

2010 Explanatory Notes  
 NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
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## THE 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). The Secretary shall transfer to NIFA, effective not later than October 1, 2009, any and all other authorities administered by the Administrator of the Cooperative State Research, Education, and Extension Service. 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 entrée 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's Office of Higher Education Programs, 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 in this account are only for research projects. Special Research Grants are awarded on a discretionary 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 (formerly National Research Initiative Competitive Grants) - 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 priorities in United States agriculture in the following areas:

- 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 Iilisagvik 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 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) 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., 10 percent for FY 2009, 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 by formula to 1862 and 1890 Land-Grant Institutions for educational 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 maintains the ongoing rural health projects in Mississippi and Louisiana that focus 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. Beginning Farmer and Rancher Development Program - Section 7410 of FCEA amended section 7405 of FSRIA and made available \$18,000,000 for FY 2009, and \$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.

10. Healthy Urban Food Enterprise Development Center – Section 4402 of FCEA provides mandatory funding for a competitively awarded grant to a nonprofit organization to establish and support a healthy urban food enterprise development center to increase access to healthy affordable foods, including locally produced agricultural products, to underserved communities. Funding in the amount of \$1,000,000 is to be made available for FY 2009 through FY 2011.

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) Identify 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.

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.

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 (formerly Homeland Security) - 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 \$18,000,000 for FY 2009 and \$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 \$30,000,000 was made available for FY 2008 and \$50,000,000 is to be made available for each of FY 2009 through FY 2012 to carry out the SCRI.

### Section 2501, Outreach and Technical Assistance for Socially Disadvantaged Farmers and Ranchers Program

Section 14004 of FCEA authorizes mandatory funding for this program. It also amended Section 2501(a) of the FACT Act which authorizes the Secretary to make grants to eligible institutions and organizations so that they may provide outreach and technical assistance to encourage and assist socially disadvantaged farmers and ranchers to own and operate farms and ranches and to participate equitably in the full range of agricultural programs offered by the Department.

The authorization was amended to require that the outreach and technical assistance being provided shall be used exclusively (1) to enhance coordination of the outreach, technical assistance, and education efforts authorized under agriculture programs; and (2) to assist the Secretary in (i) reaching current and prospective socially disadvantaged farmers or ranchers in a linguistically appropriate manner; and (ii) improving the participation of those farmers and ranchers in Department programs.

This program serves Black farmers, Tribal groups, Hispanic and other growing groups of minority farmers and ranchers, and socially disadvantaged groups by encouraging participation in specific USDA loan, conservation, technical assistance, and related programs. The competitive program enhances the ability of minority farmers and ranchers to operate farms and ranches independently and produce income adequate to service debt, maintain operations, and provide a reasonable lifestyle. The program provides grants to educational institutions and community-based organizations to encourage and assist socially disadvantaged farmers and ranchers to own and operate farms and ranches, to participate in USDA agricultural programs, and to become integral parts of the agricultural community. Mandatory funding is made available in the amount of \$15,000,000 for FY 2009 and \$20,000,000 for FY 2010 through FY 2012.

### 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 \$20,000,000 in FY 2009, \$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, 2008, there were 360 permanent full-time employees and 21 other than permanent full time employees.

### **Agency Audit Reports**

The National Institute of Food and Agriculture

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 September 30, 2006  
 Southeastern Oklahoma State University, for the Fiscal Year Ending June 30, 2006  
 Rochester Institute of Technology, for the Fiscal Year Ending June 30, 2006  
 Rutgers, The State University of New Jersey, for the Fiscal Year Ending June 30, 2006  
 Sheldon Jackson College, for the Fiscal Year Ending June 30, 2006  
 Smithsonian Institution, for the Fiscal Year Ending September 30, 2006  
 South Carolina State University, for Fiscal Year Ending June 30, 2006  
 St. Augustine College, for Fiscal Year Ending June 30, 2006  
 State of Florida, for the Fiscal Year Ending June 30, 2006  
 State of Mississippi Institutions of Higher Learning, for the Fiscal Year Ending June 30, 2006  
 State of North Dakota, for Fiscal Year ending June 30, 1006  
 State of Rhode Island and Providence Plantations, for the Fiscal Year Ending June 30, 2006  
 State of South Carolina, for the Fiscal Year Ending June 30, 2006  
 State of Texas C/O Comptroller of Public Accounts, for the Fiscal Year August 31, 2006  
 State of Wisconsin, for the fiscal year ending June 30, 2006

The Brigham and Women's Hospital, Inc., or the Fiscal Year Ending September 30, 2006  
The Ohio State University, for the Fiscal Year Ending June 30, 2006  
The University of Alabama, for the Fiscal Year Ending September 30, 2006  
The University of Toledo, for the Fiscal Year Ending June 30, 2006  
Tillamook School District No. 9, for the Fiscal Year Ending June 30, 2006  
Tuskegee University, for the Fiscal Year Ending June 30, 2006  
University of Delaware, for the Fiscal Year Ending June 30, 2006  
University of Hawaii, for the Fiscal Year Ending June 30, 2006  
University of Idaho, for the Fiscal Year Ending June 30, 2006  
University of Medicine and Dentistry of New Jersey, for the Fiscal Year Ending June 30, 2006  
University of Miami, for the Fiscal Year Ending May 31, 2006  
University of Missouri, for the Fiscal year ending June 30, 2006  
University of Richmond and Affiliate, for the Fiscal Year Ending June 30, 2006  
University of Southern California, for the Fiscal Year Ending June 30, 2006  
University of Wyoming, for the Fiscal Year Ending June 30, 2006  
University System of New Hampshire, for the Fiscal Year Ending June 30, 2006  
Verona Area School District, for Fiscal Year Ending June 30, 2006  
Wayne State University, for Fiscal Year Ending September 30, 2006  
Yale University, for Fiscal Year Ending June 30, 2006  
Youngstown State University, for Fiscal Year Ending June 30, 2006  
Appleton Area School District, for Fiscal Year Ending June 30, 2007  
Boise State University, for Fiscal Year Ending June 30, 2007  
Carnegie Institution of Washington, for Fiscal Year Ending June 30, 2007  
Case Western Reserve University, for Fiscal Year Ending June 30, 2007  
Coastal Enterprises, Inc & Subsidiaries, for Fiscal Year Ending September 30, 2007  
The Trustees of Columbia University in the City of New York, for Fiscal Year Ending June 30, 2007  
Dodgeville School District, for Fiscal Year Ending June 30, 2007  
Georgia Institute of Technology/Georgia Tech Research Corporation, for Fiscal Year Ending June 30, 2007  
Howard-Suamico School District, for Fiscal Year Ending June 30, 2007  
Keck Graduate Institute of Applied Life Sciences, for Fiscal Year Ending June 30, 2007  
Massachusetts Institute of Technology, for Fiscal Year Ending June 30, 2007  
New England Medical Center Hospitals, Inc., for Fiscal Year Ending September 30, 2007  
Riverdale School District, for Fiscal Year Ending June 30, 2007  
Rutgers, The State University of New Jersey, for Fiscal Year Ending June 30, 2007  
Saint Louis University, for Fiscal Year Ending June 30, 2007  
School District of Denmark, for Fiscal Year Ending June 30, 2007  
School District of Platteville, for Fiscal Year Ending June 30, 2007  
School District of Waupaca, for Fiscal Year Ending June 30, 2007  
Southern Illinois University, for Fiscal Year Ending June 30, 2007  
St. Augustine College, for Fiscal Year Ending June 30, 2007  
State of Colorado, for Fiscal Year Ending June 30, 2007  
State of Florida, for Fiscal Year Ending June 30, 2007  
State of Montana, for Fiscal Year Ending June 30, 2007  
State of Tennessee, for Fiscal Year Ending June 30, 2007  
State of Texas c/o Comptroller of Public Accounts, for Fiscal Year Ending August 31, 2007  
State of Utah, for Fiscal Year Ending June 30, 2007  
State of Wisconsin, for Fiscal Year Ending June 30, 2007  
The Ohio State University, for Fiscal Year Ending June 30, 2007  
University of Delaware, for Fiscal Year Ending June 30, 2007  
University of Hawaii/State of Hawaii, for Fiscal Year Ending June 30, 2007  
University of Medicine & Dentistry of New Jersey, for Fiscal Year Ending June 30, 2007  
University of Missouri System, for Fiscal Year Ending June 30, 2007  
University of Puerto Rico, for Fiscal Year Ending June 30, 2007  
University of Southern California, for Fiscal Year Ending June 30, 2007  
University of Vermont and State Agricultural College, for Fiscal Year Ending June 30, 2007  
University of Wyoming, for Fiscal Year Ending June 30, 2007

