FY 2012 Explanatory Notes

National Institute of Food and Agriculture
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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 will continue 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 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. Special 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.

Research grants are also awarded under the Critical Agricultural Materials Act, Pub. L. 98-284, as amended. Grants are awarded to aquaculture centers under section 1475(d) of NARETPA. Grants for supplemental and alternative crops are awarded under section 1473D of NARETPA. Grants for sustainable agriculture research and education are awarded under section 1621 of the FACT Act. Grants for Rangeland Research are awarded under section 1480 of NARETPA.

5. 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.

6. 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.

7. 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.

8. New Era Rural Technology Program - Section 7137 of FCEA established this competitively awarded grants program for technology development, applied research, and training to aid in the development of an agriculture-based renewable energy workforce. Projects are to focus in areas of bioenergy, pulp and paper manufacturing, and agriculture-based renewable energy resources.

9. 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. Other grants also are included.

10. 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).

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.

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.

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.

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 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 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 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 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 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 – As identified above, all awards will be made competitively in FY 2009 and thereafter to support pest management activities to eligible institutions.

Farm Safety - The Rural Health and Safety Education Act of 1990, section 2390 of the FACT Act (7 U.S.C. 2661) - This 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.

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.

Federally-recognized Tribes Extension Program (formerly Extension Indian Reservations) - Section 1677 of the FACT Act, 7 U.S.C. 5930 – Competitively awarded projects at various Indian Reservations and State Extension Services focus on providing assistance and educational programs in agriculture, community development, families and societal issues facing Native Americans.

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.

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. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

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. Food Safety - This program provides for research, extension, and education programs to improve the safety of food products and to create a public that is more informed about food safety issues.

3. 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).

4. Crops at Risk from Food Quality Protection Act (FQPA) Implementation - This program is an intermediate-term research and extension program with the at-risk cropping system as the focal point. Development of new multiple-tactic IPM strategies designed to assist in the transition period for certain pesticides affected by the implementation of the FQPA of 1996 is the goal of the program.

5. FQPA Risk Mitigation Program for Major Food Crop Systems - This program emphasizes the development and implementation of new and innovative pest management systems designed to maintain the productivity and profitability of major acreage crops, while meeting or exceeding environmental quality and human health standards as required by the FQPA.

6. 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.

7. 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. International Science and Education Grants Program - Section 1459A of NARETPA- This program focuses on incorporating substantive international activities into programs related to food systems agriculture and natural resources at U.S. land-grant colleges and universities.

2. Critical Issues Program - Section 2(c)(1)(B) of the 1965 Act (7 U.S.C. 450i(c)(1)(B)) - This program supports the development of early intervention strategies to prevent, manage or eradicate new and emerging diseases, both plant and animal, which would prevent loss of revenue to growers or producers.

3. 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.

4. Food and Agriculture Defense Initiative Program - Section 1484 of NARETPA provides support for a unified network of public agricultural institutions 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. 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.

5. 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.

6. 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, 2010, there were 376 permanent full-time employees and 41 other.

Agency Audit Reports

OMB Circular A-133 Audits

The audits below are ongoing in FY 2011.

Arkansas Land and Farm Development Corporation, for the Fiscal Year Ended September 30, 2002
Auburn University, for the Fiscal Year Ended September 30, 2002
Brown University, for the Fiscal Year Ended June 30, 2002
College of Micronesia Land Grant Program, for the Fiscal Year Ended September 30, 2002
Commonwealth of Virginia–Department of Accounts, for the Fiscal Year Ended June 30, 2002
Cornell University, for the Fiscal Year Ended June 30, 2002
Howard University, for the Fiscal Year Ended June 30, 2002
Institute of Paper Science and Technology, Inc., for the Fiscal Year Ended June 30, 2002
Miami University, for the Fiscal Year Ended June 30, 2002
National Tribal Development Association, for the Fiscal Year Ended December 31, 2002
Northern Marianas College, for the Fiscal Year Ended September 30, 2002
Northwestern University, for the Fiscal Year Ended August 31, 2002
Rural Action, Inc., for the Fiscal Year Ended December 31, 2002
South Carolina State University, for the Fiscal Year Ended June 30, 2002
Southeastern Healthcare System Inc./Memorial Hospital of Rhode Island, for the Fiscal Year Ended September 30, 2002
State of Colorado, for the Fiscal Year Ended June 30, 2002
State of Florida, for the Fiscal Year Ended June 30, 2002
State of Georgia, for the Fiscal Year Ended June 30, 2002
State of North Carolina, for the Fiscal Year Ended June 30, 2002
State of Texas c/o Comptroller of Public Accounts, for the Fiscal Year Ended August 31, 2002
State of Wisconsin, for the Fiscal Year Ended June 30, 2002
The General Hospital Corporation, for the Fiscal Year Ended September 30, 2002
The Ohio State University, for the Fiscal Year Ended June 30, 2002
The University of Alabama, for the Fiscal Year Ended September 30, 2002
The University of Massachusetts, for the Fiscal Year Ended June 30, 2002
Thomas Jefferson Institute for Crop Diversification, for the Fiscal Year Ended December 31, 2002
Tuskegee University, for the Fiscal Year Ended June 30, 2002
University of Arkansas for Medical Sciences, for the Fiscal Year Ended June 30, 2002
University of Georgia, for the Fiscal Year Ended June 30, 2002
University of Missouri System, for the Fiscal Year Ended June 30, 2002
University of New Mexico, for the Fiscal Year Ended June 30, 2002
University of Pennsylvania, for the Fiscal Year Ended June 30, 2002
University of Puerto Rico, for the Fiscal Year Ended June 30, 2002
University of the Virgin Islands, for the Fiscal Year Ended September 30, 2002
University of Wyoming, for the Fiscal Year Ended June 30, 2002
American Samoa Community College, for the Fiscal Year Ended September 30, 2005
Auburn University, for the Fiscal Year Ended September, 30, 2005
College of Micronesia Land Grant Program, for the Fiscal Year Ended September 30, 2005
Georgetown University, for the Fiscal Year Ended June 30, 2005
Georgia State University Research Foundation, Inc, for the Fiscal Year Ended June 30, 2005
Georgia Tech Research Corporation/Georgia Institute of Technology, for the Fiscal Year Ended June 30, 2005

Kentucky State University, for the Fiscal Year Ended June 30, 2005
Kewaunee School District, for the Fiscal Year Ended June 30, 2005
Langston University, for the Fiscal Year Ended June 30, 2005
Massachusetts Institute of Technology, for the Fiscal Year Ended June 30, 2005
Michigan Research Institute, for the Fiscal Year Ended December 31, 2005
Michigan State University, for the Fiscal Year Ended June 30, 2005
National Biodiesel Board, for the Fiscal Year Ended September 30, 2005
Northern Marianas College, for the Fiscal Year Ended September 30, 2005
Ohio University, for the Fiscal Year Ended June 30, 2005
School District of Monroe, for the Fiscal Year Ended June 30, 2005
State of Colorado, for the Fiscal Year Ended June 30, 2005
State of South Carolina, for the Fiscal Year Ended June 30, 2005
State of Texas c/o Comptroller of Public Accounts, for the Fiscal Year Ended August 31, 2005
State of Wisconsin, for the Fiscal Year Ended June 30, 2005
Chicago Zoological Society, for the Fiscal Year Ended December 31, 2005
The University of Alabama, for the Fiscal Year Ended September 30, 2005
University of Massachusetts, for the Fiscal Year Ended June 30, 2005
University of California, for the Fiscal Year Ended June 30, 2005
University of Delaware, for the Fiscal Year Ended June 30, 2005
University of Hawaii, for the Fiscal Year Ended June 30, 2005
University of Medicine and Dentistry of New Jersey, for the Fiscal Year Ended June 30, 2005
University of Pennsylvania, for the Fiscal Year Ended June 30, 2005
University of Southern California, for the Fiscal Year Ended June 30, 2005
University of Vermont and State Agricultural College, for the Fiscal Year Ended June 30, 2005
Alabama A&M University, for the Fiscal Year Ending September 30, 2007
Appleton Area School District, for Fiscal Year Ending June 30, 2007
Auburn University, for the Fiscal Year Ending September 30, 2007
Battelle Memorial Institute, for the Fiscal Year Ending September 30, 2007
Board of Regents Southwestern Indian Polytechnic Institute, for the Fiscal Year Ending December 31, 2007
Boise State University, for Fiscal Year Ending June 30, 2007
Case Western Reserve University, for Fiscal Year Ending June 30, 2007
City of Hope and Affiliates, for the Fiscal Year Ending September 30, 2007
Cleveland Clinic, for the Fiscal Year Ending December 31, 2007
College of Micronesia (Land Grant Program Only), for the Fiscal Year Ending September 30, 2007
Columbia University, for the Fiscal Year Ending June 30, 2007
Donald Danforth Plant Science Center, for the Fiscal Year Ending December 31, 2007
Georgia Tech Research Corporation/Georgia Institute of Technology, for the Fiscal Year Ending June 30, 2007
Girl Scouts of the United State of America, for the Fiscal Year Ending September 30, 2007
Growing Power, for the Fiscal Year Ending December 31, 2007
Howard-Suamico School District, for the Fiscal Year Ending June 30, 2007
Massachusetts Institute of Technology, for the Fiscal Year Ending June 30, 2007
Maui Economic Development Board, for the Fiscal Year Ending June 30, 2007
New England Medical Center Hospitals, Inc., for the Fiscal Year Ending September 30, 2007
Northern Marianas College, for the Fiscal Year Ending September 30, 2007
Rural Action, Inc. , for the Fiscal Year Ending December 31, 2007
Rutgers, The State University of New Jersey, for the Fiscal Year Ending June 30, 2007
Saint Louis University, for the Fiscal Year Ending June 30, 2007
Sheldon Jackson College and Affiliate, for the Fiscal Year Ending June 30, 2007
Smithsonian Institution, for the Fiscal Year Ending September 30, 2007
Southern Illinois University, for the Fiscal Year Ending June 30, 2007
St. Augustine College, for the Fiscal Year Ending June 30, 2007
State of Colorado, for the Fiscal Year Ending June 30, 2007
State of Florida, for the Fiscal Year Ending June 30, 2007
State of Montana, for the Fiscal Year Ending June 30, 2007

State of South Dakota, for the Fiscal Year Ending June 30, 2007
State of Tennessee, for the Fiscal Year Ending June 30, 2007
State of Texas C/O Comptroller of Public Accounts, for the Fiscal Year Ending August 31, 2007
State of Utah, for the Fiscal Year Ending June 30, 2007
State of Wisconsin, for the Fiscal Year Ending June 30, 2007
Territory of American Samoa, for the Fiscal Year Ending September 30, 2007
The Ohio State University, for the Fiscal Year Ending June 30, 2007
The University of Alabama, for the Fiscal Year Ending September 30, 2007
University of Delaware, for the Fiscal Year Ending June 30, 2007
University of Hawaii, for the Fiscal Year Ending June 30, 2007
University of Medicine & Dentistry of New Jersey, for the Fiscal Year Ending June 30, 2007
University of Missouri System, for the Fiscal Year Ending June 30, 2007
University of Puerto Rico, for the Fiscal Year Ending June 30, 2007
University of the Virgin Islands, for the Fiscal Year Ending September 30, 2007
University of Vermont and State Agricultural College, for the Fiscal Year Ending June 30, 2007
University of Wyoming, for the Fiscal Year Ending June 30, 2007
Waianae District Comprehensive Health and Hospital Board, Inc., for the Fiscal Year Ending June 30, 2007
Wayne State University, for the Fiscal Year Ending September 30, 2007
Youngstown State University, for the Fiscal Year Ending June 30, 2007
Coastal Enterprises, Inc. and Subsidiaries, for the Fiscal Year Ending September 30, 2007
National Tribal Development Association, for the Fiscal Year Ending September 30, 2007
Growing Power, Inc., for the Fiscal Year Ending December 31, 2008
Maui Economic Development Board, Inc., for the Fiscal Year Ending June 30, 2008
Stroud Water Research Center, Inc., for the Fiscal Year Ending December 31, 2008
University of Medicine and Dentistry of New Jersey, for the Fiscal Year Ending June 30, 2008
Abbots Ford School District, for the Fiscal Year Ending June 30, 2009
American Samoa Community College, for the Fiscal Year Ending September 30, 2009
American University, for the Fiscal Year Ending April 30, 2009
Auburn University, for the Fiscal Year Ending September 30, 2009
Baylor College of Medicine, for the Fiscal Year Ending June 30, 2009
Brown University, for the Fiscal Year Ending June 30, 2009
Delaware State University, for the Fiscal Year Ending June 30, 2009
Edgar School District, for the Fiscal Year Ending June 30, 2009
Georgia State University Research Foundation, Inc. and Affiliate, for the Fiscal Year Ending June 30, 2009
Gillett School District, for the Fiscal Year Ending June 30, 2009
Hawaii Agriculture Research Center, for the Fiscal Year Ending June 30, 2009
Illinois Institute of Technology, for the Fiscal Year Ending May 31, 2009
Keck Graduate Institute of Applied Life Sciences, for the Fiscal Year Ending June 30, 2009
Kentucky State University, for the Fiscal Year Ending June 30, 2009
Marshall School District, for the Fiscal Year Ending June 30, 2009
Massachusetts Institute of Technology, for the Fiscal Year Ending June 30, 2009
Nevada System of Higher Education, for the Fiscal Year Ending June 30, 2009
Northeastern University, for the Fiscal Year Ending June 30, 2009
Northern Marianas College, for the Fiscal Year Ending June 30, 2009
Oceanic Institute and Subsidiary, for the Fiscal Year Ending June 30, 2009
Pecatonica Area School District, for the Fiscal Year Ending June 30, 2009
Racine Unified School District, for the Fiscal Year Ending June 30, 2009
Research Triangle Institute, for the Fiscal Year Ending September 30, 2009
Saint Louis University, for the Fiscal Year Ending June 30, 2009
School District of Granton, for the Fiscal Year Ending June 30, 2009
School District of New Holstein, for the Fiscal Year Ending June 30, 2009
State of Florida, for the Fiscal Year Ending June 30, 2009
State of Montana, for the Fiscal Year Ending June 30, 2009
State of Texas c/o Comptroller of Public Accounts, for the Fiscal Year Ending August 31, 2009
State of Wisconsin, for the Fiscal Year Ending June 30, 2009

State System of Higher Education, Commonwealth of Pennsylvania, for the Fiscal Year Ending June 30, 2009
Syracuse University, for the Fiscal Year Ending June 30, 2009
Texas A&M Research Foundation, for the Fiscal Year Ending August 31, 2009
The Ohio State University, for the Fiscal Year Ending June 30, 2009
The University of Alabama, for the Fiscal Year Ending June 30, 2009
University of Delaware, for the Fiscal Year Ending June 30, 2009
University of Guam, for the Fiscal Year Ending September 30, 2009
University of Idaho, for the Fiscal Year Ending June 30, 2009
University of Illinois, for the Fiscal Year Ending June 30, 2009
University of Missouri, for the Fiscal Year Ending June 30, 2009
University of Wyoming, for the Fiscal Year Ending June 30, 2009

OIG Reports (OIG Audit No. and Title)

13001-3-Te	NIFA Implementation of Agricultural Research, Extension, and Education Reform Act of 1998. NIFA anticipates that corrective action will be completed in 2011.
13011-3-At	Review of 1994 Tribal Land Grant Institutions. NIFA anticipates that corrective action will be completed in 2011.
50099-84-Hy	USDA's Response to Colony Collapse Disorder. In process.
50501-01-It	USDA's Management and Security Over Wireless Handheld Devices. In process.
50601-13-Ch	Implementation of Renewable Energy Programs in USDA. NIFA anticipates that corrective action will be completed in 2011.
50601-14-At	Effectiveness and Enforcement of Suspension and Debarment Regulations in USDA. NIFA anticipates that corrective action will be completed in 2011.
50601-14-Te	Exports of Genetically Engineered Agricultural Commodities. NIFA anticipates that corrective action will be completed in 2011.
50601-16-Te	Controls over Genetically Engineered Animal and Insect Research. In process.
50703-2-DA	New Audit on Recovery Act – Review of Effectiveness of USDA/NIFA Data Quality Review Process. In process.

GAO Studies (GAO Job Code and Title)

120788	Department of Defense Research Facilities and Administration Cost Reimbursement. No report issued.
130812	Overview of Educational Programs. Report was issued January 2010.
361094	Native American Graves. The report was issued July 2010.
361095	Management and Activities of the Propane Education and Research Council and the National Oilheat Research Alliance. Report was issued September 2010.
440674	Integration of U.S. Biosurveillance Efforts. Report was issued June 2010.
440849	Preliminary Observations on Funding, Oversight, and Investigations and Prosecutions of ACORN or Potentially Related Organizations. Report was issued June 2010.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Statement of Available Funds and Staff Years

2010 Actual and Estimated 2011 and 2012

Item	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	2012 Estimated Amount	2012 Estimated Staff Years
Direct Appropriations:						
Research and Education Activities	$788,243,000	220	$788,243,000	241	$708,107,000	233
Native American Institutions Endowment Fund	11,880,000	0	11,880,000	0	11,880,000	0
Native American Institutions Endowment Interest	4,267,000	0	4,307,000	0	4,773,000	0
Hispanic-Serving Agricultural Colleges and Universities Endowment Fund	0	0	0	0	10,000,000	0
Hispanic Institutions Endowment Interest	0	0	0	0	0	0
Extension Activities	494,923,000	158	494,923,000	159	466,788,000	142
Integrated Activities	60,022,000	10	60,022,000	10	29,874,000	10
Improved Nutritional Delivery of Food Assistance Grants	4,000,000	0	4,000,000	0	0	0
Risk Management Education	5,000,000	0	5,000,000	0	5,000,000	0
Specialty Crop Grant Programs Sec. 7311	50,000,000	0	50,000,000	0	50,000,000	0
Biomass Research and Development Initiative	28,000,000	0	30,000,000	0	40,000,000	0
Organic Research Initiative Sec. 7206	20,000,000	0	20,000,000	0	20,000,000	0
Beginning Farmers and Ranchers Program	19,000,000	0	19,000,000	0	19,000,000	0
Healthy Urban Food Enterprise Development Center	1,000,000	0	1,000,000	0	0	0
Total, Direct Appropriations	1,486,335,000	388	1,488,375,000	410	1,365,422,000	385
Other Appropriations:						
Biodiesel Fuel Education Program, Section 9004	1,000,000	0	1,000,000	0	1,000,000	0
Community Food Projects Program	5,000,000	0	5,000,000	0	5,000,000	0
Trade Adjustment Assistance for Farmers	17,150,000	0	0	0	0	0
Total, Other Appropriations	23,150,000	0	6,000,000	0	6,000,000	0
Total, Appropriations	1,509,485,000	388	1,494,375,000	410	1,371,422,000	385
Obligations under other USDA appropriations:						
Research and Education Activities:						
Agricultural Research Services:						
Biotechnology Risk Assessment (ARS)	1,810,414	0	1,725,976	0	1,725,976	0
Salary, Benefits, and Operating Expenses for Detailee	10,500	0	0	0	0	0
IR-4 Quality Assurance Program	313,200	0	313,200	0	313,200	0
Departmental Administration						
COOP CAT Training	448	0	0	0	0	0
Foreign Agricultural Service:						
Salary, Benefits, and Operating Expenses for Detailees	43,485	0	13,000	0	0	0
Forest Service:						
Forest Service Biotechnology Risk Assessment	63,280	0	63,280	0	63,280	0
Graduate Training Joint Funding	250,000	0	250,000	0	250,000	0
National Atmospheric Deposition Program	198,479	0	222,847	0	222,847	0
Risk Management Agency:						
Integrated Pest Management Pest Information Platform for Extension and Education	1,500,000	0	500,000	0	500,000	0
Tree Genome Research Under Ag./Food	10,000	0	0	0	0	0

Item	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	2012 Estimated Amount	2012 Estimated Staff Years
Research Initiative						
Various agencies sharing cost of the USDA SBIR Program	3,020,327	0	4,398,607	0	2,564,743	0
Various research agencies sharing the cost of the Current Research Info. Sys.	444,197	0	639,867	0	639,867	0
Other Anticipated Reimbursements	0	0	2,064,801	0	2,064,801	0
Subtotal, Res./Ed. Other USDA Appropriations	7,664,330	0	10,191,578	0	8,344,714	0
Extension Activities:						
Foreign Agricultural Service:						
Afghanistan Extension Project	0	0	8,000,000	0	0	0
SAMS Project India	63,710	0	0	0	0	0
Animal and Plant Health Inspection Service						
Diagnostician Training	127,500	0	0	0	0	0
First Detector-Arthropod	117,590	0	0	0	0	0
Pest Detection Training for Underserved Audiences	122,980	0	100,000	0	100,000	0
Collaborative e-Learning	79,990	0	0	0	0	0
Botanical Gardens	300,000	0	0	0	0	0
Small Farms Outreach	100,000	0	100,000	0	100,000	0
Food Safety and Inspection Service:						
6th National Small Farm Conference	0	0	10,000	0	0	0
Forest Service:						
Assessment of Carbon Stock	500,000	0	0	0	0	0
Climate Change Ecosystem	500,000	0	0	0	0	0
Natural Resources Conservation Services:						
Renewable Resources Extension Act -- National Focus Fund Program	0	0	25,000	0	0	0
Miscellaneous Reimbursements	0	0	267,938	0	0	0
Other Anticipated Reimbursements	0	0	1,408,832	0	9,911,570	0
Subtotal, Extension Other USDA Appropriations	1,911,770	0	9,911,770	0	10,111,570	0
Total, NIFA Other USDA Appropriations	9,576,100	0	20,103,348	0	18,456,284	0
Other Federal Funds:						
Research and Education Activities:						
Army Corps of Engineers:						
Multifunctional Water Resources Management program	55,000	0	100,000	0	100,000	0
Role of Internet in Knowledge Transfer Program	0	0	50,000	0	100,000	0
Department of Commerce:						
NOAA National Atmospheric Deposition Program	186,534	0	186,534	0	186,534	0
Department of Defense:						
U.S. Army Environmental Center Liaison	214,982	0	205,000	0	205,000	0
Department of Interior						
Geological Survey, Atmospheric Deposition	617,403	0	617,403	0	617,403	0
National Park Service, Atmospheric Deposition	351,847	0	351,847	0	351,847	0
Fish and Wildlife Service National Trends Network	32,098	0	32,670	0	32,670	0
Bureau of Land Management, Atmospheric Deposition	42,213	0	42,213	0	42,213	0
Department of Health and Human Service:						
Foreign Animal Disease Countermeasure Program	1,353,276	0	0	0	0	0

Item	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	2012 Estimated Amount	2012 Estimated Staff Years
Environmental Protection Agency:						
NOAA National Atmospheric Deposition Program	186,534	0	186,534	0	186,534	0
Other Anticipated Reimbursements	0	0	2,064,801	0	2,064,801	0
Subtotal, Res/Educ. Other Federal Funds	3,039,887	0	3,837,002	0	3,887,002	0
Extension Activities:						
Department of Defense:						
Family Life Skills	3,951,480	0	4,003,397	0	3,803,397	0
Army Youth Development Project	3,000,000	0	2,000,000	0	1,000,000	0
Air Force 4-H Programs	790,000	0	430,000	0	360,000	0
Air Force Advocacy Program	810,000	0	0	0	250,000	0
Family Education and Advocacy Programs	205,477	0	233,491	0	200,000	0
Autism Phase II Study	500,000	0	0	0	0	0
Extension Partnership	14,600,000	0	5,000,000	0	3,000,000	0
Military Internship Program	426,000	0	400,000	0	400,000	0
Cornell-FMWRC Family Advocacy Program	516,538	0	400,000	0	400,000	0
University of Georgia FMWRC Survivor Outreach Program	960,740	0	0	0	0	0
Navy 4-H Military Partnership	26,199,319	0	0	0	0	0
Readiness at Penn State	0	0	1,000,000	0	0	0
Department of Housing and Urban Development:						
Healthy Homes Project	350,000	0	350,000	0	350,000	0
IPM Training to Public Housing Authorities	30,000	0	500,000	0	333,333	0
Department of Interior:						
Fish and Wildlife Service 4-H Awards Program	260,935	0	65,000	0	65,000	0
U.S. Department of Navy:						
Evaluation/Impact Assessment	250,000	0	0	0	0	0
Family Resiliency Conference	330,000	0	0	0	0	0
Environmental Protection Agency:						
Training for Pesticide Applicators	1,300,000	0	1,300,000	0	1,300,000	0
Clean Water Act	0	0	219,844	0	0	0
Subtotal, Extension Other Federal Funds	54,480,489	0	15,901,732	0	11,461,730	0
Total, NIFA Other Federal Funds	57,520,376	0	19,738,734	0	15,348,732	0
Total, NIFA Available Funds	1,576,581,476	388	1,534,217,082	410	1,405,227,016	385

