treatments continue to prove effective as a sterilization technique in selected products. Several food items are under study to fully validate this technology and to analyze the final characteristics. On the other hand, emerging non-thermal technologies showed success for microbial inactivation in some foods.

Across the nation the Expanded Food and Nutrition Education Program (EFNEP) program has been teaching adult and youth participants to improve food safety practices. As a result, over 69,000 youth participants and 66 percent of the 134,446 adults have reported improving food safety and preparation practices.

Domestic and international consumers are demanding more information about the source of the meat products they purchase, including the age, health, nutrition, and handling management of the animal. Montana State University studies help ensure that Montana producers raise safe beef while improving the quality of the beef that is raised. Extension and research efforts have resulted in outreach programs that include a sustainable beef supply (SBS) program, which was established to return additional revenue and provide current information to cattle producers while meeting consumer needs in Montana and the nation. The SBS uses its resources to undertake research and educational issues that are of immediate concern to Montana beef producers: biosecurity, beef quality assurance, animal verification, and feed efficiency. With the SBS program in place, Montana producers can more easily adopt, and are, therefore, more likely to use, traceability systems and national animal ID programs.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
NIFA will sponsor AFRI food safety projects specifically targeting emerging issues in food safety, particularly produce; food and agricultural defense; Goals include:

- Improve the safety of the food supply through developing and implementing effective strategies that prevent or mitigate food-borne contamination, including food processing technologies, resulting in a reduction in the incidence of food-borne illness, while preventing future food-borne outbreaks.
- Promote the development and adoption of detection technologies for food-borne pathogens and other contaminants in foods, which are sensitive, specific, rapid, economical, easily-implemented, and usable under a variety of conditions, including use in the field.
- Reduce negative public health and economic impacts through the development and demonstration of effective traceability systems that track the source, movement, critical tracking events (CTEs), storage, and control of contaminated food and food ingredients from production to consumption.
- Increase the number of food safety scientists, as well as scientists who are cross trained in environmental science, animal science, microbiology, genetics, epidemiology, economics, social science, food science, engineering, and public health, to provide a holistic approach to ensuring the safety of the food supply, from pre-harvest through consumption.

Efficiency Measure 4.1(a): Proposal Review Time in days.

Efficiency Measure 4.2(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 5.1: New knowledge that clarifies dietary health relationships in order to support better dietary recommendations and improved food products.

Long-term Performance Measure 5.1: Confirmation and/or changes to the existing guidelines to be in the 2010 Dietary Guidelines for America

Selected Past Accomplishments toward Achievement of the Key Outcome:
Researchers at Oregon State University seek to identify, understand, and eliminate the specific toxicants in the food supply that contribute to health deficits as well dietary chemopreventive, beneficial food components. Initial work has tested phytochemicals from cruciferous vegetables and compared the efficacy of these dietary supplements to the whole foods from which they were derived. Work underway will determine whether pure phytochemicals or whole foods are more effective in cancer prevention. The research team is initiating chemoprevention studies with cruciferous vegetables with human volunteers. This enhances the translational nature of the research and the impact on human health. This work has been published in quality journals and has been delivered by the research team at national and international meetings as well as academic institutions. The popular press has also found this research to be extremely promising.

Researchers at Oregon State University (OSU) have developed new techniques for handling fresh blueberries—including a method of pre-washing them for market and applying an edible coating—that may extend the shelf life of this popular Oregon crop and open up new markets for its sale. Edible coatings are being used by scientists in OSU's College of Agricultural Science to extend quality and prolong storage of two varieties of blueberry, Duke and Elliott. The coatings also can slow decay and water loss after the fruit is washed. In 2 years of trials, fresh blueberries were first washed with chlorinated water then dipped in one of five different edible coatings before being placed in storage containers. The berries were evaluated for quality after 15 days. Results from the study suggest that this technique could be used to develop ready-to-eat blueberries with no reduction in shelf life.