Waianae District Comprehensive Health and Hospital Board, Incorporated and Subsidiary, for Fiscal Year Ending June 30, 2007

Wayne State University, for Fiscal Year Ending September 30, 2007

Youngstown State University, for Fiscal Year Ending June 30, 2007

OIG Reports (OIG Audit No. and Title)

13001-3-Te	NIFA Implementation of Agricultural Research, Extension, and Education Reform Act of 1998
13011-3-At	Review of 1994 Tribal Land Grant Institutions
13601-1-Hy	National Research Initiative – Competitive Grants Program
50099-17-KC	NIFA Biosecurity Grant Funding Controls Over Biosecurity Grant Funds Usage
50601-14-Te	Exports of Genetically Engineered Agricultural Commodities
50601-16-Te	Controls over Genetically Engineered Animal and Insect Research

GAO Studies (GAO Job Code and Title)

192238	Federal Grant and Direct Assistance Participants Who Owe Outstanding Federal Taxes
194749	Improving Federal Oversight and Accountability for Federal Grant Funds
360855	Veterinarian Capabilities for Disease Prevention, Food Safety, and Defense
360978	USDA Biofuel Efforts
440674	Integration of U.S. Biosurveillance Efforts
450625	Federal Funding to the Nonprofit Sector

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## Available Funds and Staff-Years

2008 Actual and Estimated 2009 and 2010

Item	2008		2009		2010	
	Actual	Staff	Estimated	Staff	Estimated	Staff
	Amount	Years	Amount	Years	Amount	Years
<b>Direct Appropriations:</b>						
Research and Education Activities .....	\$668,286,000	212	\$691,043,000	252	\$622,892,000	252
Native American Endowment Fund .....	11,880,000		11,880,000		11,880,000	
Endowment Interest .....	3,209,000		3,823,000		3,823,000	
Extension Activities .....	453,265,000	154	474,250,000	174	487,005,000	174
Integrated Activities .....	55,850,000	8	56,864,000	8	56,864,000	8
Section 2501 .....	6,395,000	2	--		--	
Trade and Biotechnology Activities (Specialty Crops) .....	39,000		16,978		--	
Risk Management Education Program .....	5,000,000		5,000,000		5,000,000	
Biodiesel Fuel Education Program, Section 9004 .....	1,000,000		1,000,000		1,000,000	
Specialty Crop Research Initiative.....Section 9004 .....	30,000,000		50,000,000		50,000,000	
Congressional Relations .....	118,000		--		--	
Community Food Projects .....	--		10,000,000		5,000,000	
Biomass Research and Development, Sec. 9008 .....	--		20,000,000		28,000,000	
Organic Agriculture Research and Extension Initiative, Sec. 7218 .....	3,000,000		--		--	
Organic Research Initiative .....	--		18,000,000		20,000,000	
Outreach and Technical Assistance for Socially Disadvantaged	--					
Farmers and Ranchers, Sec. 14004 .....	--		15,000,000		20,000,000	
Beginning Farmer and Rancher Programs, Section 7410 .....	--		18,000,000		19,000,000	
Healthy Urban Food Enterprise Development Center, Sec. 4402 .....	--		1,000,000		1,000,000	
Rescission on CSREES Programs.....	8,344,987		--		--	
<b>Total, Direct Appropriations .....</b>	<b>1,246,386,987</b>	<b>376</b>	<b>1,375,876,978</b>	<b>434</b>	<b>1,331,464,000</b>	<b>434</b>
<b>Obligations under other USDA appropriations:</b>						
<b>Research and Education Activities:</b>						
<b>Agricultural Research Service:</b>						
Biotechnology Risk Assessment .....	1,849,479	--	1,849,479	--	1,849,479	--
Shared Cost of the National Agricultural Research, Education,						
IR-4 Quality Assurance Program .....	200,000	--	50,000	--	50,000	--
<b>Foreign Agricultural Service:</b>						
Salary, Benefits, and Operating Expenses for Detailee .....	328,667	--	337,713	--	--	--
<b>Forest Service:</b>						
Graduate Training .....	250,000		--		--	
<b>Rural Management Agency:</b>						
Tribal Tax Guide Project .....	277,000	--	--	--	--	--
Various agencies sharing cost of the USDA Small						
Business Innovation Research Program (SBIR) .....	3,027,146	--	3,027,000	--	3,027,000	--
Various research agencies sharing cost of the Current						
Research Information System (CRIS) .....	600,149	6	444,197	6	457,980	6
Miscellaneous Reimbursements .....	185,198	--	--	--	--	--
Other Anticipated Reimbursements.....	--	--	1,000,000	--	1,000,000	--
<b>Subtotal, Res./Ed. Other USDA Appropriations .....</b>	<b>6,717,639</b>	<b>6</b>	<b>6,708,389</b>	<b>6</b>	<b>6,384,459</b>	<b>6</b>
<b>Extension Activities:</b>						
<b>Foreign Agricultural Service:</b>						
Iraq Agricultural Extension Revitalization Project .....	3,130,789	--	1,700,000	--	1,700,000	--
<b>Natural Resources Conservation Service:</b>						
Conservation Effects Assessment Project .....	600,000	--	600,000	--	600,000	--
<b>Risk Management Agency</b>						
Integrated Pest Management Pest Information Platform for						
and Education .....	--		500,000	--	--	--
Miscellaneous Reimbursements .....	174,938	--	190,309	--	--	--
Other Anticipated Reimbursements .....	--	--	1,000,000	--	1,600,000	--
<b>Subtotal, Extension Other USDA Appropriations .....</b>	<b>3,905,727</b>	<b>0</b>	<b>3,990,309</b>	<b>0</b>	<b>3,900,000</b>	<b>0</b>
<b>Total, CSREES Other USDA Appropriations .....</b>	<b>10,623,366</b>	<b>6</b>	<b>10,698,698</b>	<b>6</b>	<b>10,284,459</b>	<b>6</b>
<b>Total, Agriculture Appropriations .....</b>	<b>1,257,010,353</b>	<b>382</b>	<b>1,386,575,676</b>	<b>440</b>	<b>1,341,748,459</b>	<b>440</b>

	2008		2009		2010	
	Actual		Estimated		Estimated	
Item	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>Other Federal Funds:</b>						
<b>Research and Education Activities:</b>						
Army Corps of Engineers:						
Recreation and Natural Resource Investigations.....	259,570	--	250,000	--	250,000	--
Department of Commerce:						
National Oceanic and Atmospheric Administration,						
National Atmospheric Deposition Program .....	272,734	--	243,007	--	243,007	--
Department of Defense:						
Foot and Mouth Disease .....	250,000	--	250,000	--	250,000	--
U. S. Army Environmental Center Liaison .....	188,730	--	205,000	--	205,000	--
Department of Interior:						
Geological Survey, Atmospheric Deposition .....	671,540	--	672,000	--	672,000	--
National Park Service, Atmospheric Deposition .....	322,982	--	323,000	--	323,000	--
Department of State:						
Salary, Benefits, and Operating Expenses for Detailee .....	100,743		77,158		--	--
Environmental Protection Agency:						
Biopesticide Demonstration Project .....	400,000	--	400,000	--	400,000	--
National Atmospheric Deposition Program .....	537,140	--	537,000	--	537,000	--
Miscellaneous Reimbursements .....	147,501	--	32,098	--	100,000	--
Other Anticipated Reimbursements .....	--	--	170,927	--	504,113	--
Subtotal, Res./Educ. Other Federal Funds .....	3,150,940	0	3,160,190	0	3,484,120	0
<b>Extension Activities:</b>						
Department of Defense:						
Family Life Skills .....	3,136,194	--	2,852,791	--	4,222,333	--
Family Education and Advocacy Programs .....	592,185	--	538,350	--	300,000	--
Army Youth Development Project .....	25,000,000	--	970,000	--	20,000,000	--
Air Force 4-H Programs .....	500,000	--	1,000,000	--	1,000,000	--
Air Force Advocacy Program .....	310,000	--	2,065,348	--	2,065,348	--
Multi-Component Family Support Network Initiative .....	4,455,000	--	4,050,000	--	4,050,000	--
Navy 4-H Programs .....	786,319	--	1,000,000	--	1,000,000	--
Department of Health and Human Services:						
Youth and Families Administration of Children .....	600,000	--	--	--	--	--
Department of Homeland Security:						
Field Assessments Concerning Disaster Awareness .....	350,000	--	250,000	--	--	--
Department of Housing and Urban Development:						
Healthy Homes Project .....	310,000	--	310,000	--	310,000	--
IPM Training to Public Housing Authorities .....	175,000	--	175,000	--	175,000	--
Environmental Protection Agency:						
Training for Pesticide Applicators .....	1,700,000	--	1,700,000	--	1,700,000	--
Agriculture Water Quality .....	--	--	144,950	--	--	--
Miscellaneous Reimbursements .....	77,902	--	166,000	--	166,000	--
Other Anticipated Reimbursements .....	--	--	22,685,579	--	3,009,646	--
Subtotal, Extension Other Federal Funds .....	37,992,600	0	37,908,018	0	37,998,327	0
Total, CSREES Other Federal Funds .....	41,143,540	0	41,068,208	0	41,482,447	0
Total, CSREES Available Funds .....	1,298,153,893	382	1,427,643,884	440	1,383,230,906	440