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Permanent Positions by Grade and Staff Years Summary

2010 Actual and Estimated 2011 and 2012

Grade	2010			2011			2012		
	Wash DC	Field	Total	Wash DC	Field	Total	Wash DC	Field	Total
Senior Executive Service....	8	0	8	10	0	10	10	0	10
GS-15	75	0	75	72	0	72	70	0	70
GS-14	53	0	53	53	0	53	45	0	45
GS-13	55	0	55	55	0	55	55	0	55
GS-12	66	0	66	66	0	66	65	0	65
GS-11	24	0	24	24	0	24	20	0	20
GS-10	3	0	3	3	0	3	1	0	1
GS-9	24	0	24	24	0	24	15	0	15
GS-8	18	0	18	18	0	18	19	0	19
GS-7	46	0	46	46	0	46	46	0	46
GS-6	23	0	23	23	0	23	23	0	23
GS-5	10	0	10	9	0	9	10	0	10
GS-4	5	0	5	3	0	3	2	0	2
GS-3	1	0	1	0	0	0	0	0	0
GS-2	1	0	1	0	0	0	0	0	0
Other Graded Positions.....	0	0	0	4	0	4	4	0	4
Total Permanent Positions.....	412	0	412	410	0	410	385	0	385
Unfilled Positions	-36	0	-36	-26	0	-26	-26	0	-26
Total, Permanent Full-Time Employment, end-of-year.....	376	0	376	384	0	384	359	0	359
Staff Year Estimate.....	388	0	388	410	0	410	385	0	385

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, $708,107,000, as follows: to carry out the provisions of the Hatch Act of 1887 (7 U.S.C. 361a-i), $204,250,000; for grants for cooperative forestry research (16 U.S.C. 582a through a-7), $27,550,000; for payments to eligible institutions (7 U.S.C. 3222), $48,500,000, provided that each institution receives no less than $1,000,000; for special grants (7 U.S.C. 450i(c)), $1,837,000; for competitive grants on improved pest control (7 U.S.C. 450i(c)), $16,185,000; for competitive grants (7 U.S.C. 450(i)(b)), $324,655,000, 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), $1,805,000, to remain available until expended; for rangeland research grants (7 U.S.C. 3333), $983,000; for a program pursuant to section 1415A of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3151a), $4,800,000, to remain available until expended; for a higher education multicultural scholars program (7 U.S.C. 3152(b)(5)), $1,241,000, to remain available until expended (7 U.S.C. 2209b); for an education grants program for Hispanic-serving Institutions (7 U.S.C. 3241), $10,161,000; 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, $3,200,000; for secondary education , 2-year post-secondary education, and agriculture in the K-12 classroom (7 U.S.C. 3152(j)), $3,483,000; for aquaculture grants (7 U.S.C. 3322), $3,928,000; for sustainable agriculture research and education (7 U.S.C. 5811), $15,000,000; 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 3222, $20,075,000, to remain available until expended (7 U.S.C. 2209b); for payments to the 1994 Institutions pursuant to section 534(a)(1) of Public Law 103–382, $3,676,000; for 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 new era rural technology program pursuant to section 1473E of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3319e), $875,000; and for necessary expenses of Research and Education Activities, $14,253,000, of which $2,704,000 for the Research, Education, and Economics Information System and $5,136,000 for the Electronic Grants Information System, are to remain available until expended.

Hispanic-Serving Agricultural Colleges and Universities Endowment Fund

1 For the Hispanic-Serving Agricultural Colleges and Universities Endowment Fund under section 1456 (7 U.S.C. 3243) 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 Changes

The first 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.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Lead-Off Tabular and Summary of Increases and Decreases

Lead-Off Tabular Statement

RESEARCH AND EDUCATION ACTIVITIES

Annualized Continuing Resolution, 2011	$788,243,000
Budget Estimate, 2012	708,107,000
Change in Appropriation	-80,136,000

Summary of Increases and Decreases
(On basis of appropriation)

Item of Change	2011 Estimated	Pay Costs	Earmark Changes	Program Changes	2012 Estimated
Research and Education Activities:					
Agriculture and Food Research Initiative	$262,482,000	0	0	$62,173,000	$324,655,000
Sustainable Agriculture	14,500,000	0	0	500,000	15,000,000
Farm Business Management and Benchmarking Program	1,500,000	0	0	-1,500,000	0
Sun Grant Program	2,250,000	0	0	-2,250,000	0
Higher Education Programs:					
Graduate Fellowship Grants	3,859,000	0	0	-3,859,000	0
Institution Challenge Grants	5,654,000	0	0	-5,654,000	0
Hispanic Education Partnership Grants	9,237,000	0	0	924,000	10,161,000
Secondary/2-year Post-secondary	983,000	0	0	2,500,000	3,483,000
Capacity Building Grants (1890 Institutions)	18,250,000	0	0	1,825,000	20,075,000
Payments to the 1994 Institutions (Tribal Colleges)	3,342,000	0	0	334,000	3,676,000
Federal Administration:					
Electronic Grants Administration System	2,136,000	0	0	3,000,000	5,136,000
Other Federal Administration	42,986,000	0	-$33,869,000	0	9,117,000
Special Research Grants	89,029,000	0	-87,192,000	0	1,837,000
Improved Pest Control:					
Expert IPM Decision Support System	156,000	0	0	-156,000	0
Integrated Pest Management	2,415,000	0	0	1,590,000	4,005,000
Pest Management Alternatives	1,434,000	0	0	-1,434,000	0
Hatch Act	215,000,000	0	0	-10,750,000	204,250,000
McIntire-Stennis Cooperative Forestry	29,000,000	0	0	-1,450,000	27,550,000
Animal Health and Disease (Sec. 1433)	2,950,000	0	0	-2,950,000	0
Alternative Crops	835,000	0	0	-835,000	0
Critical Agricultural Materials Act	1,083,000	0	0	-1,083,000	0
All Other	79,162,000	0	0	0	79,162,000
Total, Research and Education	788,243,000	0	-121,061,000	40,925,000	708,107,000

Item of Change	2011 Estimated	Pay Costs	Earmark Changes	Program Changes	2012 Estimated
Activities.....					
Hispanic Institutions Endowment Interest.....	0	0	0	0	0
Native American Institutions Endowment Interest.....	4,307,000	0	0	466,000	4,773,000
Hispanic-Serving Agricultural Colleges and Universities Endowment Fund.....	0	0	0	10,000,000	10,000,000
Native American Institutions Endowment Fund.....	11,880,000	0	0	0	11,880,000
Total Available or Estimate.....	804,430,000	0	-121,061,000	51,391,000	734,760,000

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Project Statements

RESEARCH AND EDUCATION ACTIVITIES

Project Statement by Program
(On basis of Appropriation)

	2010 Actual		2011 Estimated			2012 Estimated	
Projects	Amount	Staff Years	Amount	Staff Years	Increase or Decrease	Amount	Staff Years
Hatch Act	$215,000,000		$215,000,000		-$10,750,000	$204,250,000	
McIntire-Stennis Cooperative Forestry	29,000,000		29,000,000		-1,450,000	27,550,000	
Evans-Allen Program (1890 Colleges and Tuskegee University)	48,500,000		48,500,000		0	48,500,000	
Animal Health and Disease (Sec. 1433)	2,950,000		2,950,000		-2,950,000	0	
Special Research Grants:							
Global Change and UV Monitoring	1,408,000		1,408,000		0	1,408,000	
Minor Use Animal Drugs	429,000		429,000		0	429,000	
Other (Earmarked Projects)	87,192,000		87,192,000		-87,192,000	0	
Total Special Research Grants	89,029,000		89,029,000		-87,192,000	1,837,000	
Improved Pest Control:							
Expert IPM Decision Support System	156,000		156,000		-156,000	0	
Pest Management Alternatives	1,434,000		1,434,000		-1,434,000	0	
Integrated Pest Management	2,415,000		2,415,000		1,590,000	4,005,000	
Minor Crop Pest Management (IR-4)	12,180,000		12,180,000		0	12,180,000	
Total Improved Pest Control	16,185,000		16,185,000		0	16,185,000	
Critical Agricultural Materials Act	1,083,000		1,083,000		-1,083,000	0	
Aquaculture Centers (Sec. 1475)	3,928,000		3,928,000		0	3,928,000	
Sustainable Agriculture	14,500,000		14,500,000		500,000	15,000,000	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
1994 Institutions Research Program	1,805,000		1,805,000		0	1,805,000	
Alternative Crops	835,000		835,000		-835,000	0	
Agriculture and Food Research Initiative	262,482,000		262,482,000		62,173,000	324,655,000	
Farm Business Management and Benchmarking Program	1,500,000		1,500,000		-1,500,000	0	
Sun Grant Program	2,250,000		2,250,000		-2,250,000	0	
Joe Skeen Institute for Rangeland Management	983,000		983,000		0	983,000	
New Era Rural Technology Program	875,000		875,000		0	875,000	
Federal Administration (direct approp.):							
Pay Costs and FERS	5,576,000		5,576,000		0	5,576,000	
Office of Extramural Programs (Grants)	440,000		440,000		0	440,000	
Peer Panels	397,000		397,000		0	397,000	
Data Information System (REEIS)	2,704,000		2,704,000		0	2,704,000	
Electronic Grants Administration System	2,136,000		2,136,000		3,000,000	5,136,000	
Other	33,869,000		33,869,000		-33,869,000	0	
Total Federal Administration	45,122,000		45,122,000		-30,869,000	14,253,000	
Higher Education:							
Graduate Fellowship Grants	3,859,000		3,859,000		-3,859,000	0	
Institution Challenge Grants	5,654,000		5,654,000		-5,654,000	0	
Multicultural Scholars Program	1,241,000		1,241,000		0	1,241,000	
Hispanic Education Partnership Grants	9,237,000		9,237,000		924,000	10,161,000	
Secondary/2-year Post-secondary	983,000		983,000		2,500,000	3,483,000	
Capacity Building Grants (1890 Institutions)	18,250,000		18,250,000		1,825,000	20,075,000	
Payments to the 1994 Institutions (Tribal Colleges)	3,342,000		3,342,000		334,000	3,676,000	
Alaska Native-serving and	3,200,000		3,200,000		0	3,200,000	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Native Hawaiian-serving Edu. Grants							
Resident Instruction Grants for Insular Areas	900,000		900,000		0	900,000	
Distance Education Grants for Insular Areas	750,000		750,000		0	750,000	
Veterinary Medical Services Act	4,800,000		4,800,000		0	4,800,000	
Total Higher Education Grants	52,216,000		52,216,000		-3,930,000	48,286,000	
Subtotal	788,243,000		788,243,000		-80,136,000	708,107,000	
Endowment Funds:							
Native American Institutions Endowment Fund	11,880,000		11,880,000		0	11,880,000	
Native American Institutions Endowment Interest	4,267,000		4,307,000		466,000	4,773,000	
Hispanic-Serving Agricultural Colleges and Universities Endowment Fund	0		0		10,000,000	10,000,000	
Hispanic Institutions Endowment Interest	0		0		0	0	
Total Endowment Funds	16,147,000		16,187,000		10,466,000	26,653,000	
Total Available or Estimate	804,390,000	220	804,430,000	241	-69,670,000	734,760,000	233

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

RESEARCH AND EDUCATION ACTIVITIES

Project Statement by Program
(On basis of Available Funds)

(includes Carryover balance)

	2010 Actual		2011 Estimated			2012 Estimated	
Projects	Amount	Staff Years	Amount	Staff Years	Increase or Decrease	Amount	Staff Years
Hatch Act	$214,965,000		$215,000,000		-$10,750,000	$204,250,000	
McIntire-Stennis Cooperative Forestry	29,000,000		29,000,000		-1,450,000	27,550,000	
Evans-Allen Program (1890 Colleges and Tuskegee University)	48,500,000		48,500,000		0	48,500,000	
Animal Health and Disease (Sec. 1433)	2,950,000		2,950,000		-2,950,000	0	
Special Research Grants							
Global Change and UV Monitoring	1,408,000		1,408,000		0	1,408,000	
Minor Use Animal Drugs	429,000		429,000		0	429,000	
Other (Earmarked Projects)	87,192,000		87,192,000		-87,192,000	0	
Total Special Research Grants	89,029,000		89,029,000		-87,192,000	1,837,000	
Improved Pest Control							
Expert IPM Decision Support System	156,000		156,000		-156,000	0	
Integrated Pest Management	2,415,000		2,415,000		1,590,000	4,005,000	
Minor Crop Pest Management (IR-4)	12,180,000		12,180,000		0	12,180,000	
Pest Management Alternatives	1,434,000		1,434,000		-1,434,000	0	
Total Improved Pest Control	16,185,000		16,185,000		0	16,185,000	
Critical Agricultural Materials Act	2,084,000		1,083,000		-1,083,000	0	
Carryover			19,000		-19,000	0	
Aquaculture Centers (Sec. 1475)	3,928,000		3,928,000		0	3,928,000	
Sustainable Agriculture	14,500,000		14,500,000		500,000	15,000,000	
1994 Institutions Research	1,343,000		1,805,000		0	1,805,000	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Program							
Carryover			462,000		-462,000	0	
Alternative Crops	835,000		835,000		-835,000	0	
Agriculture and Food Research Initiative	146,683,965		262,482,000		62,173,000	324,655,000	
Carryover			265,765,000		-265,765,000	0	
Farm Business Management and Benchmarking Program	1,500,000		1,500,000		-1,500,000	0	
Sun Grant Program	2,250,000		2,250,000		-2,250,000	0	
Joe Skeen Institute for Rangeland Management	983,000		983,000		0	983,000	
New Era Rural Technology Program	875,000		875,000		0	875,000	
Federal Administration (direct approp.)							
Pay Costs and FERS	5,576,000		5,576,000		0	5,576,000	
Office of Extramural Programs (Grants)	440,000		440,000		0	440,000	
Peer Panels	397,000		397,000		0	397,000	
Data Information System (REEIS)	2,883,000		2,704,000		0	2,704,000	
Electronic Grants Administration System	2,277,000		2,136,000		3,000,000	5,136,000	
Other	33,869,000		33,869,000		-33,869,000	0	
Total Federal Administration	45,442,000		45,122,000		-30,869,000	14,253,000	
Higher Education:							
Graduate Fellowship Grants	7,888,000		3,859,000		-3,859,000	0	
Institution Challenge Grants	5,654,000		5,654,000		-5,654,000	0	
Multicultural Scholars Program	2,230,000		1,241,000		0	1,241,000	
Hispanic Education Partnership Grants	9,237,000		9,237,000		924,000	10,161,000	
Secondary/2-year Post-secondary	983,000		983,000		2,500,000	3,483,000	
Capacity Building Grants (1890 Institutions)	36,123,000		18,250,000		1,825,000	20,075,000	
Payments to the 1994 Institutions (Tribal Colleges)	3,342,000		3,342,000		334,000	3,676,000	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Alaska Native-serving and Native Hawaiian-serving Edu. Grants	3,200,000		3,200,000		0	3,200,000	
Resident Instruction Grants for Insular Areas	900,000		900,000		0	900,000	
Distance Education Grants for Insular Areas	750,000		750,000		0	750,000	
Veterinary Medical Services Act	9,382,000		4,800,000		0	4,800,000	
Total Higher Education Grants	79,689,000		52,216,000		-3,930,000	48,286,000	
Carryover			12,277,000		-12,277,000	0	
Subtotal	700,741,965		1,066,766,000		-358,659,000	708,107,000	
Endowment Funds:							
Native American Institutions Endowment Fund	(11,880,000)		(11,880,000)		(0)	(11,880,000)	
Native American Institutions Endowment Interest	4,267,000		4,307,000		466,000	4,773,000	
Hispanic-Serving Agricultural Colleges and Universities Endowment Fund	(0)		(0)		(10,000,000)	(10,000,000)	
Hispanic Institutions Endowment Interest	0		0		0	0	
Total Endowment Funds	(16,147,000)		(16,187,000)		(10,466,000)	(26,653,000)	
Improved Nutritional Delivery of Food Assistance Grants	4,000,000		4,000,000		-4,000,000	0	
Subtotal Available or Estimate	709,008,965		1,075,073,000		-362,193,000	712,880,000	
Unobligated Balance:							
Available, Start of Year	-178,779,965		-278,523,000		278,523,000	0	
Unobligated Balance, Lapsing	35,000		-0		0	0	
Available, End of Year	278,523,000		-0		0	0	
Native American Institutions Endowment Interest	-4,267,000		-4,307,000		-466,000	-4,773,000	
Improved Nutritional Delivery of Food Assistance Grants	-4,000,000		-4,000,000		4,000,000	0	
Total Appropriation	800,520,000	220	788,243,000	241	-80,136,000	708,107,000	233

Mandatory:

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Biomass Research and Development Initiative ...	28,000,000		30,000,000		10,000,000	40,000,000	

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Justification of Increases and Decreases

1 An increase of $62,173,000 to Agriculture and Food Research Initiative ($262,482,000 available in 2011) as follows:

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 agricultural science 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 in the Office of Management and Budget (OMB) and Office of Science Technology Policy (OSTP) memorandum dated July 21, 2010, 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. Each of these addresses OMB/OSTP's challenge areas for the 2012 Budget.

The NIFA 2012 budget proposes to redirect funding from the Graduate Fellowships Program and the Institution Challenge Grants Program (two small, stand-alone programs that support collegiate academic activities and graduate fellowships) into the AFRI program. A portion of the proposed AFRI increase ($9,513,000) will be used to support activities similar to those previously funded through the Institution Challenge Grants Program and the Graduate Fellowship Grants Program to train the next generation of agriculture scientists. This redirection will allow efficiency in management and alignment of medium to long-term research goals with scientific training opportunities and directions. Students at the undergraduate and graduate levels will be trained in areas of science critical to achieving national goals and expanding foundational capacity in agricultural science. While the National Research Initiative, the predecessor to the AFRI program, provided opportunities to support graduate assistantships as part of research project funding, the 2008 Farm Bill expands the authority of the AFRI program to make awards in direct support of education.

BIOENERGY: NIFA is requesting an increase of $8,239,900 (including a portion of the funds formerly used to support the Institution Challenge Grants program). Base funding will support ongoing research, education, and extension in support of the President's Agenda 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 will require a substantial investment in the sustainable production of high-quality, cost-effective feedstocks for biofuel production. This priority supports the Department's Priority 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 three regional centers for sustainable biomass production, education programs to create the needed skilled workforce, and research on enhanced value co-products and crop protection. Increased funding will support research, education, and extension in the following three areas: 1) land-use changes resulting from feedstock production and conversion; 2) identification of socioeconomic impacts of biofuels in rural communities in order to enhance sustainable rural economies; and 3) logistics of handling feedstocks for biofuels. New efforts will also include education activities consistent with those supported by the former Institution Challenge Grants program.

CLIMATE VARIATION EFFECTS ON PRODUCTION: NIFA is requesting an increase of $4,685,350 (including a portion of the funds formerly used to support the Institution Challenge Grants program). Base funding 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 and temperature. This includes cereal germplasm phenotyping in support of plant breeding to respond to environmental extremes and the development of improved

animal breeds or production methods for swine, poultry, ruminants, and dairy in order to provide the amount of food needed by a growing population. Climatic challenges to production are becoming more common and variable. These challenges include drought, limits on irrigation water supplies, floods, and temperature extremes. USDA needs to extend research knowledge and assist farmers 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. Increased funding will support research, education, and extension in the following areas: 1) non-food horticultural production systems; 2) fiber production systems (e.g., changes in forest composition); 3) farmed aquaculture and specialty livestock; 4) deciduous hardwoods and mixed forests and 5) continued work with germplasm phenotyping and plant/animal breeding. New efforts will also include education activities consistent with those supported by the former Institution Challenge Grants program.

GLOBAL FOOD SECURITY: NIFA is requesting an increase of $11,794,450 (including a portion of the funds formerly used to support the Institution Challenge Grants program). 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, minimizing crop plant losses from oomycete pathoystems and fungal diseases, and wide area pest monitoring. 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's and supports the Department's Priority Goal of helping America promote sustainable agricultural production and biotechnology exports as America works to increase global food security. Increased funding will support research, education, and extension in the following areas: 1) reproductive fertility in food animals; 2) minimizing losses from livestock disease; 3) management of plant insect pests; and 4) management of plant bacterial diseases. New efforts will also include education activities consistent with those supported by the former Institution Challenge Grants program.

NUTRITION AND HEALTH: NIFA is requesting an increase of $8,239,900 (including a portion of the funds formerly used to support the Institution Challenge Grants program). Obesity is the number one nutritional problem in America. Base funding will support ongoing research, education, and extension focused on children ages 2 – 14 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 address obesity in children ages 15-19. New efforts will also include education activities consistent with those supported by the former Institution Challenge Grants program.

FOOD SAFETY: NIFA is requesting an increase of $8,239,900 (including a portion of the funds formerly used to support the Institution Challenge Grants program). Base funding will support ongoing research, education, and extension to improve the safety of the United States 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 Priority Goal of ensuring that all in America have access to safe, nutritious, and balanced meals. Increased funding will address research, education, and extension efforts in microbial ecology of food-borne pathogens and control of other food-borne pathogens of concern, such as Listeria monocytogenes. New efforts will also include education activities consistent with those supported by the former Institution Challenge Grants program.

For each of the above challenge areas, base funding supports ongoing work initiated in Fiscal Years 2010 and 2011. The challenge area programs were designed to support discrete programmatic elements each year. Results from 2010 and 2011 projects, when combined with results from work initiated in FY 2012, will allow for the fuller achievement of program goals in support of OMB/OSTP's priorities. 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.

FOUNDATIONAL SCIENCE: NIFA is requesting an additional $15,798,000. 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: NIFA is addressing an increase of $5,175,500 (including $3,859,000 formerly used to support the Graduate Fellowships program.). In 2010, NIFA established the NIFA fellows program through AFRI which directly supports graduate education in priority research programs at almost twice the level of the National Needs Fellowship Program proposed for redirection in the FY 2012 budget proposal. Awards will be made to individuals based upon their qualifications and interest in pursuing research careers in NIFA research priorities.

In 2012, these curriculum and recruitment efforts will be expanded and integrated with current research priorities and future opportunities to give strong relevance to science, technology, engineering, and mathematics (STEM) programs. This approach will facilitate the linking of agricultural science with broad biological science opportunities.

In the new organizational structure educational activities will be administered through the Division of Community and Education in the Institute of Youth, Family, and Community. By implementing the undergraduate and graduate training programs in a coordinated activity NIFA will be on track to have a more unified plan for creating an informed and educated workforce for the food and agriculture sector to serve the needs of the American public.

2 An increase of $500,000 to Sustainable Agriculture Research and Education Program ($14,500,000 available in 2011) as follows:

Sustainable Agriculture Research and Education Program base funding advances agricultural innovations that improve profitability, environmental stewardship and quality of life through applied research and extension. Increased funding for the program will be used to support systems research and farmer/rancher projects that will improve soil quality and carbon sequestration, save energy, and mitigate climate change. Projects are funded through competitive grants offered nationwide by four regions under the direction of councils that include farmers, ranchers, and representatives from universities, government, agribusiness, nonprofit organizations.