Generation of new fat cells (adipogenesis) and activation of oxidative stress in adipose tissue are known to be the major etiology of obesity and its related inflammatory diseases. Curcumin, a bioactive food component has recently been proposed to be a potential anti-obesity dietary component. However, its efficacy and effective dosage in preventing the development of obesity in animals is varying depending on the study designs and the obesity status of experimental animals. Understanding of how curcumin modulates the biochemical and molecular events in adipose tissue development during the course of obesity would provide potential opportunities to understand the effective use of curcumin to lower obesity. Purdue University researchers have elucidated molecular basis underlying curcumin-inhibited adipogenesi, with results suggesting that curcumin effectively controls the molecular and cellular activities related to obesity. This research could provide potentially valuable insight into a safe, healthy method of using a bioactive compound to fight obesity.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
AFRI projects will focus on identifying the behavioral factors that influence obesity; developing valid behavioral and environmental instruments for measuring progress in obesity prevention efforts; and, nutrition research that leads to the development and evaluation of effective programs to prevent obesity.

AFRI requests for proposals will address the micro-nutrient content of new cultivars. An expansion of plant breeding activities will result in genetically mapping and improving the nutritional value of staple crops, fruits, and vegetables. In addition, plant breeding can expand the availability and potentially reduce the cost of nutrient-dense foods, thus expanding access to healthy diets.

Efficiency Measure 5.1(a): Proposal Review Time in days.

Efficiency Measure 5.2(b): Cumulative Dollars Saved for Grant Review.

Key Outcome 5.2: Reduced proportion of adult participants age 20 years and older who are obese, and of children and adolescents who are obese and overweight by increasing healthier food choices and lifestyles.

Agency Priority Goal: NIFA provides research, extension, and education to support USDA work to establish national standards that result in improved quality of food sold in schools throughout the day.

Long-term Performance Measure 5.2: Development and use of effective intervention methods and strategies to change behavior and improve diet and physical activity in target populations.

Selected Past Accomplishments toward Achievement of the Key Outcome:
EFNEP program continues to be highly effective in changing participants' behaviors, resulting in significant improvements in daily living skills. Last year 95 percent of adults reported improvements in their diets including consuming the equivalent of nearly one additional cup of fruits and vegetables, 84 percent of recent graduates improved food management practices, 89 percent improved nutrition practices, and 67 percent improved food safety practices. Multiple cost-benefit studies in past years show that every dollar invested in EFNEP results in from $3.63 to $10.64 in saved health care costs and $2.48 saved in food expenditures.

The University of Maine Extension's Harvest for the Hungry Program seeks to mitigate hunger, improve nutrition and health, and help recipients develop lifelong positive nutritional habits. The program involves home gardeners, Master Gardeners, and other volunteers who grow and clean fresh fruits and vegetables and donate them to needy individuals and families in Maine. During the 2010 garden season, University of Maine Extension collected 191,977 pounds of fresh fruit and vegetables to give to food banks, soup kitchens, service organizations, and directly to families as part of our healthy lifestyles educational programs. At an average market value of $1.69 per pound, the contribution was valued at more than $325,400.

The Farm to School Program is a public-private collaboration between Florida A&M University and New North Florida Cooperative designed to encourage school district participation allowing schools to have access to fresh, local/regional fruits and vegetables produced by small-scale farmers while guiding school feeding programs toward promoting healthy eating habits among children. Through this program, 13 Florida school districts serving 300,000 school children improved nutritional value of school meals due to incorporating local and regional fresh produce. Schools purchased approximately 100,000 pounds of fresh produce grown by small and medium-sized farmers.

Selected Accomplishments Expected at the 2013 Proposed Resource Level:
With EFNEP funds all 1862 and 1890 institutions will be able to maintain and sustain the growth of program outreach in addition to enhanced support and training from the Federal partner. New opportunities will enable educators in minority neighborhoods to reach at risk families with culturally appropriate materials to improve the quality of their diets. EFNEP will be able to sustain the staff and resources they require to continue to implement programs, and to reach more Americans each year.