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Permanent Positions by Grade and Staff-Year Summary2008 Actual and Estimated 2009 and 2010

		2008	::	2009	::	2010
Grade	::	Headquarters	::	Headquarters	::	Headquarters
Senior Executive Service	::	10	::	10	::	10
GS-15	::	74	::	79	::	79
GS-14	::	53	::	63	::	63
GS-13	::	43	::	53	::	53
GS-12	::	68	::	61	::	61
GS-11	::	21	::	30	::	30
GS-10	::	1	::	1	::	1
GS-9	::	15	::	20	::	20
GS-8	::	19	::	22	::	22
GS-7	::	51	::	61	::	61
GS-6	::	17	::	28	::	28
GS-5	::	5	::	10	::	10
GS-4	::	2	::	2	::	2
GS-3	::	1	::	0	::	0
GS-2	::	0	::	0	::	0
Total Permanent Positions .....	::	380	::	440	::	440
Unfilled Positions end-of-year.....	::	-20	::	-26	::	-26
Total, Permanent Full-Time Employment, end-of-year.....	::	360	::	414	::	414
Staff-Year Estimate....	::	382	::	440	::	440

## 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

1 For payments to agricultural experiment stations, for cooperative forestry and other research, for facilities, and for other expenses, [\$691,043,000, of which \$113,275,000 shall be for the purposes, and in the amounts, specified in the table titled "Cooperative State Research, Education, and Extension Service, Research and Education Activities, Congressionally-designated Projects" in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act),] \$622,892,000, as follows: to carry out the provisions of the Hatch Act of 1887 (7 U.S.C. 361a-i), \$207,106,000; for grants for cooperative forestry research (16 U.S.C. 582a through a-7), \$27,535,000; for payments to eligible institutions (7 U.S.C. 3222), \$45,504,000, provided that each institution receives no less than \$1,000,000; for special grants (7 U.S.C. 450i(c)), [\$84,499,000] \$2,021,000; for competitive grants on improved pest control (7 U.S.C. 450i(c)), \$15,945,000; for competitive grants (7 U.S.C. 450(i)(b)), \$201,504,000, to remain available until expended; for the support of animal health and disease programs (7 U.S.C. 3195), \$2,950,000; for supplemental and alternative crops and products (7 U.S.C. 3319d), \$819,000; for grants for research pursuant to the Critical Agricultural Materials Act (7 U.S.C. 178 et seq.), \$1,083,000, 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), \$1,610,000, to remain available until expended; for rangeland research grants (7 U.S.C. 3333), \$983,000; for higher education graduate fellowship grants (7 U.S.C. 3152(b)(6)), \$3,859,000, to remain available until expended (7 U.S.C. 2209b); for a program pursuant to section 1415A of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3151a), \$2,950,000, to remain available until expended; for higher education challenge grants

(7 U.S.C. 3152(b)(1)), [~~\$5,654,000~~]\$23,154,000; for a higher education multicultural scholars program (7 U.S.C. 3152(b)(5)), \$981,000, to remain available until expended (7 U.S.C. 2209b); for an education grants program for Hispanic-serving Institutions (7 U.S.C. 3241), [~~\$6,237,000~~]\$9,237,000; 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, \$3,196,000; for a [secondary agriculture education program and 2-year post-secondary education]secondary education, two-year postsecondary education, and agriculture in the K-12 classroom (7 U.S.C. 3152(j)), [~~\$983,000~~]\$18,483,000; for aquaculture grants (7 U.S.C. 3322), \$3,928,000; for sustainable agriculture research and education (7 U.S.C. 5811), \$14,399,000; 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, [~~\$15,000,000~~]\$18,000,000, 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, \$3,342,000; 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), \$800,000; for a new era rural technology program pursuant to section 1473E of the National Agricultural Research, Extension, and Teaching Act of 1977 (7 U.S.C. 3319e), \$750,000; and for necessary expenses of Research and Education Activities, [~~\$39,426,000~~]\$12,753,000, of which \$2,704,000 for the Research, Education, and Economics Information System and \$2,136,000 for the Electronic Grants Information System, are to remain available until expended.

Explanation of Changes:

The first change deletes the language for Congressionally-designated projects described in Section 4 of the explanatory statement of the Consolidated Appropriations Act. The budget does not include funding for these projects.

The second change in the language changes the program title to reflect the title as stated in Section 7109, of the Food, Conservation, and Energy Act of 2008.

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. (*7 U.S.C. 328, 427, 427i, 1281 note, 1621, 2201, 2204, 2225, 3101 note; 10 U.S.C.2306; 16 U.S.C. 590(a)-590(b), 590(k); 18 U.S.C. 1114; 19 U.S.C. 1306(a), 1306(c);20 U.S.C. 191-194; 21 U.S.C. 114c, 114e-131; 42 U.S.C. 1476(e), 1483; Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2009.*)

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Lead-Off Tabular Statement

RESEARCH AND EDUCATION ACTIVITIES

Appropriations Act, 2009 .....	\$706,746,000	a/
Budget Estimate, 2010 .....	<u>638,595,000</u>	a/
Decrease in Appropriation .....	<u>-68,151,000</u>	

a/ Totals include an estimate for the interest earned on the Native American Endowment Fund. That amount is \$3,823,000 in Fiscal Year 2009 and Fiscal Year 2010.

SUMMARY OF INCREASES AND DECREASES

(On basis of adjusted appropriation)

<u>Item of Change</u>	<u>2009 Estimated</u>	<u>Pay Costs</u>	<u>Program Changes</u>	<u>2010 Estimated</u>
Research and Education Activities:				
Special Research Grants .....	84,499,000	- -	-\$82,478,000	2,021,000
Federal Administration (Direct Appropriation) .....	39,426,000	+603,000	-27,276,000	12,753,000
Higher Education Programs:				
Institution Challenge Grants .....	5,654,000	- -	+17,500,000	23,154,000
Hispanic Serving Institutions Education Grants Program .....	6,237,000	- -	+3,000,000	9,237,000
Secondary/2-Year Post Secondary .....	983,000	- -	+17,500,000	18,483,000
1890 Institution Capacity Building Grants	15,000,000	- -	+3,000,000	18,000,000
All Other .....	<u>539,244,000</u>	<u>- -</u>	<u>- -</u>	<u>539,244,000</u>
Subtotal .....	691,043,000	+603,000	-68,754,000	622,892,000
Native American Institutions Interest .....	3,823,000	- -	- -	3,823,000
Native American Endowment .....	<u>11,880,000</u>	<u>- -</u>	<u>- -</u>	<u>11,880,000</u>
Total Available, Research and Education Activities .....	<u>706,746,000</u>	<u>+603,000</u>	<u>-68,754,000</u>	<u>638,595,000</u>

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## RESEARCH AND EDUCATION

Project Statement by Program

(On basis of Appropriation)