3 A decrease of $1,500,000 to Farm Business Management and Benchmarking Program ($1,500,000 available in 2011) as follows:

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 decrease of $2,250,000 to Sun Grant Program ($2,250,000 available in 2011) as follows:

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.

5 A decrease of $3,930,000 to Higher Education as follows:

5.a A decrease of $3,859,000 to Graduate Fellowship Grants ($3,859,000 available in 2011) as follows:

In FY 2012, NIFA proposes that the activities formerly supported under the Graduate Fellowships Grants (a small, stand-alone program) be supported under AFRI. This will allow efficiency in management and alignment of medium to long-term research goals with scientific training opportunities and directions. Students at the graduate level can be trained in areas of science critical to achieving national goals and expanding foundational capacity in agricultural science. The administration of the program activities under AFRI also is a means to streamline the NIFA budget portfolio. In 2010, NIFA established the NIFA Fellows Program through AFRI which directly supports graduate education in priority research programs at almost twice the level of the Graduate Fellowship Program proposed for redirection in the FY 2012 budget proposal. In 2012, these curriculum and recruitment efforts can be expanded and integrated with research priorities and future opportunities to give strong relevance to STEM programs.

5.b A decrease of $5,654,000 to Institution Challenge Grants ($5,654,000 available in 2011) as follows:

In FY 2012, NIFA proposes that the activities formerly supported under the Institution Challenge Grants be supported under AFRI. This will allow efficiency in management and alignment of medium to long-term research goals with scientific training opportunities and directions. Students at the undergraduate and graduate levels can be trained in areas of science critical to achieving national goals and expanding foundational capacity in agricultural science. 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.

5.c An increase of $924,000 to Hispanic-Serving Institutions Education Grants ($9,237,000 available in 2011) as follows:

Base funding will support USDA efforts to better service Hispanic Americans and to prepare them for careers in agriscience and agribusiness. Increased funding will support the establishment of alliances among Hispanic Serving Institution's to advance research, education and extension activities that meet NIFA priorities and will support OMB and OSTP science policy regarding strengthening STEM education and advancing learning technologies at every level and for all segments of society. It will enable a coordinated approach to develop and support student scholars with strong STEM training, development of instructional materials and the accompanying teachers' training, and development of curricula that have strong STEM components related to the agricultural sciences.

5.d An increase of $2,500,000 to Secondary Education/2-year Post Secondary, and Agriculture in the K-12 Classroom ($983,000 available in 2011) as follows:

Base funding will be used 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. In support of the President’s initiative to make math and science education a national priority at all grade levels, increased funding will be used to improve rural education within the Secondary Education, Two-Year Postsecondary Education, and Agriculture in K-12 Classroom (SPECA) program to: (1) Update and revise secondary, 2-year postsecondary, and higher education biological, social, and related curricula, especially at academic institutions serving rural areas, to meet the challenges of preparing graduates for emerging science, technology, engineering and mathematics (STEM) related employment opportunities critical to revitalizing rural American communities, and to ensure a qualified workforce in the United States; (2) Provide incentives for educators teaching in rural areas to enhance their teaching skills by establishing Rural America Teaching Fellowships that will provide funds for qualified teachers to pursue professional development activities (conferences, workshops, continuing education, etc.) to enhance their classroom delivery skills; and (3) Encourage complementary and synergistic linkages among secondary, 2-year postsecondary, and higher education programs in the food and agricultural sciences in order to enhance research and extension activities that support regional approaches to establishing best practices in STEM curriculum content and delivery methods throughout rural communities. With SPECA funds, NIFA will establish a separate Sustaining Rural Communities through Education component within the grants program to focus academic curricula at the K-14 grade levels on improving the economic health and viability of rural communities through developing degree programs emphasizing new and emerging

employment opportunities supported by the agriscience and agribusiness disciplines. SPECA emphasis would be on curricula improvements and faculty expertise.

5.e An increase of $1,825,000 to 1890 Institution Capacity Building Grants ($18,250,000 available in 2011) as follows:

Minority Serving Programs: One of NIFA's education goals is to increase the number and diversity of the next generation of highly trained, technologically skilled and globally aware agricultural scientists. These scientists will be able to assume leadership roles in advancing the nation's research, education, and extension agenda in meeting societal challenges posed by adaptation/mitigation to global climate change, development of sustainable bioenergy, food safety, food security, and reduction in childhood obesity. To meet these challenges, programs must be enhanced to attract, recruit, and retain the next generation of STEM fields students. NIFA Education Programs provide support to academic and research institutions and other eligible organizations to develop programs that enhance awareness and preparation in agriculture sciences of students from kindergarten through graduate school. In FY 2012 funding increases are proposed for the 1890 Institution Capacity Building Grants, Hispanic Serving Institutions Education Grants, and Tribal Colleges Education Equity Grants Programs. Capacity Building Grants: Base funding for this program serves to advance the teaching and research capacity, and expand the competitiveness of the 1890 Land-Grant Institutions, Tuskegee University, and West Virginia State University to build their capabilities as full partners in USDA's mission to provide more and better trained professionals for careers in the food and agricultural sciences. The increase in funding will establish multi-State alliances among the 1890 institutions to focus on one or two target areas within NIFA's mission and priorities. The alliances are designed to increase the number of faculty members who will carry out teaching, research, and extension in focused research areas. This also will result in a more coordinated and integrated approach in providing research and training programs to graduate and undergraduate students and in implementing extension activities to small farmers and local industries. The approach will yield results larger than traditional programs and will support fellowships for undergraduate, graduate, and postdoctoral students, with the goal to increase retention of African American students and trainees in food and agricultural degree programs. Finally, curriculum developed by these alliances will build on the expertise of multiple institutions and the benefits will be at a larger scale than if accomplished by a single institution. The goals of this funding are to enhance diversity of the food and agricultural workforce by providing underrepresented students with educational opportunities; strengthen linkages among 1890 institutions and other institutions of higher learning, USDA, and private industry; and enhance the quality of Teaching, Research and Extension programs at the 1890 institutions. These program activities are in accordance with OMB and OSTP science policy regarding strengthening STEM education and advancing learning technologies at every level and for all segments of society.

5.f An increase of $334,000 to Tribal Colleges Education Equity Grants ($3,342,000 available in 2011) as follows:

Base funding will support teaching programs in the food and agricultural sciences at the 1994 Institutions. Additional funding will result in an increase of support to each Tribal College from $104,438 to $114,875. The additional estimated $10,437 per college will primarily be used to support faculty and educational programs that reach American Indian students who do not have opportunities to attend non-native institutions of higher learning. The overall goal of the Tribal Colleges Education Equity Grants (TCEG) program is to help build American Indian food security through viable Native Institutions that address Native problems and opportunities on American Indian Reservations. Strengthening tribal research, education and extension programs responsive to American Indian communities that suffer from above average incidences of childhood obesity, diabetes, unemployment and their attendant social ills is often the only way that such problems receive attention. American Indian youth are at risk and these programs reach nearly 18,000 students attending Tribal Land Grant Colleges. Programs are tailored to indigenous culture that will attract students and allow them to better serve their communities and increase the success rate of American Indian students within the higher education systems. One goal of the Tribal Land Grants is to increase the graduation rate of students in two-year degree programs and better prepare them to enroll in and become successful at 4-year degree programs. Without the preparatory work of the Tribal Colleges, American Indian students find it difficult to compete in off-reservation 4-year institutions. TCEG also

provides extensive outdoor research opportunities for students involving studies of native plants, climate change analysis and ecosystem studies. This can be a natural choice for many Native American students who also benefit from internships and other similar work programs. The scientific skills of observation, note taking and data analysis can lead to job opportunities and advanced degrees. Some of these programs include internships that have placed students with the National Park Service and allowed others to pursue advanced degrees at graduate institutions. As referenced in the Administration's Science and Technology memorandum, TCEG activities will strengthen efforts in STEM education and advance learning technologies at every level and for all segments of society.

6 A decrease of $30,869,000 to Federal Administration as follows:

6.a An increase of $3,000,000 to E-Government ($2,136,000 available in 2011) as follows:

With the requirement for electronic submission of grant applications, base funding supports the agency's grant making processes and systems. Increased funding will support critical changes to the processes and systems that will substantially lower the transaction costs of applying for an AFRI or other NIFA competitive grants, and increase proposal receipt and acceptance speeds and accuracy.

6.b A decrease of $33,869,000 to eliminate Federal Administration earmarked projects:

The Administration strongly believes that peer-reviewed competitive programs that meet national needs are a more effective use of taxpayer dollars than earmarks that are provided to specific recipients. The FY 2012 budget proposes to eliminate these targeted earmarks. Within necessary budget constraints, it is critical that taxpayer dollars be used for the highest quality projects, those that are awarded based on competitive peer- reviewed process to meet national priorities, rather than through earmarks. Therefore, some broad aspects of many research topics currently addressed by earmarked projects can be included in the scope of the Agriculture and Food Research Initiative program in FY 2012. Other topics will be addressed under other broader based, competitively-awarded Federal programs supported with non-Federal funds administered by State-level scientific program managers.

7 A decrease of $87,192,000 to eliminate Special Research Grants earmarked projects:

The Administration strongly believes that peer-reviewed competitive programs that meet national needs are a more effective use of taxpayer dollars than earmarks that are provided to specific recipients. The FY 2012 budget proposes to eliminate these targeted earmarks. Within necessary budget constraints, it is critical that taxpayer dollars be used for the highest quality projects, those that are awarded based on competitive peer- reviewed process to meet national priorities, rather than through earmarks. Therefore, some broad aspects of many research topics currently addressed by earmarked projects can be included in the scope of the AFRI program in FY 2012. Other topics will be addressed under other broader based, competitively-awarded Federal programs supported with non-Federal funds administered by State-level scientific program managers.

8 No net change to Improved Pest Control as follows:

8.a A decrease of $156,000 to Expert IPM Decision Support System ($156,000 available in 2011) as follows:

In FY 2012, the budget proposes that the activities formerly supported under the Expert Integrated Pest Management Decision Support System be supported under the Integrated Pest Management and Biological Control Program (IPM&BCP). The administration of the program activities under IPM&BCP is a means to streamline the NIFA budget portfolio, and is consistent with the Administration's efforts to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities.

8.b An increase of $1,590,000 to Integrated Pest Management & Biological Control ($2,415,000 available in 2011) as follows:

The funds requested will be used to support applied research projects seeking to develop predictive models and real-time information and management tools for pest management challenges in plant and animal production systems. This request consolidates funding for the Expert Integrated Pest Management Decision Support System, Pest Management Alternatives, and Integrated Pest Management and Biological Control into a single program. The consolidation of these programs will improve the efficiency of program implementation and will result in research investments with greater focus, more appropriate scale and enhanced impact. Some of the Nation's most pressing pest management problems occur when a critically important tactic in a management program is no longer available due to development of pest resistance, regulatory action or marketing decisions of manufacturers. The loss of a key management tactic or the lack of an approved tactic can have devastating impacts on productivity, product quality and profitability. Agricultural production systems are also challenged by the introduction of new invasive species and by the spread or increased virulence of already established pests that may be exacerbated by global climate change. Examples of current pest management challenges that would be addressed by the program include the development of new management strategies to reduce damage from pests/diseases such as citrus greening, to reduce the development of glyphosate resistance in weed populations, and to mitigate damage caused by resurgence and expanded ranges of bark beetles in Western forests due to climate change. A single national issue or several regional issues may be addressed in any given year by the program. It is expected that, for each project, cross-disciplinary national or regional research teams will be formed. Existing regional and national networks of scientists, producers and stakeholders will be utilized to help guide and conduct research and outreach efforts supported by the program. The strategic directions of the program will be guided by USDA's "National Roadmap for Integrated Pest Management". The projects supported by this program will contribute to global food security by reducing the development of pest resistance to management tactics, reducing risks to human health and the environment caused by pests or the use of pest management practices, and by increasing the economic benefits of adopting integrated pest management practices. The program would also address the issues of range expansion and shifts in pest/pathogen species complexes due to climatic variability.

8.c A decrease of $1,434,000 to Pest Management Alternatives ($1,434,000 available in 2011) as follows:

In FY 2012, the budget proposes that the activities formerly supported under Pest Management Alternatives be supported under the Integrated Pest Management and Biological Control Program (IPM&BCP). The administration of the program activities under IPM&BCP is a means to streamline the NIFA budget portfolio, and is consistent with the Administration's efforts to redirect available resources, as appropriate, and consistent with the agency mission, from lower-priority areas to other science and technology activities.

9 A decrease of $10,750,000 to Hatch Act ($215,000,000 available in 2011) as follows:

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 five percent below FY 2011.

10 A decrease of $1,450,000 to McIntire-Stennis Cooperative Forestry ($29,000,000 available in 2011) as follows:

This program provides base funding to support research related to the use of the Nation’s forest resources. Funding at the requested level will assist in carrying out a program of state forestry research and developing a trained pool of forest scientists capable of conducting needed forestry research, which should include: (1) ecological restoration; (2) catastrophe management; (3) valuing and trading ecological services; (4) energy conservation, biomass energy and bio-based materials development; (5) forest fragmentation: (6) carbon sequestration and climate change; and (7) ways of fostering healthy forests and a globally competitive forest resources sector. In light of constrained budget levels, funding is requested at five percent below FY 2011.

11 A decrease of $2,950,000 to Animal Health and Disease ($2,950,000 available in 2011) as follows:

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.

12 A decrease of $835,000 to Supplemental and Alternative Crops ($835,000 available in 2011) as follows:

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.

13 A decrease of $1,083,000 to Critical Agricultural Materials ($1,083,000 available in 2011) as follows:

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.

14 An increase of $466,000 to Native American Institutions Endowment Interest ($4,307,000 available in 2011) as follows:

An increase in the estimated interest earned on the Tribal Colleges Endowment Fund, based on revised investment data.

15 An increase of $10,000,000 to Hispanic-Serving Agricultural Colleges and Universities Endowment Fund ($0 available in 2011) as follows:

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. 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 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 2.5 percent of all extramural research and development funds within the Department are set-aside and used to fund the SBIR program.

Agency	FY 2010 Actual	FY 2011 Budget	FY 2012 Estimate
Agricultural Research Service	$ 1,828,000	$ 1,128,000	$ 1,321,097
Animal and Plant Health Inspection Service	67,465	30,878	31,209
National Institute of Food and Agriculture	19,244,791	18,132,299	16,955,599
Economic Research Service	12,500	145,000	,171,950
Forest Service	1,084,242	1,084,242	,1,030,000
National Agricultural Statistics Service	6,950	8,000	8,000
Rural Development	14,220	0	0
FAS/International Cooperative Development	6,950	2,487	2,487
Total	$22,265,118	$22,530,906	$19,520,342

The staff functions of USDA's SBIR program (solicitation, review and evaluation of proposals) have been centralized in NIFA in order to serve the SBIR community most effectively and efficiently. Nine 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 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 enhance the knowledge and technology base necessary for the continued growth of the domestic aquaculture industry as a form of production agriculture. Emphasis is placed on research leading to improved production efficiency and increased competitiveness of private sector aquaculture in the United States.

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.

Geographic Breakdown of Obligations and Staff Years

TABLE 1 - FISCAL YEAR 2010
DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRIC EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS

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	BIOTECH RISK ASSESS	TOTAL FEDERAL FUNDS
	HATCH ACT AS AMENDED											
ALABAMA	3,520,360	1,034,041	4,554,401	919,848	4,985,035	62,838	2,401,124	2,087,836	4,664,990	0	0	19,676,072
ALASKA	961,125	166,518	1,127,643	638,905	0	0	595,876	0	1,662,606	0	0	4,025,030
AMER SAMOA	798,407	25,279	823,686	59,459	0	0	307,388	0	0	0	0	1,190,533
ARIZONA	1,350,016	880,455	2,230,471	463,315		30,848	373,198	1,213,275	1,486,041	0	0	5,797,148
ARKANSAS	3,000,876	849,272	3,850,148	814,495	2,152,523	55,735	1,879,852	672,887	1,438,290	0	365,214	11,229,144
CALIFORNIA	4,155,772	1,842,557	5,998,329	796,934	0	245,924	7,526,704	11,270,000	2,929,637	1,795,248	840,000	31,402,776
COLORADO	1,879,280	1,178,191	3,057,471	393,079	0	170,596	2,310,564	3,575,297	680,000	0	0	10,187,007
CONNECTICUT	1,453,777	576,214	2,029,991	270,166	0	18,512	1,338,532	1,231,074	218,000	276,120	400,000	5,782,395
DELAWARE	1,029,911	431,034	1,460,945	112,137	1,192,685	9,930	139,600	317,950	1,436,438	0	0	4,669,685
DISTRICT OF COLUMBIA	673,985	124,443	798,428	0	0	0	0	1,674,044	0	0	20,000	2,492,472
FLORIDA	2,664,855	770,333	3,435,188	761,818	1,976,232	45,396	6,588,814	5,932,705	3,732,393	2,615,184	0	25,087,730
GEORGIA	3,995,563	1,487,479	5,483,042	972,526	2,863,095	79,523	5,093,981	4,644,223	1,068,696	0	800,000	21,005,086
GUAM	834,412	142,580	976,992	59,459	0	0	460,268	0	857,162	0	0	2,353,881
HAWAII	1,012,715	446,471	1,459,186	217,490	0	1,733	3,496,293	150,000	1,687,737	2,492,640	0	9,505,079
IDAHO	1,729,220	694,166	2,423,386	586,227	0	40,715	2,140,184	1,656,397	461,485	0	0	7,308,394
ILLINOIS	4,984,283	1,231,777	6,216,060	428,197	0	60,892	1,847,174	8,650,339	538,000	0	0	17,740,662
INDIANA	4,681,804	996,001	5,677,805	480,874	0	43,195	913,557	4,341,896	919,045	702,000	0	13,078,372
IOWA	4,909,264	1,962,455	6,871,719	375,520	0	96,684	2,682,125	4,031,239	1,066,234	1,042,704	0	16,166,225
KANSAS	2,984,377	915,696	3,900,073	287,726	0	86,782	3,410,619	775,342	342,479	3,534,000	0	12,337,021
KENTUCKY	4,698,864	1,035,400	5,734,264	603,786	3,414,101	45,308	2,158,219	439,578	1,186,238	280,800	0	13,862,294
LOUISIANA	2,737,048	801,634	3,538,682	832,053	1,914,171	29,407	1,225,429	3,586,740	2,881,820	0	0	14,008,302
MAINE	1,510,290	600,563	2,110,853	744,258	0	5,362	972,188	0	0	0	0	3,832,661
MARYLAND	2,009,539	755,660	2,765,199	322,843	1,442,218	20,015	4,688,034	5,006,298	3,553,815	514,800	0	18,313,222
MASSACHUSETTS	1,708,252	737,627	2,445,879	340,403	0	38,887	697,508	3,591,417	47,914	0	0	7,162,008
MICHIGAN	4,701,208	1,137,735	5,838,943	814,494	0	62,260	5,597,243	4,514,106	857,088	1,483,560	0	19,167,694
MICRONESIA	857,852	0	857,852	0	0	0	0	0	0	0	0	857,852
MINNESOTA	4,625,104	1,045,142	5,670,246	674,022	0	174,594	4,921,719	3,330,182	756,631	0	0	15,527,394
MISSISSIPPI	3,482,210	979,929	4,462,139	902,290	2,383,477	50,061	3,235,669	227,765	929,901	2,216,088	0	14,407,390
MISSOURI	4,520,748	933,677	5,454,425	603,786	3,359,503	90,144	3,830,213	931,060	1,702,913	394,992	0	16,367,036
MONTANA	1,652,882	777,421	2,430,303	551,110	0	32,823	2,281,154	529,317	1,962,256	0	0	7,786,963
NEBRASKA	2,769,570	1,059,524	3,829,094	270,166	0	93,449	558,401	1,121,284	597,663	0	700,000	7,170,057
NEVADA	956,771	425,659	1,382,430	147,255	0	4,468	781,761	2,663,154	100,473	0	0	5,079,541
NEW HAMPSHIRE	1,221,750	431,934	1,653,684	428,197	0	2,927	0	1,198,685	47,914	0	0	3,331,407
NEW JERSEY	1,693,746	1,354,071	3,047,817	252,608	0	8,131	3,894,721	619,949	0	0	400,000	8,223,226
NEW MEXICO	1,383,555	468,327	1,851,882	340,403	0	22,112	1,338,302	363,327	1,901,396	175,968	400,000	6,393,390
NEW YORK	4,389,202	1,819,414	6,208,616	779,376	0	107,577	5,010,449	8,596,613	223,715	0	400,000	21,326,346
NORTH CAROLINA	5,836,754	1,714,595	7,551,349	937,406	3,950,947	108,563	1,341,150	4,548,345	3,761,666	205,920	0	22,405,346
NORTH DAKOTA	1,979,911	703,553	2,683,464	164,813	0	19,073	1,683,740	1,702,839	1,286,115	0	0	7,540,044
NORTHERN MARIANAS	788,157	0	788,157	0	0	0	0	0	0	0	0	788,157
OHIO	5,626,736	1,132,636	6,759,372	498,433	0	46,572	1,046,072	3,642,590	1,030,898	4,513,392	400,000	17,937,329
OKLAHOMA	2,899,714	696,840	3,596,554	515,992	2,187,553	67,354	2,091,749	2,755,224	2,249,509	256,464	0	13,720,399
OREGON	2,219,225	1,101,089	3,320,314	919,846	0	35,758	2,637,777	3,395,262	33,539	0	400,000	10,742,496
PENNSYLVANIA	5,399,989	1,461,035	6,861,024	638,904	0	113,341	3,537,958	5,828,091	0	1,067,040	0	18,046,358
PUERTO RICO	3,288,182	862,880	4,151,062	94,578	0	7,144	553,637	150,000	290,000	0	0	5,246,421
RHODE ISLAND	935,458	447,263	1,382,721	112,136	0	1,688	260,587	885,264	0	0	0	2,642,396
SOUTH CAROLINA	3,034,085	800,278	3,834,363	726,699	2,137,063	15,065	1,106,682	243,538	649,921	1,374,984	400,000	10,488,315
SOUTH DAKOTA	2,100,949	709,546	2,810,495	182,372	0	34,325	1,843,167	2,609,868	998,638	0	0	8,478,865
TENNESSEE	4,421,201	992,178	5,413,379	656,463	3,117,643	32,744	2,695,075	1,034,552	2,910,321	0	598,961	16,459,138
TEXAS	6,148,176	1,411,368	7,559,544	814,494	4,606,053	193,590	5,937,995	7,394,098	4,830,738	4,776,408	0	36,112,920
UTAH	1,202,859	867,398	2,070,257	287,726	0	17,995	4,018,531	1,790,866	0	0	0	8,185,375
VERMONT	1,273,341	378,733	1,652,074	393,079	0	6,201	4,103,780	1,565,486	136,001	0	0	7,856,621
VIRGIN ISLANDS	813,099	138,823	951,922	59,459	0	0	226,100	0	0	0	0	1,237,481
VIRGINIA	3,775,415	907,795	4,683,210	796,934	2,660,840	36,050	2,265,270	2,063,302	1,670,182	469,872	0	14,645,660
WASHINGTON	2,450,561	1,421,817	3,872,378	884,730	0	78,977	5,849,297	4,279,493	271,394	250,848	0	15,487,117
WEST VIRGINIA	2,330,555	629,415	2,959,970	551,110	1,407,119	5,388	970,235	496,757	1,163,923	936,000	0	8,490,502
WISCONSIN	4,645,405	1,144,804	5,790,209	674,022	0	61,384	1,252,491	3,559,122	596,198	1,310,400	0	13,243,826
WYOMING	1,140,798	620,272	1,761,070	235,049	0	17,200	298,372	209,946	0	0	0	2,521,637
OTHER	0	322,950	322,950	0	48,477	0	99,383	2,000,000	251,345	0	0	2,722,155
SBIR	3,966,927	1,252,714	5,219,641	703,250	1,176,125	70,800	3,164,952	0	0	0	0	10,334,768
REIMBURSABLE	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL ADMIN	4,722,936	1,491,453	6,214,389	870,000	1,455,000	118,000	5,478,920	10,744,146	1,762,072	12,918,209	0	39,560,736
SUBTOTAL	162,539,026	51,328,114	213,867,140	28,962,720	48,429,860	2,924,040	137,159,783	149,842,768	65,831,430	45,603,641	6,124,175	698,745,557
UNOBLIG BAL	35,000	0	35,000	0	0	0	481,330	265,764,648	12,276,597	185,018	0	278,742,593
SUBTOTAL	162,574,026	51,328,114	213,902,140	28,962,720	48,429,860	2,924,040	137,641,113	415,607,416	78,108,027	45,788,659	6,124,175	977,488,150
TRIBAL ENDOW		0	0	0	0	0	0	0	11,880,000	0	0	11,880,000
BIOTECH RISK ASSESSMENT	860,974	271,886	1,132,860	37,280	70,140	25,960	560,980	124,197	36,840	0	0	2,265,720
TOTAL	163,435,000	51,600,000	215,035,000	29,000,000	48,500,000	2,950,000	138,202,093	415,731,613	90,024,867	45,788,659	6,124,175	991,633,870