Efficiency Measure 5.2(a): Proposal Review Time in days.

Efficiency Measure 5.2(b): Cumulative Dollars Saved for Grant Review.

Key Performance Outcomes and Measures

Key outcomes and performance measures under each of the agency's strategic goals as outlined below:

Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating and economically thriving.

Key Outcomes:

- 2.1 - Expanded science-based knowledge and technologies to generate high-quality products and processes by: (1) increasing knowledge of bioenergy and biomass conversion, (2) creating new commercially viable and marketable alternative crops, and alternative markets for non-food products from existing crops, and (3) establishing new integrated research and extension programs and multi-disciplinary graduate education training programs.

- 2.2 - Increased efficiency of the agricultural production system by: (1) expanding information to model feed utilization for animal species, (2) releasing new or improved varieties or germplasm with enhanced pest or disease resistance, (3) further understanding the biological role of gene sequences in plants, animals, microbes and insects, (4) strengthening masters degree level courses in the food and agricultural sciences, particularly at minority-serving institutions, (5) increasing the number of minority students participating in the workforce by funding minority-serving projects at Hispanic serving institutions, 1890 institutions, 1994 institutions, Alaska-native serving, native-Hawaiian serving institutions, and (6) increasing the number of socially disadvantaged minority farmers and ranchers who are knowledgeable, eligible, and participating in USDA farm programs.
- 2.3 - Increased producers' knowledge of principles and techniques of risk management.
- 3.1 - Expanded economic opportunities in Rural America and increased knowledge pertaining to economic diversification, community planning, service infrastructure, local government, youth/adult workforce planning, and civic engagement through innovative integrated research and extension projects targeted to regional business, economic and business development.
- 3.2 - Increased knowledge among county based staff and community leadership in order to provide research-based practices to encourage appropriate community capitol development which enhances business and economic development, the availability of appropriate education and health services, transportation networks and the vibrant community connections. Electronic deployment of information to increase the social, cultural, human and economic capitol available for more nimble and creative community responses to needs.
- 4.2 - Expanded science-based information and technologies and reduced number and severity of agricultural pest and disease outbreaks through: (1) connection and data exchange among national plant and animal disease diagnostic networks, (2) increased resource efficiency and decreased economic risk regarding the adoption of sustainable pest management tactics, (3) developed capacity to minimize or mitigate occupational and non-occupational human health risks associated with pest management, and (4) increased capacity in minimizing or mitigating environmental risk associated with pest management.

Key Performance Measures:

- Cumulative number of biochemical or thermochemical technologies which are developed and used commercially for the conversion of biomass to fuels.
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Performance Measure	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Target	2013 Target
Cumulative number of biochemical or thermochemical technologies which are developed and used commercially for the conversion of biomass to fuels.	4	4	5	5	5	6
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review	$2,069	$2,377	$2,797	$3,226	$3,664	$4,111
Efficiency Measure - Proposal Review Time in Days	194	188	184	184	184	184

Goal 2: Ensure our national forests and private working lands are conserved, restored and made more resilient to climate change, while enhancing our water resources.

Key Outcomes:

- 6 - Expanded and disseminated science-based knowledge and information for management of the nation's natural resources and environment, including soil, air and water, in agricultural, forest, and range working lands and ecosystems.

Key Performance Measures:

- Assessment and control technologies for agricultural emissions developed and used
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Performance Measure	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Target	2013 Target
Assessment and control technologies for agricultural emissions developed and used	9	12	14	16	18	19
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review	$2,069	$2,377	$2,797	$3,226	$3,664	$4,111
Efficiency Measure - Proposal Review Time in Days	194	188	184	184	184	184

Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security.

Key Outcomes:

- 1.2 - Expanded international economic development and trade capacity building through: (1) partnerships between U.S. and counterpart faculty in developing or transitioning countries to strengthen science applications and (2) technical assistance provided to these countries to support market and agricultural sector development.
- 3.1 - Expanded economic opportunities in Rural America and increased knowledge pertaining to economic diversification, community planning, service infrastructure, local government, youth/adult workforce planning, and civic engagement through innovative integrated research and extension projects targeted to regional business, economic and business development.