Project	2008 Actual		2009 Estimated		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
<b>Research &amp; Education Activities:</b>							
Hatch Act .....	\$195,811,656		\$207,106,000		--	\$207,106,000	
Cooperative Forestry Research Program .....	24,791,238		27,535,000		--	27,535,000	
Payments to 1890 Colleges and Tuskegee University .....	41,050,620		45,504,000		--	45,504,000	
Animal Health and Disease Research, Section 1433 .....	4,970,958		2,950,000		--	2,950,000	
Special Research Grants							
Other Special Research Grants .....	90,164,400		83,091,000		-82,478,000	613,000	
Global Change, UV-Monitoring .....	1,610,646		1,408,000		--	1,408,000	
Total Special Research Grants .....	91,775,046		84,499,000		-82,478,000	2,021,000	
Improved Pest Control							
Expert IPM Decision Supp. System .....	153,915		154,000		--	154,000	
Integrated Pest Management .....	2,379,228		2,379,000		--	2,379,000	
Minor Crop Pest Mgmt, IR-4 .....	11,367,864		12,000,000		--	12,000,000	
Pest Management Alternatives .....	1,412,046		1,412,000		--	1,412,000	
Total Improved Pest Control .....	15,313,053		15,945,000		--	15,945,000	
Critical Agricultural Materials							
Act of 1984 .....	1,083,363		1,083,000		--	1,083,000	
Aquaculture Centers, Section 1475 .....	3,928,308		3,928,000		--	3,928,000	
Sustainable Agriculture .....	14,398,500		14,399,000		--	14,399,000	
1994 Research Program .....	1,533,192		1,610,000		--	1,610,000	
Supplemental and Alternative Crops, Section 1473D .....	819,225		819,000		--	819,000	
Agriculture and Food Research Initiative (formerly NRD) .....	190,883,397		201,504,000		--	201,504,000	
Joe Skeen Institute for Rangeland Restoration, NM, TX, MT .....	983,070		983,000		--	983,000	
New Era Rural Technology Program .....	--		750,000		--	750,000	

Project	2008 Actual		2009 Estimated		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
Federal Administration (direct approp.)							
REEIS .....	2,703,939		2,704,000		--	2,704,000	
Move Costs .....	--		--		+1,500,000	1,500,000	
Funding for Pay Cost .....	4,218,264		4,973,000		+603,000	5,576,000	
Partial Funding for Office of Extramural Programs .....	439,899		440,000		--	440,000	
Partial Funding for Peer Panels .....	397,200		397,000		--	397,000	
Compliance with P.L. 106-107 and Govt Paperwork Elimination Act .....	2,135,943		2,136,000		--	2,136,000	
Other .....	32,258,598		28,776,000		-28,776,000	0	
<b>Total Federal Administration .....</b>	<b>42,153,843</b>		<b>39,426,000</b>		<b>-26,673,000</b>	<b>12,753,000</b>	
Higher Education:							
Graduate Fellowships Grants .....	3,675,093		3,859,000		--	3,859,000	
* Institution Challenge Grants .....	5,385,039		5,654,000		+17,500,000	23,154,000	
* 1890 Institution Capacity Building Grants .....	13,592,184		15,000,000		+3,000,000	18,000,000	
Multicultural Scholars .....	981,084		981,000		--	981,000	
* Hispanic Serving Institutions Education Grants Program .....	6,046,377		6,237,000		+3,000,000	9,237,000	
Tribal Colleges Education Equity Grants Program .....	3,318,606		3,342,000		--	3,342,000	
* Secondary/2-Year Post Secondary .....	983,070		983,000		+17,500,000	18,483,000	
Veterinary Medical Services Act .....	868,875		2,950,000		--	2,950,000	
Alaska Native-serving and Native Hawaiian-serving Institutions .....	3,195,474		3,196,000		--	3,196,000	
Resident Instruction Grants for Insular Areas .....	744,750		800,000		--	800,000	
<b>Total Higher Education Grants .....</b>	<b>38,790,552</b>		<b>43,002,000</b>		<b>+41,000,000</b>	<b>84,002,000</b>	
Tribal College Endowment Fund:							
Endowment Fund .....	11,880,000		11,880,000		--	11,880,000	
Interest Earned .....	3,209,000		3,823,000		--	3,823,000	
<b>Total Endowment Fund .....</b>	<b>15,089,000</b>		<b>15,703,000</b>		<b>--</b>	<b>15,703,000</b>	
<b>Total Available or Estimate .....</b>	<b>683,375,021</b>	<b>258</b>	<b>706,746,000</b>	<b>258</b>	<b>-68,151,000</b>	<b>638,595,000</b>	<b>258</b>
Interest Earned .....	-3,209,000		-3,823,000				
Rescission .....	+4,710,979		--				
<b>Total Available or Estimate .....</b>	<b>684,877,000</b>	<b>258</b>	<b>702,923,000</b>	<b>258</b>			
* Subtotal Rural Revitalization Initiative	--		--		+41,000,000	41,000,000	

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

RESEARCH AND EDUCATION

Project Statement by Program

(On basis of Available Funds)

(Includes Carryover Balance)

Project	2008 Actual		2009 Estimate		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
<b>Research &amp; Education Activities:</b>							
Hatch Act .....	\$195,766,656	:	\$207,106,000	:	--	\$207,106,000	:
Cooperative Forestry Research Program .....	24,791,238	:	27,535,000	:	--	27,535,000	:
Payments to 1890 Colleges and Tuskegee University .....	41,050,620	:	45,504,000	:	--	45,504,000	:
Animal Health and Disease Research, Section 1433 .....	4,970,958	:	2,950,000	:	--	2,950,000	:
Special Research Grants							
Other Special Research Grants .....	90,164,400	:	83,091,000	:	-82,478,000	613,000	:
Global Change, UV-Monitoring .....	1,610,646	:	1,408,000	:	--	1,408,000	:
Total Special Research Grants .....	91,775,046	:	84,499,000	:	-82,478,000	2,021,000	:
Improved Pest Control							
Expert IPM Decision Supp. System .....	153,915	:	154,000	:	--	154,000	:
Integrated Pest Management .....	2,379,228	:	2,379,000	:	--	2,379,000	:
Minor Crop Pest Mgmt, IR-4 .....	11,367,864	:	12,000,000	:	--	12,000,000	:
Pest Management Alternatives .....	1,412,046	:	1,412,000	:	--	1,412,000	:
Total Improved Pest Control .....	15,313,053	:	15,945,000	:	--	15,945,000	:
Critical Agricultural Materials							
Act of 1984 .....	226,079	:	1,083,000	:	--	1,083,000	:
Carryover .....	--	:	857,284	:	-857,284	--	:
Aquaculture Centers, Section 1475 .....	3,928,308	:	3,928,000	:	--	3,928,000	:
Sustainable Agriculture .....	14,398,500	:	14,399,000	:	--	14,399,000	:
1994 Research Program .....	774,008	:	1,610,000	:	--	1,610,000	:
Carryover .....	--	:	879,802	:	-879,802	--	:
Supplemental and Alternative Crops, Section 1473D .....	819,225	:	819,000	:	--	819,000	:
Agriculture and Food Research Initiative (formerly NRI) .....	186,461,049	:	201,504,000	:	--	201,504,000	:
Carryover .....	--	:	107,208,939	:	-107,208,939	--	:
Joe Skeen Institute for Rangeland Restoration, NM, TX, MT .....	983,070	:	983,000	:	--	983,000	:
New Era Rural Technology Program .....	--	:	750,000	:	--	750,000	:

Project	2008 Actual		2009 Estimate		Increase or Decrease	2010 Estimated	
	Amount	Staff : Years	Amount	Staff : Years		Amount	Staff : Years
Federal Administration (direct approp.)							
REEIS .....	2,047,284		2,704,000		--	2,704,000	
Move Costs .....	--		--		+1,500,000	1,500,000	
Funding for Pay Cost .....	4,218,264		4,973,000		+603,000	5,576,000	
Partial Funding for Office of							
Extramural Programs .....	439,899		440,000		--	440,000	
Partial Funding for Peer Panels .....	397,200		397,000		--	397,000	
Compliance with P.L. 106-107 and							
Govt Paperwork Elimination Act .....	2,093,854		2,136,000		--	2,136,000	
Other .....	32,258,598		28,776,000		-28,776,000	--	
Total Federal Administration .....	41,455,099		39,426,000		-26,673,000	12,753,000	
Carryover .....	--		698,744		-698,744	--	
Higher Education:							
Graduate Fellowships Grants.....	6,149,273		3,859,000		--	3,859,000	
* Institution Challenge Grants .....	5,385,039		5,654,000		+17,500,000	23,154,000	
* 1890 Institution Capacity Building Grants .....	13,592,184		15,000,000		+3,000,000	18,000,000	
Multicultural Scholars .....	785,491		981,000		--	981,000	
* Hispanic Serving Institutions Education							
Grants Program .....	6,046,377		6,237,000		+3,000,000	9,237,000	
Tribal Colleges Education Equity Grants							
Program .....	3,318,606		3,342,000		--	3,342,000	
* Secondary/2-Year Post Secondary .....	983,070		983,000		+17,500,000	18,483,000	
Veterinary Medical Services Act .....	86,888		2,950,000		--	2,950,000	
Alaska Native-serving and Native							
Hawaiian-serving Institutions .....	3,195,474		3,196,000		--	3,196,000	
Resident Instruction Grants for Insular							
Areas .....	744,750		800,000		--	800,000	
Total Higher Education Grants .....	40,287,152		43,002,000		+41,000,000	84,002,000	
Carryover .....	--		8,029,793		-8,029,793	--	
Tribal College Endowment Fund:							
Endowment Fund .....	11,880,000		11,880,000		--	11,880,000	
Interest Earned .....	3,209,000		3,823,000		--	3,823,000	
Total Endowment Fund .....	15,089,000		15,703,000		--	15,703,000	
Total Available or Estimate .....	678,089,061	258	824,420,562	258	-185,825,562	638,595,000	258
Unobligated Balance:							
Available, start of year .....	-113,998,135		-117,674,562		+117,674,562	--	
Lapsing .....	45,000		--				
Available, end of year .....	117,674,556		--				
Total Available or Estimate .....	681,810,482	258	706,746,000	258	-68,151,000	638,595,000	258
Interest Earned .....	-3,209,000		-3,823,000				
Rescission .....	+4,710,979		--				
Total Appropriation.....	683,312,461	258	702,923,000	258			
* Subtotal Rural Revitalization Initiative	--		--		+41,000,000	41,000,000	

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## Justification of Increases and Decreases

## Research and Education Activities

1. As part of the President's \$70 million Rural Revitalization Initiative to improve the rural economy through improvements to research and education programs, an increase of \$41,000,000 for Higher Education programs (\$43,002,000 available in 2009) as follows (an additional \$29 million is included in Extension Activities):

- a. An increase of \$17,500,000 for the Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom (SPECA) Grants Program (\$983,000 available in 2009) as follows: In support of the President's Agenda item to make math and science education a national priority at all grade levels, in FY 2010 NIFA proposes an increase of \$17,500,000 to improve rural education within the 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 the existence in the United States of a qualified workforce;
- (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 supplemental SPECA funds, NIFA will establish a separate 'Sustaining Rural Communities through Education' component within that 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.

- b. An increase of \$17,500,000 for the Higher Education Institution Challenge (HEC) Grants (\$5,654,000 available in FY 2009) as follows:

In support of the President's Agenda item to make math and science education a national priority at all grade levels, in FY 2010 NIFA proposes an increase of \$17,500,000 to improve rural education within the HEC 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 the existence in the United States of a qualified workforce;

- (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.

Activities will address program goals to increase: the number of graduate with a baccalaureate (or higher) degree in the food and agricultural sciences, and the quality of postsecondary instruction within these disciplines.

- c. An increase of \$3,000,000 for 1890 Institution Capacity Building Grants (\$15,000,000 available in 2009) as follows:

An increase of \$3,000,000 is proposed in FY 2010 to strengthen teaching and research programs in the food and agricultural sciences by building the institutional capacities of the 1890 Land-Grant Institutions, Tuskegee University and West Virginia State University through cooperative linkages with Federal and non-Federal entities. The 1890 Institution Capacity Building Grants program supports projects that strengthen teaching programs in the food and agricultural sciences in the targeted educational need areas of curriculum design and materials development, faculty preparation and enhancement for teaching, instructional delivery systems, scientific instrumentation for teaching, student experiential learning, and student recruitment and retention. The program also supports projects that strengthen research programs in the targeted research need areas of studies and experimentation in food and agricultural sciences, centralized research support systems, technology delivery systems, and other creative applications.

- d. An increase of \$3,000,000 for Hispanic-Serving Institutions Education Grants Program (\$6,237,000 available in 2009) as follows:

An increase of \$3,000,000 is proposed in FY 2010. This program promotes and strengthens the ability of Hispanic-serving institutions (HSIs) to carry out education programs that attract outstanding students and produce graduates capable of enhancing the nation's food and agricultural scientific and professional work force. Projects may involve individual institutions, consortia of HSIs, or cooperative initiatives between two or more HSIs or with other colleges and universities, units of government, or the private sector.

- 2. A decrease of \$82,478,000 for Special Research Grants to eliminate earmarked projects (\$82,478,000 available in 2009) as follows:

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 2010 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 a 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 will be included in the scope of the Agriculture and Food Research Initiative program in FY 2010. Other topics

will be addressed under other broader based, competitively-awarded Federal programs or programs supported with non-Federal funds administered by State-level scientific program managers.

3. A net decrease of \$26,673,000 in Federal Administration activities (\$39,426,000 available in 2009) as follows:

a. An increase of \$603,000 to fund pay costs (\$4,973,000 available in 2009) as follows:

The National Institute of Food and Agriculture (NIFA) budget consists of numerous programs that award thousands of individual grants to colleges and universities and other eligible recipients. These programs were managed at the national level by a staff of about 360 full time employees and a number of temporary and intermittent employees at the end of FY 2008. Grants management includes developing program regulations, establishing broad program goals, reviewing proposals, preparing grant documentation, post-award review of progress, and similar activities necessary to achieve program goals. Between 3 and 4 percent of funds provided for programs may be used to support administration of the programs as established by law. These operating activities are also supported by the direct Federal Administration funds provided in annual appropriations to pay for increased pay costs. Without these funds, the agency will be unable to maintain staffing levels needed to ensure high quality grants management of the Department's main extramural research and education programs supporting the food and agriculture system.

b. An increase of \$1,500,000 for move expenses (no funds available in 2009) as follows:

An increase of \$1,500,000 is proposed for partial support of the costs related to the potential move of NIFA employees from the Waterfront Centre due to the current rental lease expiring on January 17, 2010. The agency is currently occupying space at the Waterfront Centre under the terms of a second 5-year lease which does not have a renewal clause. The General Services Administration and the USDA/Office of Operations (OO) have instructed NIFA to include the estimated cost of the Agency move in the 2010 budget. The NIFA lease was not included in the larger Departmental lease consolidation proposal, created in 2005, because the end date for NIFA's lease was not within the timeframe under consideration.

The USDA/OO has provided guidance for NIFA to estimate the move cost. Their recommendations are based on the costs of a recent comparable Federal Agency Headquarters move in the Washington, DC central employment district. The estimate per employee cost suggested by the USDA/OO is consistent with the figures provided in a cost estimate table entitled, *General Ranges for Tenant Move Costs*. The estimated cost of a downtown move for a Federal headquarters facility comparable to the NIFA Waterfront Centre Headquarters is \$20,000 per employee/contractor.

c. A decrease of \$28,776,000 to eliminate earmarked projects (\$28,776,000 available in 2009) as follows:

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 a specific recipient. The FY 2010 budget proposes to eliminate these targeted earmarks.

Some aspects of many research topics currently addressed by earmarked projects are addressed under broader based, competitively-awarded Federal programs or programs supported with non-Federal funds administered by State-level scientific program managers.

## SMALL BUSINESS INNOVATION RESEARCH PROGRAM

The Small Business Innovation Development Act (SBIR), Public Law 97-219, July 22, 1982, as amended by Public Law 99-443, October 6, 1986, was designed to strengthen the role of small, innovative firms in Federally funded research and development. Under this program, small firms receive at least a fixed minimum percentage of research and development awards made by Federal agencies with sizable research and development budgets. The Small Business Research and Development Enhancement Act of 1992 (Public Law 102-564, October 28, 1991) as amended mandates that 2.5 percent of all extramural research and development funds within the Department are set-aside and used to fund the SBIR program.