TABLE 2 - FISCAL YEAR 2011

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	BIOTECH RISK ASSESS	TOTAL FEDERAL FUNDS
FEDERAL ADMIN	6,214,389	870,000	1,455,000	118,000	5,318,920	10,499,280	2,383,632	12,792,778	0	39,651,999
SUBTOTAL, OBLIGATIONS	6,214,389	870,000	1,455,000	118,000	5,318,920	10,499,280	2,383,632	12,792,778	0	39,651,999
UNOBLIGATED BALANCE	208,785,611	28,130,000	47,045,000	2,832,000	127,673,297	517,747,368	77,505,759	32,514,240	6,124,175	1,048,357,450
TOTAL	215,000,000	29,000,000	48,500,000	2,950,000	132,992,217	528,246,648	79,889,391	45,307,018	6,124,175	1,088,009,449

TABLE 3 - FISCAL YEAR 2012

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	BIOTECH RISK ASSESS	TOTAL FEDERAL FUNDS
FEDERAL ADMIN	6,214,389	826,500	1,455,000	0	720,880	12,986,200	2,072,400	14,253,000	0	38,528,369
										0
SUBTOTAL,										0
OBLIGATIONS	6,214,389	826,500	1,455,000	0	720,880	12,986,200	2,072,400	14,253,000	0	38,528,369
										0
UNOBLIGATED										0
BALANCE	198,035,611	26,723,500	47,045,000	0	17,301,120	311,668,800	72,866,600	0	0	684,390,631
TOTAL	204,250,000	27,550,000	48,500,000	0	18,022,000	324,655,000	74,939,000	14,253,000	0	722,919,000

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Classification by Objects

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

CLASSIFICATION BY OBJECTS
RESEARCH AND EDUCATION ACTIVITIES
2010 Actual and Estimated 2011 and 2012
(dollars in thousands)

Personnel Compensation:	2010	2011	2012
11 - Total personal compensation	$17,452	$17,452	$17,452
12 - Civilian Personnel Benefits	4,523	4,523	4,523
13 - Benefits for former personnel	5	5	5
Total pers. comp. & benefits	21,980	21,980	21,980
Other Objects:			
21 - Travel & Transportation of Persons	1,012	1,025	1,040
22 - Transportation of Things	5	5	5
23.1 - Rent to GSA	7	7	7
23.2 - Rent Paid to Others	39	39	40
23.3 - Comm., Util., Misc. Charges	308	312	316
24 - Printing and Reproduction	142	144	146
25.1 - Advisory and Assistance Services	139	141	143
25.2 - Other Services	2,510	2,543	2,579
25.3 - Purchases of Goods and Services	40	40	41
25.4 - Oper & Maintenance of Facilities	493	500	507
25.5 - Research & Development Contracts	2,537	2,570	2,606
25.6 - Medical Care	17	17	17
25.7 - Operation & Maint. of Equipment	52	53	53
25.8 - Subsistence & Support of Persons	38	39	39
26 - Supplies and Materials	133	135	137
31 - Equipment	167	169	172
41 - Grants, Subsidies & Contributions	730,191	994,553	683,052
Total other objects	737,831	1,002,292	690,900
Total direct obligations	759,811	1,024,272	712,880
Position Data:			
Average Salary, ES positions	172,090	172,090	172,090
Average Salary, GS positions	93,467	93,467	93,467
Average Grade, GS positions	10.3	10.3	10.3

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

CLASSIFICATION BY OBJECTS
BIOMASS RESEARCH AND DEVELOPMENT INITIATIVE
2010 Actual and Estimated 2011 and 2012
(dollars in thousands)

Personnel Compensation:	2010	2011	2012
11 - Total personal compensation	$376	$376	$376
12 - Civilian Personnel Benefits	108	108	108
13 - Benefits for former personnel	0	0	0
Total pers. comp. & benefits	484	484	484
Other Objects:			
21 - Travel & Transportation of Persons	40	41	41
22 - Transportation of Things	0	0	0
23.1 - Rent to GSA	0	0	0
23.2 - Rent Paid to Others	1	1	2
23.3 - Comm., Util., Misc. Charges	12	13	13
24 - Printing and Reproduction	5	5	6
25.1 - Advisory and Assistance Services	7	7	7
25.2 - Other Services	610	617	626
25.3 - Purchases of Goods and Services	2	2	2
25.4 - Oper & Maintenance of Facilities	7	7	8
25.5 - Research & Development Contracts	129	130	132
25.6 - Medical Care	1	1	1
25.7 - Operation & Maint. of Equipment	2	2	2
25.8 - Subsistence & Support of Persons	1	1	1
26 - Supplies and Materials	9	9	9
31 - Equipment	6	6	7
41 - Grants, Subsidies & Contributions	26,684	28,672	38,660
Total other objects	27,516	29,516	39,516
Total direct obligations	28,000	30,000	40,000
Position Data:			
Average Salary, ES positions	172,090	172,090	172,090
Average Salary, GS positions	93,467	93,467	93,467
Average Grade, GS positions	10.3	10.3	10.3

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Status of Program

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 Executive Branch budgets is for projects that have regional

and/or national impact, such as those projects addressing global change, pest control issues, aquaculture centers, and sustainable agriculture.

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, natural resource sciences, food and nutrition sciences, rural development, biofuels and biobased products, animal manure management, small and mid-sized farms, and marketing and trade. 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. New Era Rural Technology Program. The New Era Rural Technology Program competitively awards grants for technology development, applied research, and training to aid in the development of an agriculture-based renewable energy workforce. Projects focus on areas of bioenergy, pulp and paper manufacturing, and agriculture-based renewable energy resources.

10. Food Aid Nutrition Enhancement Program (FANEP). FANEP, in accordance with Section 724 of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2010, competitively awards grants to develop and/or field test new and improved food aid products that are delivered through the McGovern-Dole and Food for Peace Title II programs.

11. Higher Education Programs. The USDA Food and Agricultural Sciences National Needs Graduate Fellowship Grants Program awards grants to colleges and universities to stimulate the development of food and agricultural scientific expertise in targeted areas of national need. This program targets specifically to the recruitment and training of doctoral students for critical food and agricultural scientific positions. The competitive Institution Challenge Grants Program is designed 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 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 Higher Education Multicultural Scholars Program provides 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. 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 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 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 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. Scientists in North Dakota developed three barley cultivars which have been recommended for malting and brewing by the American Malting Barley Association. The two-rowed malting barley cultivar Conlon was grown on 18 percent of the North Dakota barley acreage or 265,000 acres. Since Conlon is malting barley, it commands on average a $1.25 premium over feed barley. In 2009, this resulted in Conlon generating an additional $23 million in revenue for growers of this cultivar.

2. McIntire-Stennis Cooperative Forestry Research. An invasive insect, the woodwasp Sirex noctilio, has recently become established in North American where it poses a significant threat to pine forests. Researchers at the University of Georgia used advanced genomic and proteomic approaches to identify the bioactive protein and peptide constituents of the wasp mucus that facilitate fungal colonization of the pine tissues. Better understanding of the woodwasps and their mechanisms of action will assist in the development of genetic approaches and strategies to improve pine resistance to this pest.

3. Evans-Allen Program. A study in Virginia found that the fatty acid composition of the grape, apple, and tomato pomace was similar to previous studies of respective oil and flour extracts. Grape pomace extract had the highest antioxidant activities in all tests followed by the apple pomace and tomato pomace. The results from this study suggest possible food applications for grape pomace in health promotion and disease prevention through improving human nutrition.

4. Animal Health and Disease Program. South Dakota scientists are exploring potential therapeutic alternatives to vaccination through screening extracts from native plants used in traditional medicine for compounds that might be useful in treating diarrheal disease. Extracts of plants are being tested for their antibiotic and antitoxin activity, and for the ability to inhibit bacterial attachment, an essential step in colonization, and their ability to prevent the secretory activity that is responsible for diarrhea. Those extracts found to possess biological activity also are tested for cytotoxicity, a necessary criterion for their eventual safe use.

5. Agriculture and Food Research Initiative (AFRI). The AFRI Wheat Coordinated Agricultural Project (WheatCAP) being led by the University of California, Davis implemented genetic Marker Assisted Selection (MAS) strategies for quality and disease resistance traits across the U.S. public breeding programs. The project generated approximately 1,000,000 MAS data points that were used to develop 90 new germplasm lines and cultivars and thousands of improved lines for breeding. The WheatCAP provided a stimulating learning environment that supported training of 117 undergraduates and 73 graduate students, many of whom are being hired as breeders in companies and public institutions.

Connecticut scientists are investigating the ability of plant molecules such as trans-cinnamaldehyde, carvacrol, thymol, and eugenol to reduce colonization of major foodborne pathogens in broiler chickens. The work will potentially lead to decreased outbreaks of salmonellosis and campylobacteriosis, thereby improving public health and economic opportunities for poultry farmers.

6. Hispanic Serving Institutions Education Grants Program. The goal of the Teaching and Research in Environmental Ecology Program at the University of Texas at San Antonio is to recruit, retain and financially support underrepresented undergraduates and graduate students. Workshops, training programs and mentorship from local community organizations were used to foster and develop the student's interest in careers in conservation and natural resources. Twenty-eight role-model seminars were presented by the Texas Parks and Wildlife staff, faculty from the University of Texas at San Antonio, and faculty from other universities in the U.S. The program has increased the number of minority and disadvantaged students participating in conservation and natural resource research from one to twelve.

7. 1890 Institutions Capacity Building Grants Program. An educational effort at Tennessee State University (TSU) collaborates with India's Govind Ballabh Pant University of Agriculture and Technology (GBPUA&T) to internationalize TSU's agriculture program, enhance the competitiveness of Tennessee's agricultural entrepreneurs, and foster ongoing research collaborations with GBPUA&T faculty. New course contents were developed for two courses in agribusiness after the interactive meetings with faculty and students of the GBPUA&T and other Indian agricultural universities on issues related to curriculum in agribusiness. International content is being integrated in several courses at TSU's undergraduate and graduate agriculture program. Scientific information is being made available on faculty and student experience with international exchange program, including best management practices and lessons learned. Students now have a better appreciation and understanding of global problems.

8. Tribal Colleges Education Equity Grants Program. The Omaha Nation and Santee Sioux are dealing with significant health problems, that include diabetes, obesity, heart disease, and malnutrition. Nebraska Indian Community College is enhancing the short-term and long-term educational opportunities for the Omaha Nation and Santee Sioux Nation by strengthening specific instructional programs in the food, natural resources, native foods and agricultural sciences area. Twenty-six students were enrolled in courses with a specific focus in agri-science and agri-business. The impacted students are in a wide-variety of degrees (education, science, business, general liberal arts), allowing for information to be disseminated to a large constituency in these communities.

Extension 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).

Extension Activities

For payments to States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, Micronesia, the Northern Marianas, and American Samoa, $466,788,000, 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, $282,625,000; payments for extension work at the 1994 Institutions under the Smith-Lever Act (7 U.S.C. 343(b)(3)), $5,321,000; payments for the nutrition and family education program for low-income areas under section 3(d) of the Act, $68,070,000; payments for the pest management program under section 3(d) of the Act, $9,938,000; payments for New Technologies for Ag Extension under section 3(d) of the Act, $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, $19,770,000, to remain available until expended; payments for youth-at-risk programs under section 3(d) of the Smith-Lever Act, $8,412,000; for youth farm safety education and certification extension grants, to be awarded competitively under section 3(d) of the Act, $486,000; payments for carrying out the provisions of the Renewable Resources Extension Act of 1978 (16 U.S.C. 1671 et seq.), $4,068,000; payments for the federally-recognized Tribes Extension Program under section 3(d) of the Smith-Lever Act, $8,000,000; payments for sustainable agriculture programs under section 3(d) of the Act, $4,968,000; payments for rural health and safety education as authorized by section 502(i) of Public Law 92–419 (7 U.S.C. 2662(i)), $1,738,000; payments for cooperative extension work by eligible institutions (7 U.S.C. 3221), $42,677,000, provided that each institution receives no less than $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, $8,565,000.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Lead-Off Tabular and Summary of Increases and Decreases

Lead-Off Tabular Statement

EXTENSION ACTIVITIES

Annualized Continuing Resolution, 2011	$494,923,000
Budget Estimate, 2012	466,788,000
Change in Appropriation	-28,135,000

Summary of Increases and Decreases
(On basis of appropriation)

Item of Change	2011 Estimated	Pay Costs	Earmark Changes	Program Changes	2012 Estimated
Extension Activities:					
Smith-Lever Sections 3(b) and 3(c)	$297,500,000	0	0	-$14,875,000	$282,625,000
Smith-Lever 3 (d):					
Farm Safety	4,863,000	0	-$4,863,000	0	0
Federally Recognized Tribes Extension	3,045,000	0	0	4,955,000	8,000,000
Sustainable Agriculture	4,705,000	0	0	263,000	4,968,000
Extension Services at the 1994 Institutions	4,321,000	0	0	1,000,000	5,321,000
Grants to Youth Organizations	1,784,000	0	-1,784,000	0	0
Food Animal Residue Avoidance Database (FARAD)	1,000,000	0	-1,000,000	0	0
Federal Administration and Special Grants	20,396,000	0	-11,831,000	0	8,565,000
All Other	157,309,000	0	0	0	157,309,000
Total Available, Extension Activities	494,923,000	0	-19,478,000	-8,657,000	466,788,000

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Project Statements

EXTENSION ACTIVITIES

Project Statement by Program
(On basis of Appropriation)

	2010 Actual		2011 Estimated			2012 Estimated	
Projects	Amount	Staff Years	Amount	Staff Years	Increase or Decrease	Amount	Staff Years
Smith-Lever Sections 3(b) and 3(c)	$297,500,000		$297,500,000		-$14,875,000	$282,625,000	
1890 Colleges, Tuskegee Univ. & WV State Univ	42,677,000		42,677,000		0	42,677,000	
Smith-Lever, Section 3d Programs:							
Farm Safety	4,863,000		4,863,000		-4,863,000	0	
Expanded Food and Nutrition Education Program	68,070,000		68,070,000		0	68,070,000	
Federally Recognized Tribes Extension	3,045,000		3,045,000		4,955,000	8,000,000	
New Technologies for Ag Extension	1,750,000		1,750,000		0	1,750,000	
Pest Management	9,938,000		9,938,000		0	9,938,000	
Sustainable Agriculture	4,705,000		4,705,000		263,000	4,968,000	
Youth at Risk	8,412,000		8,412,000		0	8,412,000	
Youth Farm Safety Education and Certification	486,000		486,000		0	486,000	
Total Section 3d Programs	101,269,000		101,269,000		355,000	101,624,000	
Rural Health and Safety Education	1,738,000		1,738,000		0	1,738,000	
1890 Facilities Grants (Sec. 1447)	19,770,000		19,770,000		0	19,770,000	
Grants to Youth Organizations	1,784,000		1,784,000		-1,784,000	0	
Renewable Resources Extension Act (RREA)	4,068,000		4,068,000		0	4,068,000	
Extension Services at the 1994 Institutions	4,321,000		4,321,000		1,000,000	5,321,000	
Food Animal Residue	1,000,000		1,000,000		-1,000,000	0	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Avoidance Database (FARAD).....							
Women and Minorities in STEM Fields.....	400,000		400,000		0	400,000	
Federal Administration (direct approp.)							
General Administration	8,012,000		8,012,000		0	8,012,000	
Ag in the Classroom	553,000		553,000		0	553,000	
Other (Earmarked Projects).....	11,831,000		11,831,000		-11,831,000	0	
Total Federal Administration	20,396,000		20,396,000		-11,831,000	8,565,000	
Total Available or Estimate	494,923,000	158	494,923,000	159	-28,135,000	466,788,000	142

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

EXTENSION ACTIVITIES

Project Statement by Program
(On basis of Available Funds)

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Smith-Lever Sections 3(b) and 3(c)	$297,465,000		$297,500,000		-$14,875,000	$282,625,000	
1890 Colleges, Tuskegee Univ. & WV State Univ	42,677,000		42,677,000		0	42,677,000	
Smith-Lever, Section 3d Programs:							
Farm Safety	4,863,000		4,863,000		-4,863,000	0	
Expanded Food and Nutrition Education Program	68,070,000		68,070,000		0	68,070,000	
Federally Recognized Tribes Extension	3,045,000		3,045,000		4,955,000	8,000,000	
New Technologies for Ag Extension	1,750,000		1,750,000		0	1,750,000	
Pest Management	9,938,000		9,938,000		0	9,938,000	
Sustainable Agriculture	4,705,000		4,705,000		263,000	4,968,000	
Youth at Risk	8,412,000		8,412,000		0	8,412,000	
Youth Farm Safety Education and Certification	486,000		486,000		0	486,000	
Total Section 3d Programs	101,269,000		101,269,000		355,000	101,624,000	
Rural Health and Safety Education	1,738,000		1,738,000		0	1,738,000	
1890 Facilities Grants (Sec. 1447)	19,770,000		19,770,000		0	19,770,000	
Grants to Youth Organizations	1,784,000		1,784,000		-1,784,000	0	
Renewable Resources Extension Act (RREA)	4,068,000		4,068,000		0	4,068,000	
Extension Services at the 1994 Institutions	4,321,000		4,321,000		1,000,000	5,321,000	
Food Animal Residue Avoidance Database (FARAD)	1,000,000		1,000,000		-1,000,000	0	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Women and Minorities in STEM Fields	400,000		400,000		0	400,000	
Federal Administration (direct approp.)							
General Administration	8,012,000		8,012,000		0	8,012,000	
Ag in the Classroom	553,000		553,000		0	553,000	
Other (Earmarked Projects)	11,831,000		11,831,000		-11,831,000	0	
Total Federal Administration	20,396,000		20,396,000		-11,831,000	8,565,000	
Subtotal Available or Estimate	494,888,000	158	494,923,000	159	-28,135,000	466,788,000	142
Unobligated Balance: Available, End of Year	35,000		-0		0	0	
Total Appropriation	494,923,000		494,923,000		-28,135,000	466,788,000	
Mandatory Activities:							
Beginning Farmers and Ranchers Program	19,000,000		19,000,000		0	19,000,000	
Biodiesel Fuel Education Program	1,000,000		1,000,000		0	1,000,000	
Healthy Urban Food Enterprise Development Center	1,000,000		1,000,000		-1,000,000	0	
Risk Management Education	9,808,000		5,000,000		0	5,000,000	

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Justification of Increases and Decreases

1 A decrease of $14,875,000 to Smith-Lever Formula 3(b) and 3(c) ($297,500,000 available in 2011) as follows:

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 at the reduced level will continue to support 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. In light of constrained budget levels, funding is requested at five percent below FY 2011.

2 An increase of $355,000 to Smith-Lever Section 3(d) as follows:

2.a A decrease of $4,863,000 to Farm Safety ($4,863,000 available in 2011) as follows:

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.

2.b An increase of $4,955,000 to Federally-Recognized Tribes Extension ($3,045,000 available in 2011) as follows:

FRTEP supports Extension agents who establish Extension education programs in agriculture, community development, families and societal issues facing Native Americans on the Indian Reservations and Tribal jurisdictions of Federally-Recognized Tribes. While every county in the U.S. has access to the Cooperative Extension Services, not all Tribal Reservations enjoy the same access. An increase of $4,955,000 will bring the total funding for this program to $8,000,000. This increase will allow an increase in the number of extension agents on Indian Reservations. Additional Extension agents will reach more Native Americans and will be able to address the unique needs and problems of American Indian Tribal Nations through Extension education programs. Examples of education programs include increasing efficiency of agricultural production; market principles; principles and techniques of risk management; pest management, bioenergy, food safety, conservation of natural resources, and youth leadership skills and educational opportunities. As discussed in the OMB and OSTP memorandum, FRTEP activities will assist in increasing Federal efforts to strengthen science, technology, engineering and mathematics education and advance learning technologies at every level and for all segments of society.

2.c An increase of $263,000 to Sustainable Agriculture ($4,705,000 available in 2011) as follows:

The Sustainable Agriculture base funding provides education and training for Cooperative Extension, the Natural Resources Conservation Service and other agricultural professionals so that they have state-of-the-art knowledge and tools to share with producers and the public. Funds are used for statewide coordination of sustainable agriculture programs and competitive grants awarded by the four SARE regions. Increased funding will support training on crop and livestock management to improve soil quality and carbon sequestration, save energy, and mitigate climate change; and marketing innovations that enhance profitability, such as local and regional food systems. Evaluations confirm that agricultural professionals put this knowledge to use in their educational programs and interactions with farmers, ranchers and the public.

3 An increase of $1,000,000 to Extension Services at the 1994 Institutions ($4,321,000 available in 2011) as follows:

Base funding for this program provides funding to increase Extension program capacity at 1994 Land-Grant Institutions; and to address special needs, take advantage of important opportunities, and/or demonstrate long-term sustained benefits of Extension projects at 1994 Land-Grant Institutions. Obesity and associated chronic diseases, such as diabetes, are considerably higher among Native American populations and in Native American communities. 1994 Institutions recognize the severity of this situation and are seeking to bring about change through research, education, and outreach. Often a holistic and culturally sensitive approach is used such as the use of native plants and traditional food sources. Increased funds would be used to pilot an Expanded Food and Nutrition Education Program (EFNEP) type model in a number of Native American communities through a competitive grant process. EFNEP is one of the most impactful programs of USDA. 1994 institutions, which have demonstrated some success in providing nutrition education, would partner with 1862 institutions with a strong EFNEP program or other innovative infrastructures to increase their capacity to provide culturally relevant nutrition education that supports behavioral change.

4 A decrease of $1,784,000 to Grants for Youth Serving Institutions ($1,784,000 available in 2011) as follows:

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.

5 A decrease of $1,000,000 to Food Animal Residue Avoidance Database (FARAD) ($1,000,000 available in 2011) as follows:

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 decrease of $11,831,000 to eliminate Federal Administration earmarked projects:

A decrease is proposed to eliminate earmarked projects. The Administration strongly believes that peer-reviewed competitive programs that meet national needs are a more effective use of taxpayer dollars than earmarks that are provided to specific recipients. The FY 2012 budget proposes to eliminate these targeted earmarks. Within necessary budget constraints, it is critical that taxpayer dollars be used for the highest quality projects, those that are awarded based on competitive peer- reviewed process to meet national priorities, rather than through earmarks. Therefore, some broad aspects of many topics currently addressed by earmarked projects can be included in the scope of other broader based, competitively-awarded Federal programs supported with non-Federal funds administered by State-level scientific program managers.