Key Performance Measures:

- The number of farmers and ranchers that gained an economic, environmental or quality-of-life benefit from a change in practice learned by participating in a SARE project
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Performance Measure	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Target	2013 Target
The number of farmers and ranchers that gained an economic, environmental or quality-of-life benefit from a change in practice learned by participating in a SARE project	10,849	11,488	12,436	12,800	13,300	13,800
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review	$2,069	$2,377	$2,797	$3,226	$3,664	$4,111
Efficiency Measure - Proposal Review Time in Days	194	188	184	184	184	184

Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals

Key Outcomes:

- 2.1 - Expanded science-based knowledge and technologies to generate high-quality products and processes by: (1) increasing knowledge of bioenergy and biomass conversion, (2) creating new commercially viable

and marketable alternative crops, and alternative markets for non-food products from existing crops, and (3) establishing new integrated research and extension programs and multi-disciplinary graduate education training programs.

- 3.2 - Increased knowledge among county based staff and community leadership in order to provide research-based practices to encourage appropriate community capitol development which enhances business and economic development, the availability of appropriate education and health services, transportation networks and the vibrant community connections. Electronic deployment of information to increase the social, cultural, human and economic capitol available for more nimble and creative community responses to needs.
- 4.1 - Reduced incidence or prevalence of food borne illnesses and contaminants through increased knowledge and/or the development of mitigation, intervention, or prevention strategies via research or integrated research, education, and extension projects in the following food safety areas: pre-harvest food production and transportation, post-harvest processing and distribution, retail preparation and distribution, and consumer preparation, consumption, and behavior.
- 5.1 - New knowledge that clarifies dietary health relationships in order to support better dietary recommendations and improved food products

Key Performance Measures:

- Methods that reduce food contamination and growth of foodborne organisms
- The cumulative number of specific plant diseases labs are prepared to detect
- The cumulative number of specific animal diseases labs are prepared to detect
- Dietary improvements by EFNEP participants
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Performance Measure	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Target	2013 Target
Methods that reduce food contamination and growth of foodborne organisms	13	15	17	19	20	21
The cumulative number of specific plant diseases labs are prepared to detect	8	10	10	11	11	12
The cumulative number of specific animal diseases labs are prepared to detect	9	9	10	10	11	11
Dietary improvements by EFNEP participants	93%	95%	94%	94%	95%	95%
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review:	$2,069	$2,377	$2,797	$3,226	$3,664	$4,111
Efficiency Measure - Proposal Review Time in Days	194	188	184	184	184	184

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Full Cost by Department Strategic Goal

Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Discretionary Programs:				
Research				
Program	$478,466	$237,127	$242,618	$226,305
Administrative (Direct Costs)	12,758	6,322	6,469	6,034
Indirect Costs	7,178	3,558	3,640	3,396
Total Costs	498,402	247,007	252,727	235,735
Education				
Program	54,224	55,240	53,920	55,952
Administrative (Direct Costs)	1,446	1,473	1,438	1,492
Indirect Costs	813	829	809	839
Total Costs	56,483	57,542	56,167	58,283
Extension Activities				
Program	260,859	342,542	339,720	330,632
Administrative (Direct Costs)	6,956	9,135	9,059	8,817
Indirect Costs	3,913	5,138	5,096	4,959
Total Costs	271,728	356,815	353,875	344,408
Integrated Activities				
Program	1,260	958	958	958
Administrative (Direct Costs)	33	26	26	26
Indirect Costs	19	14	14	14
Total Costs	1,312	998	998	998
Endowment Funds:				
Endowment Funds				
Program	11,880	11,880	11,880	21,880
Total Costs	11,880	11,880	11,880	21,880
Mandatory Programs:				
Risk Management Education				
Program	4,800	4,800	4,800	4,800
Administrative (Direct Costs)	128	128	128	128
Indirect Costs	72	72	72	72
Total Costs	5,000	5,000	5,000	5,000
Beginning Farmers and Ranchers Program				
Program	18,240	18,240	18,240	0