<u>Agency</u>	<u>FY 2008 Actual</u>	<u>FY 2009 Budget</u>	<u>FY 2010 Estimate</u>
Agricultural Research Service .....	\$ 1,895,000	\$ 1,870,000	\$ 1,353,883
Animal and Plant Health Inspection Service .....	82,674	59,163	58,763
National Institute of Food and Agriculture Economic Research Service .....	15,803,175	15,833,247	13,209,699
Forest Service .....	220,850	37,500	12,500
National Agricultural Statistics Service .....	762,297	707,328	710,000
Rural Development .....	6,950	0	0
FAS/International Cooperative Development .....	50,000	0	0
	<u>9,375</u>	<u>6,950</u>	<u>6,950</u>
Total .....	\$18,830,321	\$18,514,188	\$15,351,795

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. Eleven research topic areas have been established:

1. Forests and Related Resources. Research proposals are solicited to develop environmentally sound techniques to increase productivity of forest land and to increase the utilization of materials and resources from forest lands.
2. Plant Production and Protection. Research proposals are solicited 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. Soil and Water Resources. 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. Marketing and Trade. Research proposals are solicited to develop innovative marketing strategies to increase sales of agricultural, forestry, and agricultural products both in the United States and abroad.

10. Animal Manure Management. Research proposals are solicited to develop new or improved technologies based on economically and environmentally sound approaches for improved management of animal manures.

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

**TABLE 1 - FISCAL YEAR 2008  
DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRIC EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS**

STATE	<u>HATCH ACT AS AMENDED</u>			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 FORMULA	REGIONAL RESEARCH	TOTAL									
ALABAMA	3,207,607	923,721	4,131,328	822,054.00	4,213,687	114,977	2,770,561	382,828	1,346,102	413,605	0	14,195,142
ALASKA	876,619	151,059	1,027,678	591,947	0	1,040	2,570,329	1,353,951	1,528,082	0	0	7,073,027
AMER SAMOA	730,355	22,932	753,287	39,688	0	0	0	0	0	0	0	792,975
ARIZONA	1,221,919	798,716	2,020,635	438,542	0	50,688	797,501	5,598,671	918,573	0	0	9,824,610
ARKANSAS	2,750,107	770,114	3,520,221	683,990	1,837,968	99,060	1,690,264	3,115,069	917,808	0	0	11,864,380
CALIFORNIA	3,757,961	1,713,283	5,471,244	730,012	0	484,449	5,896,663	21,651,088	1,690,134	690,580	7,000	36,621,170
COLORADO	1,685,604	1,078,096	2,763,700	377,180	0	290,146	2,295,447	5,963,694	390,000	0	0	12,080,167
CONNECTICUT	1,347,699	524,480	1,872,179	208,435	0	23,543	598,400	1,990,093	258,000	572,539	0	5,523,189
DELAWARE	944,298	392,335	1,336,633	85,710	1,088,882	17,638	272,242	3,144,813	939,799	0	0	6,885,717
DISTRICT OF COLUMBIA	608,855	113,269	722,124	0	0	0	0	1,059,994	0	0	0	1,782,118
FLORIDA	2,399,365	773,283	3,172,648	637,969	1,652,135	80,529	7,720,301	4,730,583	2,173,223	2,486,273	0	22,653,661
GEORGIA	3,640,517	1,382,258	5,022,775	837,396	2,424,857	131,402	4,398,292	4,810,221	1,217,567	615,294	0	19,457,804
GUAM	760,823	129,343	890,166	39,688	0	0	489,422	0	709,604	0	0	2,128,880
HAWAII	929,901	405,022	1,334,923	162,413	0	5,833	3,955,010	835,973	1,528,082	2,602,765	240,064	10,665,063
IDAHO	1,566,214	629,720	2,195,934	484,563	0	67,093	1,966,007	2,063,682	120,000	0	0	6,897,279
ILLINOIS	4,591,171	1,130,544	5,721,715	346,499	0	122,338	2,983,296	8,448,809	249,000	0	0	17,871,657
INDIANA	4,270,476	901,412	5,171,888	392,520	0	63,763	347,246	3,570,161	601,767	0	0	10,147,345
IOWA	4,476,057	1,921,118	6,397,175	300,477	0	183,422	3,282,773	7,581,999	327,069	1,069,796	585,550	19,728,261
KANSAS	2,712,583	828,734	3,541,317	223,775	0	138,830	1,458,758	5,658,656	1,200,665	1,045,629	0	13,267,630
KENTUCKY	4,281,119	924,953	5,206,072	499,904	2,869,794	71,287	1,804,317	3,430,509	792,049	0	0	14,673,932
LOUISIANA	2,524,921	726,917	3,251,838	699,330	1,654,706	58,340	1,754,492	705,131	1,730,194	0	0	9,854,031
MAINE	1,365,707	546,643	1,912,350	653,309	0	9,858	951,227	544,998	0	0	0	4,071,742
MARYLAND	1,846,234	687,816	2,534,050	254,456	1,240,851	30,951	2,192,787	4,010,255	342,859	348,543	0	10,954,752
MASSACHUSETTS	1,588,706	671,402	2,260,108	269,796	0	56,662	550,953	4,399,233	430,441	0	0	7,967,193
MICHIGAN	4,280,539	1,004,138	5,284,677	714,672	0	102,616	4,950,760	7,883,102	359,695	932,236	0	20,227,758
MICRONESIA	779,162	0	779,162	0	0	0	0	0	0	0	0	779,162
MINNESOTA	4,204,053	945,885	5,149,938	561,266	0	150,932	4,223,323	3,337,400	633,311	0	0	14,056,170
MISSISSIPPI	3,224,575	888,593	4,113,168	791,374	2,063,924	88,957	3,437,148	500,300	460,076	2,362,871	0	13,817,818
MISSOURI	4,089,663	845,006	4,934,669	515,245	2,793,650	155,120	4,252,330	584,780	1,355,717	768,654	0	15,360,165
MONTANA	1,489,910	705,247	2,195,157	453,882	0	57,986	2,251,356	960,042	2,352,728	0	0	8,271,151
NEBRASKA	2,519,323	958,903	3,478,226	254,456	0	151,498	1,041,180	2,077,293	322,718	0	0	7,325,371
NEVADA	871,525	386,141	1,257,666	131,732	0	8,125	479,662	199,860	0	0	0	2,077,045
NEW HAMPSHIRE	1,108,376	393,154	1,501,530	361,840	0	6,186	0	414,104	0	0	0	2,283,660
NEW JERSEY	1,569,897	1,275,702	2,845,599	193,093	0	13,223	3,279,526	409,990	98,048	0	0	6,839,479
NEW MEXICO	1,256,234	424,848	1,681,082	331,158	0	36,537	1,069,522	2,675,089	1,117,560	0	0	6,910,948
NEW YORK	4,032,768	1,717,489	5,750,257	653,309	0	183,717	5,200,644	7,909,397	1,422,377	0	385,000	21,504,701
NORTH CAROLINA	5,382,748	1,260,076	6,642,824	806,714	3,392,214	190,213	1,684,346	4,211,562	1,478,840	219,350	0	18,626,063
NORTH DAKOTA	1,821,271	636,737	2,458,008	116,391	0	33,792	1,104,127	1,736,077	1,741,802	542,798	0	7,732,995
NORTHERN MARIANAS	719,013	0	719,013	0	0	0	0	0	0	0	0	719,013
OHIO	5,110,477	1,025,071	6,135,548	407,861	0	65,570	628,857	3,535,108	237,000	4,464,139	0	15,474,083
OKLAHOMA	2,611,883	631,889	3,243,772	423,202	1,816,814	123,206	1,941,478	2,018,462	896,498	273,257	0	10,736,689
OREGON	1,991,887	998,866	2,990,753	776,034	0	62,084	2,441,661	5,716,483	258,763	0	759,000	13,004,778
PENNSYLVANIA	4,969,154	1,333,524	6,302,678	545,925	0	208,734	1,746,641	7,584,984	153,000	223,068	0	16,765,030

**TABLE 1 - FISCAL YEAR 2008  
DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRIC EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS**