Geographic Breakdown of Obligations and Staff Years

STATE	SMITH-LEVER FORMULA	PEST MGMT	FARM SAFETY	1890's UNIV & TUSK UNIV	FEDERALLY-RECOGNIZED TRIBES	EFNEP	YOUTH FARM SAFETY EDUCATION AND CERTIFICATION	YOUTH AT RISK	NEW TECHNOLOGIES AT AG EXT	1890 FACILITIES	RENEWABLE RESOURCES	GRANTS TO YOUTH SERVING INSTITUTIONS	SUSTAINABLE AGRICULTURE	RURAL HEALTH & SAFETY	FEDERAL ADM-SPECIAL PROJECTS	INDIAN TRIBAL 1994 COLLEGES	Food Animal Residue Avoidance Database	Women and Minorites	Mandatory Programs a/	TOTAL FEDERAL FUNDS
ALABAMA	7,306,664	307,120	0	4,231,022	0	2,221,611	0	240,000	0	2,098,206	110,580	0	0	0	0	0	0	0	675,750	17,190,953
ALASKA	1,184,579	63,116	0	0	103,283	264,537	0	140,000	0	0	83,295	0	0	0	0	0	0	0	411,256	2,250,066
AMERICAN SAMOA	928,148	0	0	0	0	104,754	0	0	0	0	0	0	0	0	0	0	0	0	0	1,032,902
ARIZONA	2,160,365	175,000	0	0	704,566	707,995	0	584,553	0	0	72,573	0	0	0	0	85,000	0	0	747,200	5,237,252
ARKANSAS	6,109,705	218,815	179,928	1,854,332	0	1,419,989	0	0	0	972,294	98,327	0	0	0	0	85,000	0	0	3,439,366	14,377,756
CALIFORNIA	7,671,905	316,363	180,000		0	3,727,040	0	130,000	0	0	100,145	0	0	0	0	0	384,000	0	49,605	12,559,058
COLORADO	3,286,400	173,366	180,000	0	0	655,326	0	0	0	0	61,850	0	0	0	0	0	0	0	282,535	4,639,477
CONNECTICUT	2,142,874	87,802	0	0	0	542,008	0	240,000	0	0	46,532	0	0	0	0	0	0	0	0	3,059,216
DELAWARE	1,309,216	111,070	180,000	1,162,876	0	411,889	0	0	0	744,682	60,032	0	0	0	0	0	0	0	1,790,674	5,770,439
DISTRICT OF COLUMBIA	1,164,278	0	0	0	0	115,417	0	0	0	0	13,500	0	0	0	0	0	0	0	0	1,293,195
FLORIDA	4,895,110	244,105	0	1,814,294	84,550	2,385,633	0	441,026	0	982,622	99,859	0	0	0	0	0	192,000	0	900,370	12,039,569
GEORGIA	8,140,304	343,050	180,000	0	0	2,343,159	0	140,000	0	1,105,861	156,763	0	1,022,270	0	0	0	0	284,235	577,166	14,292,808
GUAM	992,314	25,353	0	2,528,521	0	105,009	0	140,000	0	0	13,500	0	0	0	0	0	0	0	0	3,804,697
HAWAII	1,350,934	73,818	0	0	0	351,140	0	140,000	0	0	46,532	0	0	0	71,808	0	0	0	0	2,034,232
IDAHO	2,917,548	166,690	0	0	274,111	386,198	0	240,000	0	0	54,191	0	0	0	0	0	0	0	559,526	4,598,264
ILLINOIS	9,894,305	315,514	0	0	0	2,199,325	0	139,997	0	0	55,723	0	0	0	168,000	0	0	0	0	12,772,864
INDIANA	9,011,459	310,728	730,704	0	0	1,272,660	0	140,000	0	0	52,659	560,000	0	0	0	0	0	0	0	12,078,210
IOWA	9,821,212	309,152	0	0	0	960,444	0	177,500	0	0	46,532	0	0	141,317	643,200	0	0	0	560,998	12,660,355
KANSAS	5,866,435	93,603	180,000	0	0	764,160	0	613,970	0	0	46,532	0	0	142,830	0	85,000	0	0	379,125	8,171,655
KENTUCKY	9,738,394	93,645	180,000	3,162,051	0	1,819,312	0	395,500	0	1,220,410	83,009	0	0	0	566,400	0	0	0	0	17,258,721
LOUISIANA	5,687,551	175,000	0	1,659,312	0	2,035,300	0	140,000	0	912,794	95,264	0	0	0	0	0	0	0	0	10,705,221
MAINE	2,375,640	218,678	172,256	0	0	501,804	0	140,000	0	0	66,445	0	0	0	1,104,000	0	0	0	0	4,578,823
MARYLAND	3,427,074	183,838	0	1,316,080	0	1,034,761	0	0	0	850,069	60,032	642,640	346,907	0	0	0	0	0	0	7,861,401
MASSACHUSETTS	2,649,727	159,865	0	0	0	1,050,594	0	140,000	0	0	46,532	0	0	349,958	359,041	0	0	0	1,489,145	6,244,862
MICHIGAN	9,187,338	206,009	180,000	0	93,900	1,859,211	156,764	140,000	0	0	80,232	0	0	0	148,800	284,467	0	0	138,524	12,475,245
MICRONESIA	1,038,571	0	0	0	0	108,930	0	0	0	0	0	0	0	0	0	0	0	0	0	1,147,501
MINNESOTA	9,469,318	292,609	176,903	0	114,000	1,056,051	0	325,551	0	0	60,318	0	1,022,270	0	0	270,000	0	93,985	1,470,860	14,351,865
MISSISSIPPI	7,056,358	87,500	0	1,979,496	81,389	1,850,575	0	0	0	977,673	145,596	0	0	0	416,160	0	0	0	317,466	12,912,213
MISSOURI	8,981,084	126,157	180,000	3,191,020	0	1,720,983	0	140,000	0	1,243,693	84,541	0	0	0	0	0	0	0	760,000	16,427,478
MONTANA	2,767,280	136,005	0	0	530,975	386,447	0	140,000	0	0	63,382	0	0	42,242	0	1,118,512	0	0	749,149	5,933,992
NEBRASKA	5,263,431	223,305	180,000	0	0	611,945	0	139,996	1,680,000	0	46,532	0	0	0	0	200,000	0	0	3,053,022	11,398,231
NEVADA	1,284,029	56,166	0	0	121,000	284,423	0	239,995	0	0	48,064	0	0	0	0	0	0	0	0	2,033,677
NEW HAMPSHIRE	1,765,576	97,472	0	0	0	325,683	0	0	0	0	46,532	0	0	0	0	0	0	0	547,307	2,782,570
NEW JERSEY	2,779,063	101,243	0	0	0	1,153,882	0	240,000	0	0	46,532	0	0	0	0	0	0	0	0	4,320,720
NEW MEXICO	2,269,043	217,270	0	0	0	604,667	0	140,000	0	0	67,977	0	0	0	285,887	370,000	0	0	0	3,954,844
NEW YORK	8,697,134	276,398	0	0	0	3,505,150	0	177,500	0	0	92,486	510,000	0	0	0	0	0	0	920,767	14,179,435
NORTH CAROLINA	12,176,590	294,293	0	3,583,281	107,000	2,676,570	0	137,311	0	1,235,946	109,050	0	0	0	0	0	384,000	0	559,966	21,264,007
NORTH DAKOTA	3,607,027	114,758	0	0	104,932	423,232	0	140,000	0	0	46,532	0	0	0	0	555,000	0	0	0	4,991,481
NORTHERN MARIANAS	911,968	0	0	0	0	104,552	0	140,000	0	0	0	0	0	0	0	0	0	0	0	1,156,520
OHIO	10,799,385	255,436	180,000	0	0	2,248,099	0	0	0	0	64,914	0	0	0	1,501,440	0	0	0	740,096	15,789,370
OKLAHOMA	5,809,900	216,658	180,000	1,955,026	101,186	1,238,994	0	0	0	1,032,996	70,755	0	18,908	0	100,320	0	0	0	0	10,724,743
OREGON	3,976,905	172,022	0	0	95,999	597,741	0	140,000	0	3	90,954	0	0	0	0	0	0	0	1,056,997	6,130,621
PENNSYLVANIA	10,291,681	444,860	0	0	0	2,721,194	134,556	138,036	0	0	87,891	0	0	0	345,408	0	0	0	0	14,163,626
PUERTO RICO	6,457,245	40,921	0	0	0	1,518,980	0	0	0	0	13,500	0	0	0	0	0	0	0	0	8,030,646
RHODE ISLAND	1,097,680	67,070	0	0	0	389,797	0	134,887	0	0	46,532	0	0	0	0	0	0	0	0	1,735,966
SOUTH CAROLINA	5,793,909	239,059	0	1,818,698	0	1,688,655	0	37,500	0	967,310	87,604	0	0	290,302	0	0	0	0	747,211	11,670,248
SOUTH DAKOTA	3,704,144	179,003	0	0	180,309	466,287	0	177,500	0	0	46,532	0	0	321,703	0	385,000	0	0	1,028,634	6,489,112
TENNESSEE	9,452,449	185,962	180,000	2,807,434	0	2,131,565	0	140,000	0	1,152,844	89,136	0	0	0	0	0	0	0	0	16,139,390
TEXAS	13,291,939	311,500	179,179	4,194,138	0	4,560,926	0	140,000	0	1,546,923	211,276	0	0	0	1,545,600	0	0	0	674,768	26,656,249
UTAH	1,917,142	79,241	180,000	0	0	406,890	0	0	0	0	49,595	0	1,084,175	0	0	0	0	0	748,109	4,465,152
VERMONT	1,878,512	189,506	180,000	0	0	320,765	81,268	0	0	0	46,532	0	1,022,270	0	115,200	0	0	0	0	3,834,053
VIRGIN ISLANDS	959,371	0	0	0	0	104,862	0	140,000	0	0	13,500	0	0	0	0	0	0	0	0	1,217,733
VIRGINIA	7,393,807	209,253	180,000	2,368,924	0	1,853,933	93,285	0	0	1,066,004	102,923	0	0	0	960,000	0	0	0	1,643,872	15,872,001
WASHINGTON	4,399,342	213,687	0	0	110,000	796,954	0	177,500	0	0	78,700	0	0	135,937	71,808	300,000	0	0	2,337,824	8,621,752
WEST VIRGINIA	4,213,649	38,209	180,000	1,343,415	0	1,143,166	0	280,000	0	868,873	72,286	0	0	0	71,808	0	0	0	0	8,211,406
WISCONSIN	8,972,834	188,511	180,000	0	0	1,028,723	0	140,000	0	0	173,342	0	0	239,614	2,882,880	385,000	0	0	243,515	14,434,419
WYOMING	1,646,656	69,420	168,137	0	116,000	277,983	0	0	0	0	51,127	0	0	0	0	0	0	0	0	2,329,323
OTHER*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEER PANEL/CSAA	0	45,286	1,373	0	0	0	687	7,198	0	0	0	0	0	4,577	0	25,181	0	5,780	99,197	189,279
REIMBURSABLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	289,342,500	9,540,480	4,668,480	40,969,920	2,923,200	67,547,880	466,560	8,075,520	1,680,000	18,979,200	3,905,280	1,712,640	4,516,800	1,668,480	11,357,760	4,148,160	960,000	384,000	29,700,000	502,546,860
FEDERAL ADMINISTRATION	8,122,500	397,520	194,520	1,707,080	121,800	522,120	19,440	336,480	70,000	790,800	162,720	71,360	188,200	69,520	9,038,240	172,840	40,000	16,000	1,100,000	23,141,140
SUBTOTAL OBLIGATIONS	297,465,000	9,938,000	4,863,000	42,677,000	3,045,000	68,070,000	486,000	8,412,000	1,750,000	19,770,000	4,068,000	1,784,000	4,705,000	1,738,000	20,396,000	4,321,000	1,000,000	400,000	30,800,000	525,688,000
UNOBLIGATED BALANCE	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,000
TOTAL	297,500,000	9,938,000	4,863,000	42,677,000	3,045,000	68,070,000	486,000	8,412,000	1,750,000	19,770,000	4,068,000	1,784,000	4,705,000	1,738,000	20,396,000	4,321,000	1,000,000	400,000	30,800,000	525,723,000

Table 2A 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	EFNEP	YOUTH FARM SAFETY EDUCATION AND CERTIFICATION	YOUTH AT RISK	NEW TECHNOLOGIES AT AG EXT	1890 FACILITIES
FEDERAL ADMINISTRATION	8,157,500	397,520	194,520	1,707,080	121,800	522,120	19,440	336,480	70,000	790,800
SUBTOTAL OBLIGATIONS	8,157,500	397,520	194,520	1,707,080	121,800	522,120	19,440	336,480	70,000	790,800
UNOBLIGATED BALANCE	289,342,500	9,540,480	4,668,480	40,969,920	2,923,200	67,547,880	466,560	8,075,520	1,680,000	18,979,200
TOTAL	297,500,000	9,938,000	4,863,000	42,677,000	3,045,000	68,070,000	486,000	8,412,000	1,750,000	19,770,000

	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	162,720	71,360	188,200	69,520	9,038,240	172,840	40,000	16,000	1,040,000	23,116,140
SUBTOTAL OBLIGATIONS	162,720	71,360	188,200	69,520	9,038,240	172,840	40,000	16,000	1,040,000	23,116,140
UNOBLIGATED BALANCE	3,905,280	1,712,640	4,516,800	1,668,480	11,357,760	4,148,160	960,000	384,000	24,960,000	497,806,860
TOTAL	4,068,000	1,784,000	4,705,000	1,738,000	20,396,000	4,321,000	1,000,000	400,000	26,000,000	520,923,000

a/ Mandatory Programs includes: Healthy Urban Enterprise Development, Beginning Farmer and Ranchers Development, Risk Management, and Biodiesel Education

Table 3A for FY 2012
Distribution of Federal Payments for Extension Activities

STATE	SMITH-LEVER FORMULA	1890's UNIV & TUSK UNIV	PEST MGMT	FEDERALLY-RECOGNIZED TRIBES	EFNEP	YOUTH FARM SAFETY EDUCATION AND CERTIFICATION	YOUTH AT RISK	NEW TECHNOLOGIES AT AG EXT	1890 FACILITIES	RENEWABLE RESOURCES
FEDERAL ADMINISTRATION	11,305,000	1,707,080	397,520	320,000	2,722,800	19,440	336,480	70,000	790,800	162,720
SUBTOTAL OBLIGATIONS	11,305,000	1,707,080	397,520	320,000	2,722,800	19,440	336,480	70,000	790,800	162,720
UNOBLIGATED BALANCE	271,320,000	40,969,920	9,540,480	7,680,000	65,347,200	466,560	8,075,520	1,680,000	18,979,200	3,905,280
TOTAL	282,625,000	42,677,000	9,938,000	8,000,000	68,070,000	486,000	8,412,000	1,750,000	19,770,000	4,068,000

	SUSTAINABLE AGRICULTURE	RURAL HEALTH & SAFETY	FEDERAL ADM-SPECIAL PROJECTS	INDIAN TRIBAL 1994 COLLEGES	Women and Minorities in STEM Fields	Mandatory Programs a/	TOTAL FEDERAL FUNDS
FEDERAL ADMINISTRATION	198,720	69,520	8,565,000	212,840	16,000	1,000,000	27,893,920
SUBTOTAL OBLIGATIONS	198,720	69,520	8,565,000	212,840	16,000	1,000,000	27,893,920
UNOBLIGATED BALANCE	4,769,280	1,668,480	0	5,108,160	384,000	24,000,000	463,894,080
TOTAL	4,968,000	1,738,000	8,565,000	5,321,000	400,000	25,000,000	491,788,000

a/ Mandatory Programs includes: Healthy Urban Enterprise Development, Beginning Farmer and Ranchers Development, Risk Management, and Biodiesel Education

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Classification by Objects

EXTENSION ACTIVITIES
2010 Actual and Estimated 2011 and 2012
(dollars in thousands)

Personnel Compensation:	2010	2011	2012
11 - Total personal compensation	$10,952	$10,952	$10,952
12 - Civilian Personnel Benefits	2,545	2,545	2,545
13 - Benefits for former personnel	5	5	5
Total pers. comp. & benefits	13,502	13,502	13,502
Other Objects:			
21 - Travel & Transportation of Persons	995	1,008	1,022
22 - Transportation of Things	6	6	6
23.1 - Rent to GSA	8	8	8
23.2 - Rent Paid to Others	44	44	45
23.3 - Comm., Util., Misc. Charges	347	351	356
24 - Printing and Reproduction	159	162	164
25.1 - Advisory and Assistance Services	247	251	254
25.2 - Other Services	2,593	2,627	2,564
25.3 - Purchases of Goods and Services	45	45	46
25.4 - Oper & Maintenance of Facilities	219	222	225
25.5 - Research & Development Contracts	1,574	1,594	1,519
25.6 - Medical Care	19	19	19
25.7 - Operation & Maint. of Equipment	59	59	60
25.8 - Subsistence & Support of Persons	43	44	44
26 - Supplies and Materials	265	268	172
31 - Equipment	188	191	194
41 - Grants, Subsidies & Contributions	503,550	499,521	470,587
Total other objects	510,362	506,421	477,286
Total direct obligations	523,864	519,923	490,788
Position Data:			
Average Salary, ES positions	172,090	172,090	172,090
Average Salary, GS positions	93,467	93,467	93,467
Average Grade, GS positions	10.3	10.3	10.3

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Status of Program

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: EFNEP; Pest Management; Farm Safety; Children, Youth, and Families At Risk; Federally-Recognized Tribes Extension Program; Sustainable Agriculture; Youth Farm Safety Education and Certification, 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. 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). Grape Berry Moth (GBM) is the key insect pest of grapes in the eastern U.S. Results of a two-year project of Cornell University Extension in New York have shown that immediate post bloom insecticide application made in vineyards classified as high- or intermediate-risk for grape berry moth damage can be eliminated using the growing degree-day phenology model. Approximately two-thirds of the vineyards in the Lake Erie Region can be classified as either at high- or intermediate risk for grape berry moth damage. The ability to eliminate 1 insecticide application on these 20,000 acres, without a reduction in quality at harvest, represents a potential decrease of 20 tons of insecticide applied each year. By saving one spray, grape growers in the Lake Erie region are saving approximately $328,000 in material costs alone.

The “My New Weigh of Life” course developed by the Pennsylvania State Extension is aimed at reducing the prevalence of obese adults by 15 percent. The course objective is to motivate permanent lifestyle changes of healthier eating and increased physical activity so that adult participants can achieve and maintain a healthier weight. The course resulted in an average weight loss of 8 pounds, average decrease of BMI of 1.65 and average decrease in waist circumference of 2.3 inches. Of the 48 participants completing the pilot program, 94 percent made healthier food choices, 88 percent consumed more low calorie foods and beverages, and 77 percent increased their physical level of activity. These changes can impact not only the quality of life of the individual, but also incidence of chronic diseases and associated healthcare costs.

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-Five percent of adults reported improvements in their diets including consuming the equivalent of nearly one additional cup of fruits and vegetables, 83 percent of recent graduates improved food management practices, 88 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. State success

examples include: Louisiana State University's EFNEP survey found that over 96 percent of EFNEP program participants reported positive changes including consuming the equivalent of one additional cup of fruits and vegetables. Utah State University's EFNEP reported over 98 percent of its EFNEP families made a positive change in consumption of at least one food group including consuming the equivalent of nearly one additional cup of fruits and vegetables.

Federally-Recognized Tribes Extension Program. A curriculum was developed at Little Big Horn College in Montana containing essential learning tools that reflect the experience of clients, and best practices of the agricultural/tourism industry. As a result, an Indian entrepreneurship business curriculum was developed to fit the needs of the Crow community economic development. The community youth/adults who attended program activities gained increased knowledge in agricultural/tourism through participation workshops, seminars, hands-on training, presentations and annual camp. Participants also learned to apply that knowledge to their business, career, farming, and ranching operation, and thus outreach to the area youth/adults is helping to encourage economic development in the community.

3. 1890 Institutions. The Southern University Agricultural Center in Louisiana collaborated with State, local and federal government agencies, agricultural businesses, and community organizations to conduct pesticide application and certification workshops across the State. All participants indicated that the knowledge and skills they gained will help in saving money by reducing costs associated with the unnecessary use of pesticides, improving health, and helping to increase the profitability of their businesses.

Integrated Activities

Appropriation Language

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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, $29,874,000, as follows: for a competitive organic transition program authorized under section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7626),$5,000,000; for a competitive international science and education grants program authorized under section 1459A of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3292b), $3,000,000, to remain available until expended; for grants programs authorized under section 2(c)(1)(B) of Public Law 89��106, as amended, for the rapid response to pests and pathogens program,$732,000, to remain available until September 30, 2013, *and* for the regional rural development centers program, $1,312,000; for grants authorized under section 1624 (7 U.S.C. 5813), $10,000,000; and for the Food and Agriculture Defense Initiative authorized under section 1484 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, $9,830,000, to remain available until September 30, 2013.

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Lead-Off Tabular and Summary of Increases and Decreases

Lead-Off Tabular Statement

INTEGRATED ACTIVITIES

Annualized Continuing Resolution, 2011	$60,022,000
Budget Estimate, 2012	29,874,000
Change in Appropriation	-30,148,000

Summary of Increases and Decreases
(On basis of appropriation)

Item of Change	2011 Estimated	Pay Costs	Earmark Reductions	Program Changes	2012 Estimated
Integrated Activities					
Water Quality	$12,649,000	0	0	-$12,649,000	0
Food Safety	14,596,000	0	0	-14,596,000	0
Regional Pest Management Centers	4,096,000	0	0	-4,096,000	0
Crops at Risk from FQPA Implementation	1,365,000	0	0	-1,365,000	0
FQPA Risk Mitigation Program for Major Food Crop Systems	4,388,000	0	0	-4,388,000	0
Methyl Bromide Transition Program	3,054,000	0	0	-3,054,000	0
Organic Transition Program	5,000,000	0	0	0	$5,000,000
International Science and Education Grants Program	3,000,000	0	0	0	3,000,000
Critical Issues Program	732,000	0	0	0	732,000
Regional Rural Development Centers Program	1,312,000	0	0	0	1,312,000
Sustainable Agriculture Federal-State Matching Grant Program	0	0	0	10,000,000	10,000,000
Food and Agriculture Defense Initiative (Homeland Security)	9,830,000	0	0	0	9,830,000
Total Available, Integrated Activities	60,022,000	0	0	-30,148,000	29,874,000

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Project Statements

INTEGRATED ACTIVITIES

Project Statement by Program
(On basis of Appropriation)

	2010 Actual		2011 Estimated			2012 Estimated	
Projects	Amount	Staff Years	Amount	Staff Years	Increase or Decrease	Amount	Staff Years
Food and Agriculture Defense Initiative (Homeland Security).....	$9,830,000		$9,830,000		0	$9,830,000	
Water Quality	12,649,000		12,649,000		-$12,649,000	0	
Food Safety.....	14,596,000		14,596,000		-14,596,000	0	
Regional Pest Management Centers.....	4,096,000		4,096,000		-4,096,000	0	
Organic Transition Program	5,000,000		5,000,000		0	5,000,000	
FQPA Risk Mitigation Program for Major Food Crop Systems.....	4,388,000		4,388,000		-4,388,000	0	
Crops at Risk from FQPA Implementation.....	1,365,000		1,365,000		-1,365,000	0	
Methyl Bromide Transition Program	3,054,000		3,054,000		-3,054,000	0	
Sustainable Agriculture Federal-State Matching Grant Program	0		0		10,000,000	10,000,000	
Critical Issues Program.....	732,000		732,000		0	732,000	
Regional Rural Development Centers Program	1,312,000		1,312,000		0	1,312,000	
International Science and Education Grants Program	3,000,000		3,000,000		0	3,000,000	
Total Available or Estimate	60,022,000	10	60,022,000	10	-30,148,000	29,874,000	10

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

INTEGRATED ACTIVITIES

Project Statement by Program
(On basis of Available Funds)

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Food and Agriculture Defense Initiative (Homeland Security)	$9,765,131		$9,830,000		0	$9,830,000	
Carryover			68,929		-$68,929	0	
Water Quality	12,649,000		12,649,000		-12,649,000	0	
Food Safety	14,571,000		14,596,000		-14,596,000	0	
Regional Pest Management Centers	4,096,000		4,096,000		-4,096,000	0	
Organic Transition Program	5,000,000		5,000,000		0	5,000,000	
FQPA Risk Mitigation Program for Major Food Crop Systems	4,388,000		4,388,000		-4,388,000	0	
Crops at Risk from FQPA Implementation	1,365,000		1,365,000		-1,365,000	0	
Methyl Bromide Transition Program	3,054,000		3,054,000		-3,054,000	0	
Sustainable Agriculture Federal-State Matching Grant Program	0		0		10,000,000	10,000,000	
Critical Issues Program	1,409,524		732,000		0	732,000	
Carryover			701,794		-701,794	0	
Regional Rural Development Centers Program	1,312,000		1,312,000		0	1,312,000	
International Science and Education Grants Program	2,732,888		3,000,000		0	3,000,000	
Carryover			478,716		-478,716	0	
Subtotal Available or Estimate	60,342,543	10	61,271,439	10	-31,397,439	29,874,000	10
Unobligated Balance: Available, Start of Year	-677,524		-1,249,439		1,249,439	0	

Projects	2010 Actual Amount	2010 Actual Staff Years	2011 Estimated Amount	2011 Estimated Staff Years	Increase or Decrease	2012 Estimated Amount	2012 Estimated Staff Years
Available, End of Year	356,981		-0		0	0	
Total Appropriation	60,022,000	10	60,022,000	10	-30,148,000	29,874,000	10
Mandatory Activities:							
Organic Research Initiative Sec. 7206	20,000,000		20,000,000		0	20,000,000	
Specialty Crop Grant Programs Sec. 7311	50,000,000		50,000,000		0	50,000,000	

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Justification of Increases and Decreases

1 A decrease of $12,649,000 to Water Quality ($12,649,000 available in 2011) as follows:

In FY 2012, the budget proposes to reduce the funding for Section 406 programs to support higher priority activities. Research, extension, and education topics previously funded under Section 406 can be supported by other competitive grant programs including AFRI, as well as State and local governments, and private sources.