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Administrative (Direct Costs)	486	486	486	0
Indirect Costs	274	274	274	0
Total Costs	19,000	19,000	19,000	0
Total Strategic Goal 1	863,805	698,242	699,647	644,424

Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Discretionary Programs:				
Research				
Program	$125,446	$115,578	$115,484	$120,862
Administrative (Direct Costs)	3,345	3,082	3,106	3,223
Indirect Costs	1,882	1,734	1,747	1,813
Total Costs	130,673	120,394	120,337	125,898
Extension Activities				
Program	57,829	50,448	50,035	48,698
Administrative (Direct Costs)	1,542	1,345	1,334	1,299
Indirect Costs	868	757	751	730
Total Costs	60,239	52,550	52,120	50,727
Integrated Activities				
Program	12,143	8,623	4,320	0
Administrative (Direct Costs)	323	230	115	0
Indirect Costs	183	129	65	0
Total Costs	12,649	8,982	4,500	0
Total Strategic Goal 2	203,561	181,926	176,957	176,625

Strategic Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Discretionary Programs:				
Research				
Program	$7,481	$181,407	$182,589	$212,216
Administrative (Direct Costs)	201	4,839	4,870	5,660
Indirect Costs	111	2,720	2,738	3,182
Total Costs	7,793	188,966	190,197	221,058
Extension Activities				
Program	37,008	672	665	648
Administrative (Direct Costs)	987	18	18	17

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Indirect Costs	555	10	10	10
Total Costs	38,550	700	693	675
Integrated Activities				
Program	30,206	15,329	15,345	40,842
Administrative (Direct Costs)	806	409	409	1,089
Indirect Costs	453	230	230	613
Total Costs	31,465	15,968	15,984	42,544
Mandatory Programs:				
National Institute of Food and Agriculture				
Biomass Research and Development Program				
Program	26,880	28,800	38,400	0
Administrative (Direct Costs)	717	768	1,024	0
Indirect Costs	403	432	576	0
Total Costs	28,000	30,000	40,000	0
Organic Research Initiative Sec. 7206				
Program	19,200	19,200	19,200	0
Administrative (Direct Costs)	512	512	512	0
Indirect Costs	288	288	288	0
Total Costs	20,000	20,000	20,000	0
Specialty Crop Grant Programs Sec. 7311				
Program	48,000	48,000	48,000	0
Administrative (Direct Costs)	1,280	1,280	1,280	0
Indirect Costs	720	720	720	0
Total Costs	50,000	50,000	50,000	0
Total Strategic Goal 3	175,808	305,634	316,874	264,277

Strategic Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Discretionary Programs:				
Research				
Program	$95,193	$85,571	$86,320	$92,935
Administrative (Direct Costs)	2,538	2,282	2,302	2,478
Indirect Costs	1,428	1,284	1,295	1,394
Total Costs	99,159	89,137	89,917	96,807

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)	2013 Estimate ($000)
Extension Activities				
Program	119,430	66,304	65,755	63,996
Administrative (Direct Costs)	3,185	1,768	1,754	1,707
Indirect Costs	1,791	995	986	960
Total Costs	124,406	69,067	68,495	66,663
Integrated Activities				
Program	14,012	10,539	0	0
Administrative (Direct Costs)	374	281	0	0
Indirect Costs	210	158	0	0
Total Costs	14,596	10,978	0	0
Mandatory Programs:				
Healthy Urban Food Enterprise Development Center				
Program	960	960	0	0
Administrative (Direct Costs)	26	26	0	0
Indirect Costs	14	14	0	0
Total Costs	1,000	1,000	0	0
Total Strategic Goal 4	239,161	170,182	158,412	163,470