STATE	<u>HATCH ACT AS AMENDED</u>		<u>TOTAL</u>	COOP	1890 UNIV	ANIMAL	SPECIAL	COMPETITIVE	HIGHER	FED ADMIN	BIOTECH	TOTAL
	<u>FORMULA</u>	<u>RESEARCH</u>		FORESTRY	& TUSK	HEALTH &	AND OTHER	RESEARCH	EDUCATION	DIRECT	RISK	FEDERAL
			<u>RSH (MS)</u>	<u>UNIV (EA)</u>	<u>DIS RSCH</u>	<u>GRANTS</u>	<u>GRANTS</u>	<u>GRANTS</u>	<u>GRANTS</u>	<u>APPROP</u>	<u>ASSESS</u>	<u>FUNDS</u>
PUERTO RICO	3,196,861	782,455	3,979,316	101,051	0	0	0	78,811	1,503,783	0	0	5,662,961
RHODE ISLAND	860,646	407,107	1,267,753	70,370	0	9,629	770,420	34,000	229,500	802,114	0	3,183,786
SOUTH CAROLINA	2,780,604	725,686	3,506,290	622,628	1,827,123	3,083	596,849	280,891	199,653	0	0	7,036,517
SOUTH DAKOTA	1,911,086	642,161	2,553,247	147,072	0	22,980	1,766,336	1,613,906	718,678	0	0	6,822,219
TENNESSEE	4,041,030	899,700	4,940,730	607,287	2,635,897	59,056	1,107,840	1,094,228	991,990	0	0	11,437,028
TEXAS	5,488,672	1,334,821	6,823,493	745,351	3,759,439	54,694	5,462,403	11,285,490	2,862,208	5,067,351	0	36,060,429
UTAH	1,096,086	772,906	1,868,992	285,137	0	350,759	6,257,084	781,818	0	627,377	0	10,171,167
VERMONT	1,159,635	344,730	1,504,365	315,818	0	31,057	3,961,039	96,494	585,500	0	0	6,494,273
VIRGIN ISLANDS	742,614	125,883	868,497	55,029	0	10,304	0	0	0	0	0	933,830
VIRGINIA	3,453,251	823,183	4,276,434	668,650	2,259,509	56,099	1,155,636	4,603,818	978,386	1,157,164	0	15,155,696
WASHINGTON	2,226,283	1,448,539	3,674,822	760,692	0	133,248	4,262,864	3,325,623	749,299	266,751	0	13,173,299
WEST VIRGINIA	2,150,895	572,905	2,723,800	469,223	1,188,353	8,453	945,411	1,234,893	48,052	942,461	0	7,560,646
WISCONSIN	4,222,081	1,050,328	5,272,409	576,607	0	108,365	2,303,184	3,740,633	445,211	1,725,056	0	14,171,465
WYOMING	1,037,383	562,689	1,600,072	177,753	0	26,825	261,223	1,030,765	0	0	0	3,096,638
OTHER	0	291,963	291,963	0	45,611	0	37,833	2,000,000	192,154	0	0	2,567,561
SBIR	3,613,285	1,141,038	4,754,323	601,188	995,478	119,303	3,116,010	4,499,578	163,106	748,586	0	14,997,572
REIMBURSABLE	0	0	0	0	0	0	168,026	320,000	0	0	0	488,026
FEDERAL ADMIN	4,240,442	1,353,297	5,593,739	743,737	1,231,519	198,838	5,193,351	2,747,517	1,506,601	10,486,842	0	27,702,144
SUBTOTAL	148,338,130	46,857,830	195,195,960	24,765,400	40,992,411	4,933,038	127,844,358	185,572,909	43,473,272	41,455,099	1,976,614	666,209,061
UNOBLIG BAL	45,000	0	45,000	0	0	0	1,737,086	107,208,933	8,029,793	698,744	0	117,719,556
SUBTOTAL	148,383,130	46,857,830	195,240,960	24,765,400	40,992,411	4,933,038	129,581,444	292,781,842	51,503,065	42,153,843	1,976,614	783,928,617
TRIBAL ENDOW		0	0	0	0	0	0	0	11,880,000	0	0	11,880,000
BIOTECH RISK ASSESSMENT	433,729	136,967	570,696	25,838	58,209	37,920	372,931	888,140	22,880	0	(1,976,614)	
TOTAL	148,816,859	46,994,797	195,811,656	24,791,238	41,050,620	4,970,958	129,954,375	293,669,982	63,405,945	42,153,843	0	795,808,617

**TABLE 2 - FISCAL YEAR 2009**  
**DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRIC EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS**

<u>STATE</u>	<u>HATCH ACT</u>	<u>COOP FORESTRY RSH (MS)</u>	<u>1890 UNIV &amp; TUSK UNIV (EA)</u>	<u>ANIMAL HEALTH &amp; DIS RSCH</u>	<u>SPECIAL AND OTHER GRANTS</u>	<u>COMPETITIVE RESEARCH GRANTS</u>	<u>HIGHER EDUCATION GRANTS</u>	<u>FED ADMIN DIRECT APPROP</u>	<u>BIOTECH RISK ASSESS</u>	<u>TOTAL FEDERAL FUNDS</u>
FEDERAL ADMIN	5,977,569	826,050	1,365,120	118,000	4,960,640	8,060,160	1,763,400	11,801,040	0	34,871,979
SUBTOTAL, OBLIGATIONS	5,977,569	826,050	1,365,120	118,000	4,960,640	8,060,160	1,763,400	11,801,040	0	34,871,979
UNOBLIGATED BALANCE	201,128,431	26,708,950	44,138,880	2,832,000	119,055,360	193,443,840	56,941,600	27,624,960	0	671,874,021
TOTAL	207,106,000	27,535,000	45,504,000	2,950,000	124,016,000	201,504,000	58,705,000	39,426,000	0	706,746,000

**TABLE 3 - FISCAL YEAR 2010**  
**DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH AT STATE AGRIC EXPERIMENT STATIONS & OTHER STATE INSTITUTIONS**

<u>STATE</u>	<u>HATCH ACT</u>	<u>COOP FORESTRY RSH (MS)</u>	<u>1890 UNIV &amp; TUSK UNIV (EA)</u>	<u>ANIMAL HEALTH &amp; DIS RSCH</u>	<u>SPECIAL AND OTHER GRANTS</u>	<u>COMPETITIVE RESEARCH GRANTS</u>	<u>HIGHER EDUCATION GRANTS</u>	<u>FED ADMIN DIRECT APPROP</u>	<u>BIOTECH RISK ASSESS</u>	<u>TOTAL FEDERAL FUNDS</u>
FEDERAL ADMIN	5,977,569	826,050	1,365,120	118,000	1,661,520	8,060,160	3,403,400	12,753,000	0	34,164,819
SUBTOTAL, OBLIGATIONS	5,977,569	826,050	1,365,120	118,000	1,661,520	8,060,160	3,403,400	12,753,000	0	34,164,819
UNOBLIGATED BALANCE	201,128,431	26,708,950	44,138,880	2,832,000	39,876,480	193,443,840	96,301,600	0	0	604,430,181
TOTAL	207,106,000	27,535,000	45,504,000	2,950,000	41,538,000	201,504,000	99,705,000	12,753,000	0	638,595,000

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

CLASSIFICATION BY OBJECTS  
Research and Education Activities  
2008 Actuals and Estimated 2009 and 2010

Personnel Compensation:	<u>2008</u>	<u>2009</u>	<u>2010</u>
Washington, D.C. ....	\$17,292,686	\$17,323,000	\$17,830,000
Field .....	0	0	0
<hr/>			
11 Total personnel compensation .....	17,292,686	17,323,000	17,830,000
12 Personnel benefits .....	4,836,672	4,977,000	5,073,000
13 Benefits for former personnel .....	10,429	11,000	11,000
Total pers. comp. & benefits .....	22,139,787	22,311,000	22,914,000
<hr/>			
<b>Other Objects:</b>			
21 Travel .....	1,793,169	1,799,000	1,817,000
22 Transportation of Things .....	20,267	21,000	22,000
23.1 Rent to GSA .....	12,753	13,000	13,000
23.2 Rent Paid to others .....	64,206	66,000	67,000
23.3 Communications, Utilities, etc. ....	539,456	550,000	556,000
24 Printing and Reproduction .....	214,609	219,000	221,000
25.1 Advisory & assist. Services .....	1,907,876	1,947,000	1,966,000
25.2 Other Services .....	4,063,305	4,115,000	2,856,000
25.3 Purchases of G&S from Govt. ....	74,902	77,000	78,000
25.4 Operation and Maintenance of facilities .....	347,905	355,000	359,000
25.5 Research and Development Contracts .....	4,545,444	4,830,000	2,684,000
25.6 ADP Services and Supplies (NFC) .....	6,073	6,000	6,000
25.7 Operation and maintenance of equipment ....	77,836	79,000	80,000
25.8 Subsistence and support of persons .....	43,884	45,000	45,000
26 Supplies .....	314,707	321,000	324,000
31 Equipment .....	182,522	186,000	188,000
41 Grants, Contracts, etc. ....	629,825,465	775,600,562	592,519,000
42 Litigation Fees .....	34,369	0	0
43 Interest Prompt Payment .....	526	0	0
Total, other objects .....	644,069,274	790,229,562	603,801,000
<hr/>			
Total Obligations .....	666,209,061	812,540,562	626,715,000
<hr/>			
<b>Position Data:</b>			
Average Salary, ES .....	\$160,838	\$165,503	\$170,799
Average Salary, GS .....	\$88,166	\$90,723	\$93,626
Average Grade, GS .....	11.6	11.6	11.6