2 A decrease of $14,596,000 to Food Safety ($14,596,000 available in 2011) as follows:

In FY 2012, the budget proposes to reduce the funding for Section 406 programs to support higher priority activities. Research, extension, and education topics previously funded under Section 406 can be supported by other competitive grant programs including AFRI, as well as State and local governments, and private sources.

3 A decrease of $4,096,000 to Regional Pest Management ($4,096,000 available in 2011) as follows:

In FY 2012, the budget proposes to reduce the funding for Section 406 programs to support higher priority activities. Research, extension, and education topics previously funded under Section 406 can be supported by other competitive grant programs including AFRI, as well as State and local governments, and private sources.

4 A decrease of $1,365,000 to Crops at Risk from FQPA Implementation ($1,365,000 available in 2011) as follows:

In FY 2012, the budget proposes to reduce the funding for Section 406 programs to support higher priority activities. Research, extension, and education topics previously funded under Section 406 can be supported by other competitive grant programs including AFRI, as well as State and local governments, and private sources.

5 A decrease of $4,388,000 to FQPA Risk Mitigation Program for Major Food Crop Systems ($4,388,000 available in 2011) as follows:

In FY 2012, the budget proposes to reduce the funding for Section 406 programs to support higher priority activities. Research, extension, and education topics previously funded under Section 406 can be supported by other competitive grant programs including AFRI, as well as State and local governments, and private sources.

6 A decrease of $3,054,000 to Methyl Bromide Transition ($3,054,000 available in 2011) as follows:

In FY 2012, the budget proposes to reduce the funding for Section 406 programs to support higher priority activities. Research, extension, and education topics previously funded under Section 406 can be supported by other competitive grant programs including AFRI, as well as State and local governments, and private sources.

7 An increase of $10,000,000 to Sustainable Agriculture Federal-State Matching Grant Program ($0 available in 2011) as follows:

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. 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.

Geographic Breakdown of Obligations and Staff Years

TABLE 1B - FISCAL YEAR 2010

STATE	Critical Issues - Plant and Animal Diseases	Homeland Security	Organic Research and Extension Initiative	International Science and Education Grants	Crops at Risk from FQPA Implementation	FQPA Risk Mitigation Program for Major Food Crop System	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	0	149,987	0	0	0	0	0	0	0	0	604,771	754,758
ALASKA	0	0	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	0	0
ARIZONA	0	298,000	950,514	149,258	0	0	0	0	0	0	0	1,145,000	312,471	2,855,243
ARKANSAS	0	0	0	0	0	0	600,000	0	0	0	0	0	0	600,000
CALIFORNIA	0	1,128,000	0	147,454	0	0	50,000	500,000	0	974,848	0	0	8,704,308	11,504,610
COLORADO	172,307	298,000	0	149,899	0	0	600,000	0	0	0	0	1,225,000	2,467,589	4,912,795
CONNECTICUT	0	0	0	0	0	0	600,000	0	0	0	0	0	0	600,000
DELAWARE	0	0	0	0	0	0	50,000	0	0	0	0	0	0	50,000
DISTRICT OF COLUMBIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	179,958	1,128,000	0	150,000	512,379	0	600,000	965,000	624,148	0	0	0	2,939,056	7,098,541
GEORGIA	0	298,000	45,713	150,000	0	0	0	0	0	0	0	0	0	493,713
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HAWAII	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IDAHO	0	0	108,815	0	0	0	0	0	0	0	0	1,190,000	0	1,298,815
ILLINOIS	0	0	2,914,144	0	0	0	600,000	0	649,883	974,848	0	0	1,548,793	6,687,668
INDIANA	0	799,000	1,288,010	150,000	0	0	600,000	0	0	0	0	0	2,441,298	5,278,308
IOWA	0	298,000	0	149,879	0	0	0	0	691,969	0	0	1,150,000	0	2,289,848
KANSAS	0	880,000	0	0	0	0	2,600,000	782,019	0	0	0	0	0	4,262,019
KENTUCKY	0	50,000	0	150,000	0	0	0	0	0	0	0	0	0	200,000
LOUISIANA	0	298,000	0	150,000	0	0	0	0	0	0	0	0	0	448,000
MAINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARYLAND	0	0	526,781	0	0	0	0	0	0	0	0	1,200,000	1,697,509	3,424,290
MASSACHUSETTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MICHIGAN	0	992,780	1,152,293	149,975	0	0	0	0	0	0	312,256	0	1,992,028	4,599,332
MICRONESIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINNESOTA	0	50,000	1,382,450	0	0	0	0	0	0	0	0	0	496,663	1,929,113
MISSISSIPPI	0	50,000	0	0	0	0	0	0	0	0	312,256	0	0	362,256
MISSOURI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONTANA	0	0	0	0	218,419	0	0	0	0	0	0	0	0	218,419
NEBRASKA	0	50,000	0	0	0	0	554,302	0	0	0	0	0	0	604,302
NEVADA	0	0	0	149,997	0	0	0	0	0	0	0	0	0	149,997
NEW HAMPSHIRE	0	0	31,372	0	0	0	0	0	700,000	0	0	0	0	731,372
NEW JERSEY	90,000	50,000	0	0	0	0	600,000	0	0	0	0	0	0	740,000
NEW MEXICO	0	50,000	0	0	0	0	0	0	0	0	0	0	0	50,000
NEW YORK	0	1,132,060	0	149,764	560,995	0	1,120,005	0	0	0	0	0	3,222,100	6,184,924
NORTH CAROLINA	0	298,000	0	298,429	0	0	0	0	251,161	974,848	0	0	0	1,822,438
NORTH DAKOTA	0	0	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	28,629	28,629
OHIO	90,000	50,000	684,496	0	0	0	1,000,000	0	0	0	0	0	2,037,717	3,862,213
OKLAHOMA	0	0	0	0	0	1,929,861	0	0	0	0	0	0	30,000	1,959,861
OREGON	0	50,000	3,048,743	0	0	0	0	0	0	0	0	0	5,808,980	8,907,723
PENNSYLVANIA	0	50,000	678,797	0	0	0	0	0	0	974,848	312,256	0	1,437,754	3,453,655
PUERTO RICO	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	0	0	0	0	0	0	2,226,848	0	2,226,848
SOUTH CAROLINA	0	0	0	148,058	0	1,154,161	0	0	0	0	0	0	0	1,302,219
SOUTH DAKOTA	0	50,000	43,809	0	0	0	0	0	0	0	0	0	0	93,809
TENNESSEE	0	50,000	50,000	0	0	0	0	643,177	0	0	0	0	50,000	793,177
TEXAS	127,620	298,000	1,629,353	0	0	225,598	1,600,000	0	697,012	0	0	2,670,000	3,802,678	11,050,261
UTAH	0	50,000	1,019,411	0	0	0	0	0	0	0	312,256	0	0	1,381,667
VERMONT	0	0	759,516	0	0	0	0	0	0	0	0	0	0	759,516
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VIRGINIA	0	0	0	0	0	0	600,000	0	0	0	0	0	6,526,342	7,126,342
WASHINGTON	0	308,000	1,538,115	0	0	828,811	2,000,000	0	0	0	0	0	519,741	5,194,667
WEST VIRGINIA	0	0	31,344	0	0	0	0	0	0	0	0	0	0	31,344
WISCONSIN	0	298,000	1,233,356	149,940	0	0	0	0	436,894	0	0	1,235,000	0	3,353,190
WYOMING	0	50,000	0	149,911	0	0	0	0	700,000	0	0	0	0	899,911
BIOTECH	4,760	39,020	0	0	960	12,500	42,300	0	0	0	0	0	0	99,540
SBIR	17,568	0	0	0	10,920	35,104	116,768	24,432	40,000	32,768	10,496	101,192	1,200,000	1,589,248
PEER PANEL	1,370	0	82,968	40,337	6,727	26,445	78,785	17,212	8,933	0	0	0	131,573	394,350
														0
FEDERAL ADMINISTRATION	24,147	324,271	800,000	0	54,600	175,520	558,840	122,160	200,000	163,840	52,480	505,960	2,000,000	4,981,818
SUBTOTAL	707,730	9,765,131	20,000,000	2,732,888	1,365,000	4,388,000	14,571,000	3,054,000	5,000,000	4,096,000	1,312,000	12,649,000	50,000,000	129,640,749
LAPSING	0	0	0	0	0	0	25,000	0	0	0	0	0	0	25,000
UNOBLIGATED BALANCE	684,610	68,929	0	478,716	0	0	0	0	0	0	0	0	0	1,232,255
TOTAL	1,392,340	9,834,060	20,000,000	3,211,604	1,365,000	4,388,000	14,596,000	3,054,000	5,000,000	4,096,000	1,312,000	12,649,000	50,000,000	130,873,004

TABLE 2B - FISCAL YEAR 2011

STATE	Critical Issues-Plant and Animal Diseases	Crops at Risk from FQPA Implementation	FQPA Risk Food Crop System Program for Major Food Crop System	Food Safety	Methyl Bromide	Organic Transistion Risk Assessment	Regional Pest Management Center	Rural Development Centers	International Science and Education Grants	Water Quality	Homeland Security	Biotech Risk Assessment	Organic Research Initiative Sec. 7206	Specialty Crop Sec.7311	TOTAL FEDERAL FUNDS
SBIR	17,568	10,920	35,104	116,768	24,432	40,000	32,768	10,496	0	101,192	0	0	0	1,200,000	1,589,248
BIOTECH RISK	4,760	960	12,500	42,300	0	0	0	0	0	0	39,020	0	0	0	99,540
FEDERAL ADMIN OBLIGATED	29,280	54,600	175,520	583,840	122,160	200,000	163,840	52,480	120,000	505,960	393,200	0	800,000	2,000,000	5,200,880
UNOBLIGATED	680,392	1,298,520	4,164,876	13,853,092	2,907,408	4,760,000	3,899,392	1,249,024	2,880,000	12,041,848	9,397,780	0	19,200,000	46,800,000	123,132,332
TOTAL	732,000	1,365,000	4,388,000	14,596,000	3,054,000	5,000,000	4,096,000	1,312,000	3,000,000	12,649,000	9,830,000	0	20,000,000	50,000,000	130,022,000

TABLE 3B - FISCAL YEAR 2012
INTEGRATED ACTIVITIES

INTEGRATED PROGRAMS

STATE	Rapid Response Pest & Pathogens	Crops at Risk from FQPA Implementation	FQPA Risk Food Crop System Program for Major Food Crop System	Food Safety	Methyl Bromide	Organic Transistion Risk Assessment	Regional Pest Management Center	Rural Development Centers	International Science and Education Grants	Water Quality	Homeland Security	Sustainable Ag. Fed.-State Matching Grant	Biotech Risk Assessment	Organic Research Initiative Sec.7206	Specialty Crop Sec. 7311	TOTAL FEDERAL FUNDS
SBIR	17,568	0	0	0	0	20,000	0	10,496	0	0	0	0	0	0	1,200,000	1,248,064
BIOTECH RISK	4,760	0	0	0	0	0	0	0	0	0	39,020	0	0	0	0	82,800
FEDERAL ADMIN OBLIGATED	29,280	0	0	0	0	100,000	0	52,480	120,000	0	393,200	400,000	0	800,000	2,000,000	3,894,960
UNOBLIGATED	680,392	0	0	0	0	2,380,000	0	1,249,024	2,880,000	0	9,397,780	9,600,000	0	19,200,000	46,800,000	92,187,196
TOTAL	732,000	0	0	0	0	2,500,000	0	1,312,000	3,000,000	0	9,830,000	10,000,000	0	20,000,000	50,000,000	97,413,020

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE
Classification by Objects

INTEGRATED ACTIVITIES
2010 Actual and Estimated 2011 and 2012
(dollars in thousands)

Personnel Compensation:	2010	2011	2012
11 - Total personal compensation	$1,491	$1,491	$1,491
12 - Civilian Personnel Benefits	685	685	685
13 - Benefits for former personnel	1	1	1
Total pers. comp. & benefits	2,178	2,178	2,178
Other Objects:			
21 - Travel & Transportation of Persons	253	256	260
22 - Transportation of Things	1	1	1
23.1 - Rent to GSA	2	2	2
23.2 - Rent Paid to Others	9	9	10
23.3 - Comm., Util., Misc. Charges	73	74	75
24 - Printing and Reproduction	34	34	35
25.1 - Advisory and Assistance Services	42	42	43
25.2 - Other Services	717	726	736
25.3 - Purchases of Goods and Services	9	10	10
25.4 - Oper & Maintenance of Facilities	46	47	48
25.5 - Research & Development Contracts	808	819	830
25.6 - Medical Care	4	4	4
25.7 - Operation & Maint. of Equipment	12	13	13
25.8 - Subsistence & Support of Persons	9	9	9
26 - Supplies and Materials	56	57	58
31 - Equipment	40	40	41
41 - Grants, Subsidies & Contributions	124,728	126,934	95,523
Total other objects	126,844	129,077	97,696
Total direct obligations	129,022	131,255	99,874
Position Data:			
Average Salary, ES positions	172,090	172,090	172,090
Average Salary, GS positions	93,467	93,467	93,467
Average Grade, GS positions	10.3	10.3	10.3

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Status of Program

Current Activities:

1. Programs currently funded under the Integrated Activities account are Water Quality, Food Safety, Regional Pest Management Centers (formerly Pesticide Impact Assessment), Crops at Risk from Food Quality Protection Act (FQPA) Implementation, FQPA Risk Mitigation Program for Major Food Crop Systems, 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 International Science and Education Grants, Critical Issues, and Regional Rural Development Centers programs are administered under this account. The International Science and Education Grants program is conducted under the authority of Section 1459A of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, Public Law 95-113. The Critical Issues and 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 an unified network of public agricultural institutions 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 Rhode Island are heading up the Northeast States and Caribbean Islands (NESCI) Regional Water Program which promotes collaboration, enhancing delivery of successful programs, and encouraging multi-State efforts to protect and restore water resources. The regional sustainable landscaping focus area developed lawn care recommendations specific for northern and southern New England and is using these recommendations with residents to promote water quality protection. Post-evaluations of private well water workshops indicate that workshop participants are adopting practices to protect their private well, including: 52 percent had their well water tested; 67 percent inspected their wellhead; 18 percent maintained their water treatment system; 13 percent had a water treatment system installed. In addition, private wells nonpoint education for municipal officials programs work with communities to change community plans, land use regulations, development practices, and the local decision making process including strategies to protect water quality.

2. Food Safety Program. According to the Centers for Disease Control & Prevention, human enteric viruses are estimated to cause two-thirds of the foodborne illness in the U.S. each year, with the great majority of those attributed to norovirus (NoV). Researchers in Illinois are developing a method which will serve as a foundation for upcoming cross contamination studies to develop a risk assessment model for NoV transfer within the food service setting. The methods developed from this project allowed for an assessment of recovery methods for viruses. Recovery rates varied widely and the project team was able to use the information in method selection and refinement to ensure consistent recovery of viruses.

3. Crops at Risk from FQPA Implementation Program. In December 2008, the invasion of the Mexican rice borer (MRB) was discovered in two pheromone traps a few kilometers from the western Louisiana State line. Annual yield losses of $220 million (sugarcane) and $45 million (rice) are forecasted when the regions of both industries become fully infested. Research at Louisiana State University indicates that

management techniques to mitigate the infestation which involves irrigation in sugarcane can reduce MRB losses up to 29 percent, use of environmentally friendly insecticides can reduce losses up to 53 percent, and resistant cultivars can reduce losses by 24 percent. The multi-year quarantine on MRB movement through the transport of sugarcane into Louisiana is projected to save between $1.1 and $3.2 billion (depending on management) during the time for complete invasion of both industries.

4. FQPA Risk Mitigation Program. Scientists at the University of Georgia developed a method to document high levels of resistance to Tomato spotted wilt virus (TSWV) in tomatoes under field conditions. This single tactic provides an available, viable means of managing this serious pest problem in commercial production systems. Growers were able to view the different resistant cultivars in the field so that they could evaluate the plants directly. Growers that participated in this project will likely base planting decisions on these results in subsequent commercial plantings. In 2009, scientists were able to demonstrate an 8-12 fold increase in tomato yield with the resistant lines under heavy TSWV infection pressure in the field. The implementation of the use of host plant resistant lines and other tactics presented here could save growers millions of dollars annually.

5. Organic Transition Program. Organic soybean growers have few options for controlling the soybean aphid, which can severely depress soybean yields. Scientists in Minnesota found that planting a rye winter cover crop prior to soybeans can lead to lower densities of soybean aphids and an increase in yield when soybean aphid pressure is high. This is an important finding for organic farmers that have no reliable insecticides to use against soybean aphid.

6. Food and Agriculture Defense Initiative Program. 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, 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 ten 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 and African Swine Fever. African Swine Fever, added in Fiscal Year 2010, causes swine to have high fevers, reddening of the skin, hemorrhages in lymph nodes and internal organs, and occasionally enlargement of the spleen. NAHLN is part of a national strategy to coordinate the Nation's Federal, State and university laboratory resources.

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 and Beet Curly Top. The laboratory network partnered with other cooperative

extension officials to quickly and efficiently conduct a widespread outreach and detection campaign on tomato and potato Late Blight, which became a significant problem in FY 2009 for the first time since the network was established. A new diagnostic test was implemented for Beet Curly Top, a disease spread by insects that affects tomatoes, sugar beets, table beets, beans, and cucurbits. In FY 2010, NPDN continued to work on additional disease detection criteria.

The Extension Disaster Education Network is a collaborative multi-State effort by Extension Services across the country to improve the delivery of services to citizens affected by disasters. For example, the University of Arkansas Cooperative Extension Service assisted communities in the aftermath of severe ice storms and tornadoes that tore through Arkansas in the winter and spring. Faculty and staff helped residents and community leaders cope with disaster, identify and locate sources of assistance, make emergency plans, find information on emergency sheltering, manage storm damaged trees and debris, and negotiate FEMA regulations.

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 seven High Performance Priority Goals (HPPGs).

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.

		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.

	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.

	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 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.

	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.

NIFA Strategic Objective 2.1: Provide research, education, and extension to expand domestic market opportunities
NIFA Strategic Objective 2.2: Provide research, education, and extension to increase the efficiency of agricultural production and marketing systems
NIFA Strategic Objective 2.3: Provide risk management and financial tools to farmers and ranchers
NIFA Strategic Objective 3.1: Expand economic opportunities in rural America by providing research, education, and extension to create opportunities for growth
NIFA Strategic Objective 3.2: Provide research, education, and extension to improve the quality of life in rural areas
NIFA Strategic Objective 4.2: Develop and deliver research, education, and extension to reduce the number and severity of agricultural pest and disease outbreaks

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:
Biofuels represent the best sustainable, secure, and renewable alternative to fossil fuels. Unfortunately, biofuel production is beset by the same problem as traditional petroleum refining – excess waste. As biofuel production increases, the market is being flooded with its waste byproducts, specifically glycerin, also known as glycerol. With funding from NIFA, a scientist at Rice University developed a new fermentation process that uses E. coli to convert glycerin into high-value chemicals, like succinate. Succinate and its derivatives have an annual domestic market of more than $1.3 billion. Succinate is used in a variety of products including flavoring agent in food and beverages, an intermediate compound for dyes and perfumes, and medical applications. Another product, formate, is principally used as a preservative and antibacterial agent in livestock feed.

Improved conversion of lignocellulosic biomass into biofuels is a high priority national research goal that will enhance national security, balance of trade, rural employment opportunities, and the nation's environmental performance, including net reductions in carbon dioxide emissions. NIFA funded scientists in Georgia developed a new chemical reaction that converts waste biomass lignin into high-value chemical components that will make bio-refineries more efficient and effective. This new reaction will yield high-value, renewable, chemical components derived from lignin. The new products can be used in a variety of products that are currently dependent on petroleum-based resources, as well as improve modern ethanol conversion programs.

NIFA funded researchers at Purdue University have examined the basis for enhancing pretreatment of cellulosic biomass, including corn stover, wood, and wet cake for the purpose of reducing the amount of enzyme required to transform the cellulosic fractions of these materials into fermentable sugars and ethanol. This is an important development because the single major cost of cellulose conversion is the cost of the enzyme. The impact of this effort in cellulosic biofuels is to develop processes capable of cost-effectively utilizing cellulosic, agricultural residues for the purpose of production of ethanol. The work in process is enabling designs and testing of designs for large scale pretreatment and bioprocessing of

cellulosic materials to ethanol. This will make a significant contribution to the energy security of the U.S. as well as providing products for other agricultural commodities in the state, Midwest, and the U. S.

Selected Accomplishments Expected at the FY 2012 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 a) generate original fundamental knowledge on the development of new processes and new or improved food and nonfood products through basic research, including research on biofuels and on functional food nutrition; b) develop new processes and value added food and nonfood products through applied research; c) conduct outreach programs for the commercialization of new processes and products developed and demonstrate the use of new products; and d) provide leadership in the delivery of research-based knowledge through extension, outreach, and information dissemination to strengthen the capacity of public and private decision makers impacting agriculture.

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:
The Colorado State University (CSU) Extension Wheat Improvement Work Team provides 18 percent of the total investment in developing and promoting CSU wheat varieties. Plantings of improved wheat varieties increased Colorado farmers' farm gate income by $12,840,000 in 2008. Extension's share (18 percent) of this impact for the Colorado wheat industry is $2,311,000, or about $13.70 returned for each $1.00 invested.

A University of Tennessee (UT) Extension variety testing program facilitated farmers increase in crop yields by identifying the varieties that perform best in local conditions. Approximately 80 percent of the state's row crop producers utilize UT Extension variety testing data to select seed used to plant their crops. The higher crop yields resulted in approximately $68.2 million additional income to Tennessee farmers in 2009.

The value of the NIFA funded IR-4 Project was highlighted through an economic analysis of the program. The Center for Economic Analysis at Michigan State University has published two reports. In 2007, they reported that the IR-4 Food Use Program contributes $7.7 billion annually to the U.S. Gross Domestic Product (GDP). A 2008 report found the IR-4 Ornamental Program provides an additional $1.2 billion to the US GDP.

With NIFA funding scientists in North Dakota developed three barley cultivars which are recommended for malting and brewing by the American Malting Barley Association. The two-rowed malting barley cultivar Conlon was grown on 18 percent of the North Dakota barley acreage or 265,000 acres. Since Conlon is a malting barley, it commanded on average a $1.25 premium over feed barley. In 2009, this resulted in Conlon generating an additional $23 million in revenue for North Dakota growers that grew this cultivar.

Selected Accomplishments Expected at the FY 2012 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.

- Increased training of young scientists at the interface of modern sequencing technologies and bioinformatics, and promote increased participation by members of underrepresented groups;
- Increased the efficiency of breeding programs;
- Streamlined delivery of new traits, e.g. higher photosynthetic activity, and increased fertilizer utilization;
- Discovery and enhancement of the innate properties of corn, e.g. drought tolerance, disease resistance, and hybrid vigor;
- Recognition and understanding of the traits that will allow corn to be an ideal crop for food and feed, e.g. low phytate corn, improved amino acid profile, control of mycotoxins; fuel and industrial uses, e.g. quality and quantity; and
- Decreased adverse environmental impact of production farming, e.g. water quality/quantity, pesticide application.

Measurements of feed kinetics and mathematical modeling will result in:

- Increased efficiency of production systems
- Expanded use of dynamic models that account for excretion of excess nutrients, fluctuations in body condition (body fat) of beef and dairy cows
- Decreased environmental impact of production farming (e.g., decreased nitrogen and phosphorus)
- A foundation for the next generation of nutrition modelers, which will increase the accuracy of prediction of nutrient availability and aid in reducing excretion of nutrients

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:
Texas AgriLife Extension conducted a Master Marketer program. A survey was done 2.5 years after the initial program to allow time for adoption of new practices and to identify economic impacts. Survey results indicated participants increased understanding of risk management tools, increase their willingness to use new tools and analysis, and felt that they had increase their income by an average of $18,929 or 3.3 percent of gross farm income relative to how they would have performed before going through the program.

"Farmdoc" is a website containing online crop insurance tools including a premium calculator for crop insurance products and a decision tool that computes payoffs and risk statistics for representative farms in each of the counties in Illinois, Indiana, and Iowa. This project is substantially improving risk management

decisions for crop farms in Illinois, the U.S. corn belt, and the U.S. Great Plains. The incorporation of this information into enhanced models provides farmers with an important tool to use in evaluating specific farm risk management strategies, particularly as it relates to crop insurance decisions, which have quickly become one of the most important risk management decisions made by farmers.

At Purdue Extension, the Purdue Risk Management Team developed and conducted a five-week workshop series to provide producers with the tools to determine their breakeven prices, marketing goals, marketing plans, crop insurance decisions, and leasing options with the end goal of being able to lock-in profitable margins. End of session evaluations showed the program had direct impacts on attitudes and modified risk management behavior. Over 95 percent of respondents said the workshops increased their comfort level in using risk management tools covered in the program.

The Agriculture Risk Education Library has had more 1,000,000 individual users since its inception. Over 6,000,000 documents have been viewed or downloaded. Use has grown from 3,000 individual users per month in 2001 to over 20,000 individual users per month in 2008. The Ag Risk Education Library provides a single source of information to producers, educators, media, and other agricultural professionals. During the past year, methodology was created to allow individual educators and researchers to upload their educational materials and categorize them within the Libraries table of contents.

Selected Accomplishments Expected at the FY 2012 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.

HPPG Measure: NIFA provides research, extension, and education to support USDA work to increase the wealth of rural communities by concentrating and strategically investing in five regions, resulting in the creation of strong local and regional economies, with a particular emphasis on food systems, renewable energy enterprises, and broad-band economies.

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:
Members of the nationwide Cooperative Extension network collaborated with local and national partners to celebrate America Saves Week for the fifth consecutive year during February 21-28, 2010. More than 85 Extension educators in 25 states conducted a variety of financial education programs and events to motivate youth and adults to take action toward a more financially secure future. Twenty-five million media contacts including television, radio, websites, posters, flyers, billboards, direct mail, exhibits, and electronic mail; 193,850 people participated in public events in 25 states; 189,847 individuals increased their knowledge related to personal savings; 20,499 youth and adults set a savings goal with a cumulative monthly sum of $2,410,205.

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.

Western Sustainable Agriculture Research and Education (SARE) is NIFA funded to educate and help the agriculture industry become more profitable, protect natural resources/the environment, and improve the quality of life for producers and consumers. The number of separate SARE-impacted farms and ranches which increased profits and/or reduced costs was documented as at least 1,452, with adjacent farms and ranches totaled over 3000, impacting 4,178,000 acres. Of these farms and ranches, 82 percent reported sustained usage of the research-based idea or practices tested. Finally, across the 5-year life-span of this Cooperative Agreement, and across the entire Western Region, there was a positive economic impact of over $500 million.

University of Florida Extension 4-H Life Skills programs enrolled 133,280 youth in science, engineering and technology programs with 74,000 youth focused on biological, environmental and plant sciences; 135,213 youth were educated through participation in citizenship and civic engagement experiences and another 37,532 were engaged in healthy lifestyle educational programs during 2009-10 program year. As a result of these 4-H programs 87.9 percent reporting change in knowledge; and 76.7 percent reporting changes in behavior/practices. 4-H educational programs often provide added benefits and life-changing impact to the more than 13,000 adult volunteers or classroom teachers.

Selected Accomplishments Expected at the FY 2012 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.

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.

The personal finance component of eXtension, launched in 2007, with funding from NIFA, provides reliable, research-based, and up-to-date financial and consumer information including learning modules, fact sheets, and commonly asked questions with unbiased, peer reviewed answers 24/7/365 on any Internet-ready device. The site, which currently focuses on financial preparation for a secure retirement, will be expanded to serve the financial literacy needs of youth and financially vulnerable audiences, such as bankruptcy filers. Key links with strategic partner organizations will expand the marketing potential. Evaluation strategies for on-line learning, plus significant effort to assure project sustainability, are expected.

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:
A University of Missouri Extension Business Development NIFA funded program assisted businesses in securing over $88 million in increased sales and government contracts. This impact is documented through client signatures and then validated through a yearly independent research study. This increase in sales and government contracts had a direct positive impact on Missouri's businesses, economy, society, and educational system.

NIFA funded Southern University Agricultural Research and Extension Center in efforts to work with profit and non-profit organizations to strengthen links between businesses and community-based organizations. This effort provided assistance to 85 small businesses with planning, market strategies/assessment, and management and assisted 22 local farmers to develop alternative enterprise initiatives. In collaboration with community organizations, 245 computers with internet access were placed in 20 locations and used by 2,406 individuals saved those users about $88,200 in annual bill payments. Survey results indicate that 93 percent respondents gained knowledge and skills which would be useful to their organizations in areas such as grant writing, evaluation, leadership, strategic planning, etc.

The University of Missouri Business Development Program seeks to encourage entrepreneurship strengthen/expand existing businesses and generate jobs and careers essential to the vitality to the community. This program provides a linkage between Extension's BDP and Small Business Development Center's for business training and counseling services, thereby helping communities identify existing and potential entrepreneurs. The Business Development Program reported 612 new jobs in the Extension Community Economic and Entrepreneurial Development program (ExCEED) communities along with $13,159,991 in new investment. In addition, ExCEED community programs reported 60 new jobs, 9 business expansions, 60 new businesses and $12,190,000 in new investments.

Selected Accomplishments Expected at the FY 2012 Proposed Resource Level:
The Federal-State matching 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:
Researchers from Virginia Tech have identified the mechanism several important microbial pathogens use to infect plants and cause devastating diseases. The study also provides insights into how some microbes cause diseases in humans and animals. The identified mechanism is used by fungi and oomycetes (microbes related to algae), including the kind of fungi that are causing wheat rust epidemics in Africa and Asia, and by oomycete pathogens that caused the Irish potato famine of the 19th century and continue to cause crop losses for producers today.

A team of researchers from Washington State University and the University of Georgia have found that organic farming increases biodiversity among beneficial, pest-killing predators and pathogens. In potato crops, this led to fewer insect pests and larger potato plants. Ecosystems with more total species, and more beneficial species that are relatively evenly distributed, are thought to be healthiest. The use of insecticides harms biodiversity by reducing the number of species and by making some species (often pests) much more common than others.

Producers have long been fighting off pea aphids, which are small, green insects that feed on the sap of several legumes such as peas, alfalfa and other forage crops. These aphids cause direct plant damage while also transmitting viruses, causing significant crop losses. A NIFA funded team of researchers at the University of Miami collaborated on the annotation of the pea aphid's genome. Gene annotation studies help scientists determine the location of genes and understand what these genes do. Once the genes relevant to pest control have been identified, studies on gene function become possible. These genes can then be manipulated for future development of novel methods to control aphids.

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 ten in 2010.

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 2010.

Selected Accomplishments Expected at the FY 2012 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;
- •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.

Means and Strategies
USDA has embraced the creation of NIFA from the former Cooperative State Research, Education, and Extension Service as a challenge to transform and reinvigorate its charge for funding agricultural science and education. The USDA has identified five key priorities for USDA science: Climate Change, Bioenergy, Childhood Nutrition, Food Safety, and International Food Security.

NIFA is in the midst of transforming itself around this vision. Relevant to this strategic goal are two of the USDA's priorities, as articulated within NIFA:

Global Food Security and Hunger. NIFA supports new science to boost U.S. agricultural production, improve global capacity to meet the growing food demand, and foster innovation in fighting hunger by addressing food security for vulnerable populations.

Sustainable Energy. NIFA contributes to the President's goal of energy independence with a portfolio of grant programs to develop biomass use for biofuels, designing optimum forestry and crops for bioenergy production, and to produce value-added bio-based industrial products.

NIFA has refocused AFRI so to address five priorities while preserving funding for foundational research and preparing the next generation of agricultural scientists. Grants are expected to be significantly larger to attract the best scientists and educators and give them sufficient resources to truly solve significant problems. Grants supporting the five priorities will be large, trans-disciplinary projects integrating research, education, and extension and, in some cases, may be regional in scale. These large grants will be funded on a continuation basis, committing the majority of existing AFRI funding for the expected five year duration of the grants. Therefore, funding above FY 2011 levels is required for AFRI to address additional priorities in the coming years.

In support of the two priorities outlined above, AFRI will be focusing its funding on:

Global Food Security and Hunger. The AFRI Global Food Security program will fund grants to address two intertwined challenge areas that underpin this important priority: food availability and food accessibility. Research, education, and extension focused on food availability will allow increased food production and reduced losses from the farm and ranch to the consumer by controlling important animal diseases and plant pests. Research, education and extension focused on food accessibility will address the emerging demand for resilient and secure food systems, resulting in a decrease in the number of food insecure individuals, families, and communities. It is expected that work funded through this program will have relevance for both domestic and international populations.

Sustainable Energy. The AFRI Sustainable Energy program will fund grants targeting the development of regional systems for the sustainable production of bioenergy and biobased products that: contribute significantly to reducing dependence on foreign oil; have net positive social, environmental, and rural economic impacts; and are integrated with existing agricultural systems. Key components of the implementation of these grants are integrated research, education, and extension/technology transfer activities. These grants will be support the start up and growth of a network of regional bioenergy centers focusing on dedicated energy crops and advanced non-ethanol infrastructure-compatible fuels and biobased products.

Farming in the 21st century requires substantial resources and extensive management skills. USDA helps agricultural producers manage the risks associated with agricultural production, improve good farming practices and become good stewards of the land, and recover economically and structurally when natural disaster strikes. NIFA contributes to the improvement and strengthening of this dynamic agricultural system through sponsored research into alternative methods to identify, assess, and manage risk, providing relevant education, and extending information and practices to improve production and market decision making through enhanced risk management.

NIFA-funded projects contribute to the goal of energy independence with a portfolio of grant programs to convert biomass to biofuels, design optimum biomass for bioenergy production, and produce value-added bio-based industrial products.

NIFA supports new science to boost U.S. agricultural production, improve global capacity to meet the growing food demand, and foster innovation in fighting hunger by addressing food security for vulnerable populations.

The Sustainable Agriculture Research and Education Program (SARE) helps farmers and ranchers adopt practices that are profitable, environmentally sound, and good for communities. Much of SARE research has been focused on locally grown products.

NIFA promotes the well-being of America through research, education, and extension to better understand the economic, demographic, and environmental forces affecting regions and communities, and using knowledge to develop strategies that make maximum use of local assets. NIFA supports the education and training of residents and community and business leaders to help their communities thrive in the global economy.

NIFA sponsors research, education, and extension to improve the understanding of socioeconomic conditions in rural America, and to promote community, youth and family well-being. Supported activities include research-based information on community assets and liabilities that affect youth, family and community well-being; research on policies and programs addressing circumstances that impact the well-being of individuals, family and communities; education, research, and extension to support effective family decision-making in managing their social and economic capital; regional rural development training, research and information access; analysis and education on issues that impact the well-being of communities and families, characterize people and places in need of assistance, and on the effectiveness of related public policies and programs; and education and extension to help parents provide a safe, healthy and nurturing atmosphere in which children and youth can grow and learn.

NIFA supports the generation, dissemination, and use of research-based information and knowledge to support new and innovative economic opportunities for communities and to assist public and private sector leaders in their decision making of rural issues. NIFA sponsors analysis of policy and translate research results into recommendations for business management and community leadership to optimize public and private decision-making; education, research, and extension on economic diversification, e-commerce, entrepreneurship, community planning, service infrastructure, local government, workforce development, leadership development and civic engagement; and sponsors research and analyses on the structure and performance of rural economies and on services and resources that promote economic development.

The Community Food Projects Competitive Grant Program funds low-income communities to address food access and nutrition issues, such as farmers markets, youth farms, urban agriculture, farm-to-school, community gardens, and community food assessments, all of which could contribute to a local and regional food system.

The Healthy Urban Food Enterprise Development Center will be established this year after a competitive process and will increase access to healthy, affordable foods, including locally produced agriculture products to underserved populations, and will establish training and technical assistance for food enterprises and sub-grant to entities for food enterprises.

NIFA supports numerous research and extension activities to enhance the competitiveness and sustainability of rural and farm economies, ranging from the development of new non-food products to improvements in productivity and financial management. NIFA sponsors vital research and development contributions for new non-food products and technologies, quality improvements, new uses, and value

added processes that enhance market opportunities for agricultural and forest products. Through extension, NIFA and its partners effectively demonstrate and transfer this knowledge to users.

NIFA sponsors education, research, extension, and technology development to identify and assess organisms, pathogens, and toxins that cause human disease throughout the agricultural environment.

Education programs strengthen the foundation for all NIFA priorities by building capacity in the agricultural research and extension system and training the next generation of scientists and educators. NIFA helps ensure that a high-quality higher education infrastructure will be available at the nation's land-grant universities to address national needs, and it uses the infrastructure of scientific expertise from these and other colleges and universities, and also of public and private laboratories, to partner in addressing national priorities. Annual activities ensure that the relevance, quality and productivity of newly funded education, research, and extension projects support these objectives. This is accomplished through guidance for annual plans of work, the preparation of requests for applications, funding meritorious competitive proposals and plans, and oversight of previously funded work. NIFA supports the base programs of State Agricultural Experiment Stations and the Cooperative Extension System nationwide at land-grant universities, providing working funds to researchers and extension personnel at land-grant institutions all over the United States.

Annual activities ensure that the relevance, quality and productivity of newly funded education, research, and extension projects are specifically linked to assisting rural communities to create wealth so they are self-sustaining, repopulating, and economically thriving. This is accomplished through guidance for annual plans of work, the preparation of requests for applications, funding meritorious proposals and plans, and oversight of previously funded work.

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.

NIFA Strategic Objective 6.1: Ensure clean, abundant water and clean, healthy air
NIFA Strategic Objective 6.2: Enhance soil quality to maintain productive working lands
NIFA Strategic Objective 6.3: Protect, enhance, and manage forests and rangelands
NIFA Strategic Objective 6.4: Protect and enhance wildlife habitat to benefit desired, at-risk, and declining species

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.

HPPG Measure: 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 3 million acres of National Forest and private working lands in priority landscapes.

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:
NIFA funded Ohio scientists have found that technology to mitigate odor and air quality concerns on livestock farms can also be used for reducing greenhouse gas emissions, while providing potential income for farmers looking to trade carbon credits. Manure storage covers, originally designed to control odors on dairy, swine, and other livestock facilities, can also capture greenhouse gases such as methane, which is more harmful to the environment in terms of global warming effects than carbon dioxide. The collected methane can be traded for carbon credits at carbon trading markets. Plus the methane can be used as a biogas.

Washington State University Extension programs impacted almost 500,000 acres of forested lands improving stewardship and reducing fire hazard to rural communities. An additional 67,500 acres of range land was put under higher levels of management saving owners up to $6 million.

Minnesota Extension partnered with Minnesota's Departments of Agriculture and Natural Resources, as well as the U.S. Department of Agriculture, and the National Plant Diagnostic Network, to develop the Emerald Ash Borer (EAB) First Detectors Program to identify the first incidence of EAB in Minnesota. The first confirmed infestation of EAB in Minnesota was discovered on May 13, 2009, by a tree service company that participated in Extension trainings. The detectors took all established steps to report the finding, and as a result the USDA confirmed the EAB detection within just 24 hours. Both federal and state quarantines were established immediately. This was one of the earliest EAB detections in the country. Most happen 5 - 6 years after introduction; Minnesota's was at year 3. Other states have contacted Minnesota with interest in replicating its trainings and procedures.

The 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 and 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 FY 2012 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 Global Climate Change will support critical research on mitigation potentials and adaptive capacities of agricultural and environmental systems.

- Mitigation and Adaptation- In addition USDA needs to assist farmers and rural communities to identifying what changes should be made to crops and farming/production practices to thrive in a warmer world. In particular, the information must be developed with regional and crop specificity to be useful.

Renewable Resources Extension Act and Smith-Lever funds will continue to support the Master Tree Farmer program. This satellite broadcasted educational event is potentially available through all land grant universities and can reach a diverse and ever changing forest landowner demographic. Master Tree Farmer is an intensive educational program designed to introduce landowners to the multitude of forest management topics. The goal is not to make landowners foresters but provide them with the foundation to effectively converse regarding sustainable management of their property. It has been shown that private landowners are more willing to have forestry practiced on their lands when they understand why things are done.

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

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

Means and Strategies

USDA has embraced the creation of NIFA from the former Cooperative State Research, Education, and Extension Service as a challenge to transform and reinvigorate its charge for funding agricultural science and education. The USDA has identified five key priorities for USDA science: Climate Change, Bioenergy, Childhood Nutrition, Food Safety, and International Food Security.

NIFA is in the midst of transforming itself around this vision. Relevant to this USDA strategic goal is one of the USDA's priorities, as articulated within NIFA:

Climate Change. NIFA-funded projects generate knowledge to develop an agriculture system that maintains high productivity in the face of climate changes. This will help producers to plan for and make decisions to adapt to changing environments and sustain economic vitality, and can take advantage of emerging economic opportunities offered by climate change mitigation technologies.

NIFA refocused AFRI to address five priorities while preserving funding for foundational research and preparing the next generation of agricultural scientists. Grants are expected to be significantly larger to attract the best scientists and educators and give them sufficient resources to truly solve significant problems. Grants supporting the five priorities will be large, trans-disciplinary projects integrating research, education, and extension and, in some cases, may be regional in scale. These large grants will be funded on a continuation basis, committing the majority of existing AFRI funding for the expected five year duration of the grants. Therefore, funding above FY 2011 levels is required for AFRI to address additional priorities in the coming years.

In support of the priority outlined above, AFRI will be focusing its funding on:

Climate Change. The AFRI Climate Change program will fund grants focused on preparing the nation's agriculture and forests to adapt to the climate of the future and to reduce agricultural greenhouse gas emissions. These grants will be large, integrated, trans-disciplinary projects focused on developing advanced food, feed and fiber production systems and creating new plant varieties and animal breeds adapted to the changing climates and developing best management practices and methods to reduce greenhouse gas emissions and increase carbon sequestration from agriculture and forest systems while contributing to the emerging carbon-based cap and trade economy.

The development of the scientific and policy knowledge base and educational and extension efforts to achieve maximum sustainable benefits from both private and common property natural resources is a goal of NIFA. Education programs strengthen the foundation for this goal by building capacity in the agricultural research and extension system and training the next generation of scientists and educators.

NIFA-funded projects create the scientific information needed so producers can plan and make decisions to adapt to changing environments and sustain economic vitality and can take advantage of emerging economic opportunities offered by climate change mitigation technologies.

Specific resource concerns that can be addressed best through an airshed or watershed approach include water quality and quantity, siting of production facilities, wetland restoration, and other terrestrial and aquatic habitat improvement issues. NIFA sponsors basic and applied research integrated with education and extension to better understand the complex environmental interrelationships affecting agricultural, forest, and rangeland ecosystems, to improve scientific and lay understanding of water and air for improved management of working lands, and to minimize adverse environmental impacts of resource management.

The AFRI Water and Watersheds Research Program provides the basic knowledge needed to address water quality and quantity issues in rural and agricultural watersheds. The goals of this program are 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.

High-quality soils support the efficient production of crops for food, fiber and energy. NIFA sponsors integrated education, research, and extension work to better understand the complex environmental interrelationships affecting agricultural, forest, and rangeland production practices, to improve scientific and lay understanding of soil for better production management, and to minimize adverse environmental impacts.

Healthy, vigorous plant communities are critical to healthy forest and rangeland ecosystems to protect soil quality, prevent accelerated soil erosion, and to maintain and improve water quality and quantity. These ecosystems also provide fiber; sequester carbon; and supply forage, cover, and habitat for livestock and wildlife. Active, science-based management is essential to maintaining healthy, diverse and resilient forests and rangelands. NIFA and its partners collaborate with landowners, industry, non-governmental organizations, citizens and other interested stakeholders to develop, validate and disseminate knowledge and technologies to help manage these communities for sustainable natural resource and ecosystem services.

Annual activities ensure that the relevance, quality and productivity of newly funded education, research, and extension projects are specifically linked to ensuring our national forests and private working lands enhance our water resources and are conserved, restored, and made more resilient to climate change. This is accomplished through guidance for annual plans of work, the preparation of requests for applications, funding meritorious proposals and plans, and oversight of previously funded work.

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

NIFA Strategic Objective 1.2: Support international economic development and trade capacity building
NIFA Strategic Objective 3.1: Expand economic opportunities in rural America by providing research, education, and extension to create opportunities for growth

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.

HPPG Measure: NIFA provides research, extension, and education to support USDA in increasing the number of provinces in Afghanistan in which women and children are food secure from 10 to 14, ensuring food security for 41 percent of the country and, through this work, establishing the model for U.S. international efforts to improve global security.

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:
Since 2003, NIFA has been working with the Foreign Agricultural Service (FAS) and several U.S. universities to provide assistance to Afghanistan's agriculture sector. NIFA has identified and selected university faculty to serve on assignments focusing on the following priority areas: revitalizing the agriculture extension system; training veterinarians in laboratory diagnostic procedures; agricultural marketing and food safety programs for the fruit and nut sectors; livestock health; and, capacity building in Afghan agricultural universities. NIFA along with USDA's Animal and Plant Health Inspection Service and FAS, provide technical assistance and training to help build Afghanistan's national capacity to detect and control animal diseases

NIFA and FAS have been cooperating to manage and implement the U.S. – Iraq Agricultural Extension Revitalization Project (IAER) in close collaboration with Iraqi officials. The IAER project is intended to

facilitate Iraqi rural economic development by revitalizing its agricultural extension system so that a private-sector-driven agricultural sector can emerge. Phase one of the IAER project trained nearly 500 Iraqi nationals through 22 agricultural extension courses provided by a consortium of five U.S. land-grant universities working in partnership with Iraq's Ministry of Agriculture, Ministry of Higher Education, Ministry of Water Resources and Irrigation, and related institutions. The five land-grant universities are Texas A&M University, Washington State University, Utah State University, University of California at Davis, and New Mexico State University. The second phase of the IAER project is being conducted in two stages. During the first stage, 60-70 Iraqi extension specialists will receive up to 8 weeks of advanced extension training at the five U.S. land-grant universities. The Iraqi extension specialists will return home and use the extension skills, knowledge, and materials that they developed in the U.S. to train other extension agents and provide advice to farmers and producers in their communities.

Jordan Water Week built upon the outcomes of a NIFA International Science Education funded project to Purdue University and called upon the collective expertise of the partner institutions in the science and engineering of water management and the social implications of water and water conflicts to create an integrated international program in water management. The project objective was to build an integrated curriculum (for Bachelor of Science/Master of Science degree students) reflecting an interdisciplinary approach to water resource management challenges through distance learning and web-based tools. New courses were developed to enhance the knowledge and skills of students. Deliverables were water resources management curriculum and workshop training material related to water management and purification technologies. Related activities culminated in March 2010 with the celebration of Jordan Water Week, consisting of a reception and award ceremony for 22 students who completed the courses offered.

Selected Accomplishments Expected at the FY 2012 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.

International Science and Education grant projects are expected to enhance the international content of curricula; ensure that faculty work beyond the U.S. and bring lessons learned back home; promote international research partnerships; enhance the use and application of foreign technologies in the U.S.; and strengthen the role that colleges and universities play in maintaining U.S. competitiveness.

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.

Means and Strategies
NIFA funds research, education, and extension programs to develop and transfer technology, practices, and skills to support economically viable farms and ranches of various size and scale. This work reduces per unit and overall production costs, improves quality and yields, reduces environmental impact, and improves marketing and management decisions.

NIFA supports new science to boost U.S. agricultural production, improve global capacity to meet the growing food demand, and foster innovation in fighting hunger by addressing food security for vulnerable populations.

NIFA funds research to discover more productive and environmentally benign ways to produce food and fiber, not only in the U.S., but worldwide. Research ranges from using genomics to develop hybrids requiring fewer chemical inputs, to systems for more informed decision making, to new precision technology and nanotechnology to improve management of crops and animals.

Agricultural pests and diseases threaten the quality of agricultural products and the economic success of a farm operation and its surrounding community. Through basic and applied research, host-pathogen interactions can be identified, epidemiological and economic impacts of diseases and pests described, and control measures improved and validated. Through education and extension, producers and practitioners understand the threats from diseases and pests, and can implement effective and efficient means of control. NIFA sponsored research and analysis is a primary source of information on pests and diseases that impact the food and fiber system. The Food and Agriculture Defense Initiative seeks to prevent post-harvest bio-terrorism and disasters, improve homeland security and ensure growers can handle additional crops and new pests in an emergency.

NIFA funds the production and dissemination of science-based information, education and technical assistance that lead to capacity building in developing countries, promoting economic, political, and social stability.

Annual activities ensure that the relevance, quality and productivity of newly funded education, research, and extension projects are specifically linked helping America promote sustainable agricultural production and biotechnology exports as America works to increase foods security. This is accomplished through guidance for annual plans of work, the preparation of requests for applications, funding meritorious proposals and plans, and oversight of previously funded work.

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

NIFA Strategic Objective 2.1: Provide research, education, and extension to expand domestic market opportunities
NIFA Strategic Objective 3.2: Provide research, education, and extension to improve the quality of life in rural areas
NIFA Strategic Objective 4.1: Reduce the incidence of food-borne illnesses and contaminants through research, education, and extension
NIFA Strategic Objective 5.1: Ensure access to nutritious food
NIFA Strategic Objective 5.2: Promote healthier eating habits and lifestyles

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:
Analyses conducted by NIFA funded scientists in Connecticut revealed illegal residues of the insecticide pirimiphos methyl in imported cereals. Results were reported to the Connecticut Department of Consumer Protection and the U.S. Food and Drug Administration. There were 4,553 cases of cereal products recalled

nationally. These results had impact because stakeholders learned that a food security monitoring system was detecting contaminated products. The prompt recall of contaminated products prevented human illness.

NIFA funded Cooperative Extension Services around the nation has been a key provider of food safety education. For example, in Iowa 963 people have taken ServSafe(r) courses through Iowa State University Extension. As a result a food safety certification was awarded to 818 participants reflecting an 85 percent pass rate on the certification exam. Another example is in Ohio where 10,666 persons participated in all types of food education programs in 2009. Evaluations showed they had learned new information about one or more safe food handling skills or good agricultural practices that promote safe food.

During 2009, 672 food service employees became certified in ServSafe(tm) through NIFA funded Virginia Cooperative Extension across Virginia. 371 restaurants, schools, daycare centers, and prisons sent employees to the program. Of those who completed feedback forms, 72 percent of ServSafe(tm) respondents increased their knowledge of food safety practices. As a result of the ServSafe(tm) program across the State, $88,422 to $727,178 were potentially saved from pain and suffering, reduced productivity and medical expenses if one case of foodborne illness was prevented per food handler completing the course.

Across the nation the Expanded Food and Nutrition Education Program (EFNEP) program has been teaching adult and youth participant to improve food safety practices. As a result, 67 percent of the 147,043 adults have reported improving food safety and preparation practices as well as over 60,000 youth participants.

Researchers in Oklahoma showed that house flies regurgitate live *E. coli O157:H7* onto spinach plants, suggesting that this might be an important route of contamination in field situations that interface with filth fly breeding areas. As a result of this work, at least one distributor of leafy greens is implementing wider border zones separating cow-calf operations and greens production areas in California.

Selected Accomplishments Expected at the FY 2012 Proposed Resource Level:
NIFA will sponsor AFRI food safety projects specifically targeting emerging issues in food safety, particularly produce; food and agricultural defense; and will increase focus on projects dealing with nanotechnology for functional foods and food safety. In particular:

- Epidemiological studies of pre- and post-harvest areas to identify and characterize pathogenic organisms, including their sources and reservoirs, and to understand the transmission of the pathogen along the entire continuum of production, processing, distribution, and consumption.

- AFRI requests for proposals will seek environmental and ecological to increase our understanding of disease-causing microorganisms, their products, and naturally occurring contaminants in meats, poultry, seafood, and fresh fruits and vegetables.

- Application of new technologies, such as nanotechnology to develop new sensing and detection methods to monitor pathogens and other contaminants across the food chain.

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.

HPPG Measure: NIFA provides research, extension, and education to support USDA work to: (1) reduce the number of households with children who experience very low food security by 100,000; (2) establish national standards that result in improved quality of food sold in schools throughout the day; and (3) reduce

food deserts by creating economic opportunities for farmers and food entrepreneurs to vend in low access areas.

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:
NIFA funded researchers in Oregon conducted laboratory experiments on lingcod fillets by dipping them into an edible, protective coating enriched with fish oil. The liquid coating contained chitosan, which comes from crustacean shells and can be made into film for food wrapping to keep out bacteria and fungi and prolong storage life. This study found that the coating tripled the omega-3 fatty acids in the refrigerated and frozen fish when compared against the uncoated fish. Omega-3 fatty acids are essential nutrients, and research suggests that increasing them may have a number of health benefits.

NIFA funded researchers at the University of Missouri have developed a soy product that looks, feels, pulls apart and, most importantly, chews like real chicken. Using an extrusion cooking process, color, flavor and fiber are added to the soy protein isolate to produce a food product with the taste and texture of white chicken meat. This new food product will provide people with a healthy alternative to meat and can be useful in the fight against obesity. Soy analogs provide important bio-active components, such as isoflavones, which help maintain healthy bones, and prevent prostate, breast and colorectal cancers. Soy foods are also a good source of essential fatty acids and contain no cholesterol.

A NIFA funded study in Virginia found that the fatty acid composition of the grape, apple, and tomato pomace was similar to previous studies of respective oil and flour extracts. Grape pomace extract had the highest antioxidant activities in all tests followed by the apple pomace and tomato pomace. Anti-proliferation effects against certain types of human colon cancer cells and human liver cancer cells were significant and correlated to antioxidant activities. Grape pomace extract had the strongest anti-proliferation effects followed by apple pomace and tomato pomace. The results from this study suggest possible food applications for grape pomace in health promotion and disease prevention through improving human nutrition.

Selected Accomplishments Expected at the FY 2012 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.

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.

HPPG Measure: 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:
The EFNEP program continues to be highly effective in changing participants' behaviors, resulting in significant improvements in daily living skills. Ninety-five percent of recent graduates reported more closely following the MyPyramid recommendations, including an increase of two-thirds of a cup of fruits and vegetable per day, 83 percent of recent graduates improved food management practices, 88 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 Family Nutrition Program (FNP) in Florida provides nutrition education to individuals and their families' eligible to receive Supplemental Nutrition Assistance Program (SNAP) benefits (formally known as food stamps), known as SNAP education. The program provides nutrition education interventions to five different target populations in an effort to address the state's disparities. In the 2009 fiscal year, the FNP program provided 862,829 direct nutrition education interventions (as either single lesson or as a multi-lesson education series) in 33 counties to 153,937 adults and children eligible to receive SNAP benefits. Adult and youth participants reported increases in intent to change nutrition, physical activity, food resource management, and food safety behaviors.

NIFA funded North Carolina Cooperative Extension, in partnership with North Carolina Division of Public Health, offers the Eat Smart, Move More, Weigh Less program. Eat Smart, Move More, Weigh Less is a 15-week weight management program that offers dietary, physical activity, and lifestyle strategies that are consistent with a healthy weight. Participants plan, track and live mindfully in addition to eating healthy and being physically active. In its first full year of implementation and has reached over 2,500 participants across the state. Most participants set a healthy weight loss goal at the beginning of the program (some participants enroll to learn about healthy eating and physical activity and do not need to lose weight). Average weight loss is 7 pounds during the 15-week program.

Selected Accomplishments Expected at the FY 2012 Proposed Resource Level:
With EFNEP funds 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.

Means and Strategies

USDA has embraced the creation of NIFA from the former Cooperative State Research, Education, and Extension Service as a challenge to transform and reinvigorate its charge for funding agricultural science and education. The USDA has identified five key priorities for USDA science: Climate Change, Bioenergy, Childhood Nutrition, Food Safety, and International Food Security.

NIFA is in the midst of transforming itself around this vision. Relevant to this USDA strategic goal is two of the USDA's priorities, as articulated within NIFA:

Childhood Obesity. NIFA-supported programs ensure that nutritious foods are affordable and available, and provide guidance so that individuals and families are able to make informed, science-based decisions about their health and well-being.

Food Safety. NIFA food safety programs work to reduce the incidence of food-borne illness and provide a safer food supply by addressing the causes of microbial contamination and antimicrobial resistance, educating consumers and food safety professionals, and developing food processing technologies to improve safety.

NIFA has refocused AFRI so to address five priorities while preserving funding for foundational research and preparing the next generation of agricultural scientists. Grants are expected to be significantly larger to attract the best scientists and educators and give them sufficient resources to truly solve significant problems. Grants supporting the five priorities will be large, trans-disciplinary projects integrating research, education, and extension and, in some cases, may be regional in scale. These large grants will be funded on a continuation basis, committing the majority of existing AFRI funding for the expected five year duration of the grants. Therefore, funding above FY 2011 levels is required for AFRI to address additional priorities in the coming years.

In support of the priorities outlined above, AFRI will be focusing its funding on:

Childhood Obesity. The AFRI Obesity Prevention program will fund grants on childhood obesity prevention. Childhood obesity and overweight have increased dramatically in recent years. Currently 17 percent of children and adolescents are overweight or obese. Obesity early in life leads to lasting health and psychosocial problems and increased health care costs. The AFRI grants will be large, integrated, trans-disciplinary projects with durations of up to 5 years. The grants will be for the prevention of obesity in children through a focus on a healthy diet and appropriate physical activity.

Food Safety. The AFRI Food Safety Program will fund research, education and integrated grants focused on 1) improving the safety of the food supply through the development and implementation of effective strategies to prevent or mitigate food-borne contamination from the pre-harvest environment to consumption (farm-to-fork); 2) promoting the development and adoption of effective detection technologies for food-borne pathogens and other contaminants in foods; 3) reducing public health and economic impacts through the development, evaluation and implementation of effective traceability systems; and 4) increasing the number of food safety scientists, as well as scientists who are cross-trained in environmental science, engineering, and public health, to provide a holistic approach to ensuring the safety of the food supply. Large-scale grants will call for multidisciplinary research approaches that are necessary for solving food safety issues and creating a safer food supply.

Maintaining an affordable and safe national food supply is essential to agriculture and the nation. The ability to detect and prevent contamination by intentional or naturally occurring causes is a priority to ensuring food safety throughout the production, processing and distribution system. Collecting and disseminating accurate scientific knowledge will promote food safety from production to consumption. Through cooperation with its partners, NIFA sponsors the development and distribution of scientific-based information, technology and practices to producers, manufacturers, the work force, and regulatory agencies to help ensure the safety of agriculture and the food supply to domestic and global consumers. NIFA sponsors education, research, extension, and technology development to identify and assess organisms, pathogens, and toxins that cause human disease in foods and in the processing and distribution system, and supports the development and transfer of practices and intervention strategies that manage, reduce or eliminate food safety risk throughout the food chain.

NIFA-funded food safety programs work to reduce the incidence of food-borne illness and provide a safer food supply by addressing and eliminating causes of microbial resistance to contaminants, educating consumer and food safety professionals, and developing food processing technologies.

The National Integrated Food Safety Initiative (NIFSI) supports food safety grants that include food safety in child care and after-school programs. Among the many food safety topics addressed, NIFSI supports food safety education grants for consumers across the lifespan, including families with young children.

NIFA sponsors research and analysis to improve the scientific knowledge base concerning nutrition and health, and sponsors education and extension to promote healthy diets, reach children early, ensure access to healthy food, and utilize scientifically valid information to improve food, diet, and activity level decisions. NIFA partners develop, test and release new technologies and innovative production practices to enhance the nutritional properties of foods, and increase accessibility to more healthy and nutritious food products for the entire population. Research helps verify new classes of food compounds that play a role in human health through optimal nutrition. Education of professionals and practitioners helps ensure that relevant, scientifically valid information and recommendations reach consumers. Extension reduces risks from adoption of unproven and dangerous practices through science-based education.

NIFA intends to use its nutrition education efforts as key opportunities to promote healthier eating and more physical activity across the Nation. EFNEP is designed to assist limited resource audiences in acquiring the knowledge, skills, attitudes, and changed behavior necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being. EFNEP reaches youth audiences through in-school programs, out-of-school programs, and summer day camps.

In addition, NIFA sponsors research, education and extension involving the community to increase better lifestyles decision making and selection of healthy, nutritious affordable foods; on food assistance policy, health promotion, and community dimensions of nutrition and food security; to improve the quality and quantity of data to assess dietary and nutritional status and physical fitness; and on food choices and their determinants, including cost, education, and environmental and socioeconomic factors. The 4-H Afterschool Program helps youth develop healthy lifestyles and behaviors. Extension staff works with school systems to develop educational materials in the areas of health and nutrition. 4-H Afterschool works toward a vision that all children and youth are in safe, healthy, and enriching environments when away from their parents.

NIFA supports numerous research and extension activities to enhance the competitiveness and sustainability of rural and farm economies, ranging from the development of new food products to improvements in productivity and financial management. NIFA sponsors vital research and development contributions for new food products and technologies, quality improvements, new uses, and value added processes that enhance market opportunities for agricultural products. Through extension, NIFA and its partners effectively demonstrate and transfer this knowledge to users.

Annual activities ensure that the relevance, quality and productivity of newly funded education, research, and extension projects are specifically linked to ensuring that all of America's children have access to safe, nutritious, and balanced meals. This is accomplished through guidance for annual plans of work, the preparation of requests for applications, funding meritorious proposals and plans, and oversight of previously funded work.

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.
- Number of commercially viable perennial grasses with increased lignocellulosic energy values grown by U.S. farmers by 2021
- 50% reduction in net farm energy use from 2000 level by 2021
- 10% reduction in U.S. gasoline consumption as a result of sustainable production of high-quality, cost-effective feedstocks, by 2021
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Because research projects are generally 2-5 years' duration and outcomes generally lag research findings, many of the 2012 targets reflect the performance outcomes expected 10 years after the funding increases as a more realistic representation of their impacts. Such outcomes, to be realized by 2021, are noted with an *.

Performance Measure	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Target	2012 Target

Performance Measure	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Target	2012 Target
Cumulative number of biochemical or thermochemical technologies which are developed and used commercially for the conversion of biomass to fuels.	3	4	4	5	5	5
Number of commercially viable perennial grasses with increased lignocellulosic energy values grown by U.S. farmers by 2021	NA	NA	0	0	0	10*
50% reduction in net farm energy use from 2000 level by 2021	$12.9B 5.4% of expenses	NA	NA	NA	NA	$6.45B* 2.7% of expenses
10% reduction in U.S. gasoline consumption as a result of sustainable production of high-quality, cost-effective feedstocks, by 2021	NA	8.9M barrels per day	NA	NA	NA	8.0 barrels per day*
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review	$1,744	$2,069	$2,377	$2,797	$3,226	$3,664
Efficiency Measure - Proposal Review Time in Days	194	194	188	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.
- Effectiveness Measure - Portfolio Review Score - Portfolios of projects are assessed by experts on an annual (internal experts) and 5-year basis (external experts) to determine progress toward solving targeted national problems reflected in the agency and department goals.
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Key Performance Measures:

- Assessment and control technologies for agricultural emissions developed and used

Performance Measure	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Target	2012 Target
Assessment and control technologies for agricultural emissions developed and used	8	9	12	14	16	18
Effectiveness Measure - Portfolio Review Score - Portfolios of projects are assessed by experts on an annual (internal experts) and 5-year basis (external experts) to determine progress toward solving targeted national problems reflected in the agency and department goals. Units: The reviews assessed the portfolios based on the OMB R&D criteria of	88	88	87	88	89	90

Performance Measure	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Target	2012 Target
relevance, quality & performance. They are then assigned an overall quantitative score from 1-100.						
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review	$1,744	$2,069	$2,377	$2,797	$3,226	$3,664
Efficiency Measure - Proposal Review Time in Days	194	194	188	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	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Target	2012 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	10,240	10,849	11,488	11,800	12,300	12,800
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review	$1,744	$2,069	$2,377	$2,797	$3,226	$3,664
Efficiency Measure - Proposal Review Time in Days	194	194	188	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
- Development and use of effective intervention methods and strategies to change behavior and improve diet and physical activity in target populations
- Proportion of U.S. adults who are obese (BMI > 30%) declines by 10 % from the 2005 – 2006 level by 2021
- Cereal yield losses due to fungal pathogens reduced by 50% worldwide by 2021
- Cumulative dollars (thousands) saved each year for grant review
- Proposal review time in days

Performance Measure	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Target	2012 Target
Methods that reduce food contamination and growth of foodborne organisms	12	13	15	17	19	20
The cumulative number of specific plant diseases labs are prepared to detect	7	8	10	10	11	11
The cumulative number of specific animal diseases labs are prepared to detect	8	9	9	10	10	11
Dietary improvements by EFNEP participants	93%	93%	95%	95%	95%	95%
Development and use of effective intervention methods and strategies to change behavior and improve diet and physical activity in target populations	3	4	5	6	7	8
Proportion of U.S. adults who are obese (BMI > 30%) declines by 10 % from the 2005 – 2006 level by 2021	NA	NA	NA	NA	NA	30% of men; 31.8% of women*
Cereal yield losses due to fungal pathogens reduced by 50% worldwide by 2021	NA	2, 121 metric tons	NA	NA	NA	1,060 metric tons*
Efficiency Measure - Cumulative dollars (thousands) saved each year for grant review:	$1,744	$2,069	$2,377	$2,797	$3,226	$3,664
Efficiency Measure - Proposal Review Time in Days	194	194	188	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)
Discretionary Programs:			
Research			
Program	$478,466	$478,466	$409,767
Administrative (Direct Costs)	12,758	12,758	10,927
Indirect Costs	7,178	7,178	6,147
Total Costs	498,402	498,402	426,841
Education			
Program	54,224	54,224	50,937
Administrative (Direct Costs)	1,446	1,446	1,358
Indirect Costs	813	813	764
Total Costs	56,483	56,483	53,059
Extension Activities			
Program	260,859	260,859	241,731
Administrative (Direct Costs)	6,956	6,956	6,446
Indirect Costs	3,913	3,913	3,626
Total Costs	271,728	271,728	251,803
Integrated Activities			
Program	1,260	1,260	10,860
Administrative (Direct Costs)	33	33	289
Indirect Costs	19	19	163
Total Costs	1,312	1,312	11,312
Endowment Funds:			
Endowment Funds			
Program	11,880	11,880	21,880
Total Costs	11,880	11,880	21,880
Mandatory Programs:			
Risk Management Education			
Program	4,800	4,800	4,800
Administrative (Direct Costs)	128	128	128
Indirect Costs	72	72	72
Total Costs	5,000	5,000	5,000

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)
Beginning Farmers and Ranchers Program			
Program	18,240	18,240	18,240
Administrative (Direct Costs)	486	486	486
Indirect Costs	274	274	274
Total Costs	19,000	19,000	19,000
Total Strategic Goal 1	863,805	863,805	788,895

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)
Discretionary Programs:			
Research			
Program	$125,446	$125,446	$112,598
Administrative (Direct Costs)	3,345	3,345	3,003
Indirect Costs	1,882	1,882	1,689
Total Costs	130,673	130,673	117,290
Extension Activities			
Program	57,829	57,829	54,497
Administrative (Direct Costs)	1,542	1,542	1,453
Indirect Costs	868	868	818
Total Costs	60,239	60,239	56,768
Integrated Activities			
Program	12,143	12,143	0
Administrative (Direct Costs)	323	323	0
Indirect Costs	183	183	0
Total Costs	12,649	12,649	0
Total Strategic Goal 2	203,561	203,561	174,058

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)
Discretionary Programs:			
Research			
Program	$7,481	$7,481	$14,831
Administrative (Direct Costs)	201	201	396
Indirect Costs	111	111	222
Total Costs	7,793	7,793	15,449

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)
Extension Activities			
Program	37,008	37,008	35,792
Administrative (Direct Costs)	987	987	954
Indirect Costs	555	555	537
Total Costs	38,550	38,550	37,283
Integrated Activities			
Program	30,206	30,206	17,820
Administrative (Direct Costs)	806	806	475
Indirect Costs	453	453	267
Total Costs	31,465	31,465	18,562
Mandatory Programs:			
Biomass Research and Development Initiative			
Program	26,880	28,800	38,400
Administrative (Direct Costs)	717	768	1,024
Indirect Costs	403	432	576
Total Costs	28,000	30,000	40,000
Biodiesel Fuel Education Program			
Program	960	960	960
Administrative (Direct Costs)	26	26	26
Indirect Costs	14	14	14
Total Costs	1,000	1,000	1,000
Organic Research Initiative Sec. 7206			
Program	19,200	19,200	19,200
Administrative (Direct Costs)	512	512	512
Indirect Costs	288	288	288
Total Costs	20,000	20,000	20,000
Specialty Crop Grant Programs Sec. 7311			
Program	48,000	48,000	48,000
Administrative (Direct Costs)	1,280	1,280	1,280
Indirect Costs	720	720	720
Total Costs	50,000	50,000	50,000
Total Strategic Goal 3	176,808	178,808	182,294

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)
Discretionary Programs:			

Program Items	2010 Amount ($000)	2011 Amount ($000)	2012 Amount ($000)
Research			
Program	$95,193	$95,193	$96,231
Administrative (Direct Costs)	2,538	2,538	2,566
Indirect Costs	1,428	1,428	1,444
Total Costs	99,159	99,159	100,241
Extension Activities			
Program	119,430	119,430	116,097
Administrative (Direct Costs)	3,185	3,185	3,096
Indirect Costs	1,791	1,791	1,741
Total Costs	124,406	124,406	120,934
Integrated Activities			
Program	14,012	14,012	0
Administrative (Direct Costs)	374	374	0
Indirect Costs	210	210	0
Total Costs	14,596	14,596	0
Mandatory Programs:			
Healthy Urban Food Enterprise Development Center			
Program	960	960	0
Administrative (Direct Costs)	26	26	0
Indirect Costs	14	14	0
Total Costs	1,000	1,000	0
Total Strategic Goal 4	239,161	239,161	221,175