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## STATUS OF PROGRAM

**RESEARCH AND EDUCATION ACTIVITIES:****Current Activities:**

1. **Hatch Act.** The Hatch Act provides formula funds to support research at the State Agricultural Experiment Stations which improves production, marketing, distribution, and utilization of crops and livestock for the food supply, health, and welfare of the American people, while conserving resources, enhancing nutrition and sustaining rural living conditions. Students are provided training opportunities to assist in scientific research projects conducted at the stations. Hatch Act formula funds are matched by non-Federal funds and are used to support research in forest and natural resources; crop resources; animal resources; people, communities, and institutions; competition, trade adjustment, price, and income policy; and food science and human nutrition. As a result of provisions contained in the Agricultural Research, Extension, and Education Reform Act of 1998, 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. These requirements can be met concurrently.
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 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. 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 within each State. 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, biological impact assessment, aquaculture centers, and sustainable agriculture.

6. **Agriculture and Food Research Initiative (formerly National Research Initiative Competitive Grants)**. The Agriculture and Food Research Initiative (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 priorities in U.S. agriculture in the areas of: 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 12 research areas supported under the SBIR program are: forests and related resources; plant production and protection-biology; animal production and protection; air, water and soils; food science and nutrition; rural development; aquaculture; biofuels and biobased products; marketing and trade; animal manure management; small and mid-sized farms; and plant production and protection-engineering. NIFA administers the SBIR program for USDA, including the funds set aside for SBIR from other USDA agencies.
8. **Specialty Crop Research Initiative Program**. The Specialty Crop Research Initiative Program addresses the critical needs of the specialty crop industry by developing and disseminating science-based tools to address the needs of specific crops and their regions. This program will give priority to projects that are multi-State, multi-institutional, or trans disciplinary; and include explicit mechanisms to communicate results to producers and the public. Projects will focus on research in plant breeding, genetics, and genomics to improve crop characteristics; to identify and address threats from pests and diseases (including threats to pollinators); to improve production efficiency, productivity, and profitability over the long term; new innovations and technology (including improved mechanization and technologies that delay or inhibit ripening); and methods to prevent, detect, monitor control, and respond to potential food safety hazards in the production and processing of specialty crops.
9. **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.
10. **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 is the only Federal program targeted 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 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.

#### **Selected Examples of Recent Progress:**

1. **Hatch Act.** Homeowners, including farmers, rely on the **Connecticut Agricultural Experiment Station** diagnostic services to solve plant pest problems. Diagnoses of insect and plant disease problems were performed on 9,738 samples submitted by stakeholders. Results and suggestions for control were provided to the stakeholders along with written information on the pest. During these activities, an extensive powdery mildew problem of pumpkins was discovered. Growers requested biological controls and other options to reduce pesticide use and costs. In field and laboratory experiments, a 50 percent by volume aqueous solution of milk-based foliar sprays was used to reduce crop damage. There was a savings of about \$68.00 per acre in fungicide costs. Application of this method Statewide on 1,559 acres of pumpkins would save growers about \$106,000. These results have application to powdery mildew infections of other plants as well. Expected long-term benefits include less human exposure to pesticides, thereby reducing health risks, and a cleaner environment.
2. **McIntire-Stennis Cooperative Forestry Research.** **Northern Arizona University** researchers demonstrated the role fire regimes have played across the native range of ponderosa pine in the southwest. By sampling and cross-dating pines from the Centennial Forest, researchers were able to reconstruct the extensive fire regime dating back prior to 1890. This work confirmed earlier studies and provided a more comprehensive understanding of natural management and restoration practices in the region. Through a study of past policies, the policy-making process, and comparative case studies, researchers are identifying recent trends in improving public participation while maintaining timely and effective planning decisions.
3. **Evans-Allen Program.** Researchers at **North Carolina A&T University** used four plants commonly used in folk medicine in different parts of the world to study antimicrobial activities on select foodborne pathogens and anticarcinogenic activities on cancer cells. The research team identified natural bioactive agents with moderately strong anticancer properties from *Rosa canina* and *Phytolacca americana*. These bioactive agents may be helpful in cancer prevention and alternative treatment. In vitro tests showed that crude extracts from *Rosa canina* and *Phytolacca americana* significantly reduced the growth and proliferation of colon, breast, and cervical cancer cells, three prominent cancer types that affect both African-American men and women.

4. **Animal Health and Disease Program.** Bluetongue virus (BTV) is a worldwide disease in domestic and wild ruminant animals and is considered a bio-terrorist agent. At **Utah State University**, scientists are using the BTV NS-2 protein against this disease and are trying to develop a vaccine. They are developing a rapid and more accurate commercial diagnostic kit that can easily determine and distinguish whether an animal is infected by BTV or vaccinated with BTV. The kit also will provide more accurate results for global import and export of livestock, as well as to trace the spread of BTV due to global warming as reported in northern and central Europe. Moreover, two potential anti-BTV drugs have been identified that might have potential uses to inhibit BTV infection in domestic cattle and wild ruminants in the near future.
5. **Agriculture and Food Research Initiative (formerly National Research Initiative).** Researchers at the **University of Rochester (New York)** found that grape phenolic extracts are highly effective against specific virulent strains of *S.mutans*, the organism responsible for tooth decay. The extracts from pomace (a waste product from processing grapes into juice and wine) exhibited higher activity than those from whole fruit, which means that fermented pomace is a promising source for extraction and isolation of compounds for the prevention of dental caries.

A team of scientists at the **Georgia Institute of Technology** developed a new chemical reaction that converts waste biomass lignin into high-value chemical components that will make bio-refineries more efficient and effective. The scientists believe this new reaction will yield high-value, renewable, chemical components derived from lignin. The new products may be used in a variety of products that are currently dependent on petroleum-based resources, as well as improve modern ethanol conversion programs.

6. **Institution Challenge Grants Program.** The **University of Minnesota** involved faculty, students, scientists, educational psychologists, producers and community members to develop an innovative method to conduct internship programs for students to strengthen knowledge transfer methods and problem-solving skills. Specific impacts describe students who have enhanced understanding of the problem of nitrate nitrogen runoff from agricultural lands and increased knowledge in developing alternative crop systems to mitigate this occurrence; enhanced skills in independent ecological research, financial analysis of a specialty crop enterprise, organization of farmers and community members, and production and marketing of organically-produced crops. This project also has increased interest among university faculty and community educators in strengthening undergraduate experiential learning opportunities. Further dissemination of these teaching practices are planned to expand results to other regions throughout the country.
7. **Hispanic Serving Institutions Education.** Students from **California State University-Monterey Bay, Hartnell Community College (California)**, and other collaborating community colleges will have internship opportunities at local and regional agriculture and watershed agencies and organizations. Fourteen underrepresented students have been placed in community-based agriculture and watershed-related internships this year. More than 30 students will be placed in similar internships during the upcoming year. The project has emphasized connecting these students to their internship sites and to their academic paths through increased mentoring and academic advising. As a result, these students are: improving their academic skills to successfully complete a four-year university program; interested in pursuing careers in similar fields as their internship; and interested in continuing their education at the graduate level.
8. **1890 Institutions Capacity Building Grants Program.** **Southern University (Louisiana)** sought to increase the awareness of plant and soil science and stimulate students desire to pursue advanced degrees by hosting high school students at various research and teaching institutions. Three research institutes and three teacher workshops were conducted in collaboration with Southern University's summer program. A total of 36 schools were approached for recruitment, eighty-five high school students participated, and 27 scholarships were awarded. This project strengthened the effort of minority student recruitment through the use of scientific exposure and collaboration with USDA/Agricultural Research Service and other public and private organizations in the region.

9. **Tribal Colleges Education Equity Grants Program.** Little Priest Tribal College (Nebraska) is training students in field techniques, woodland plant identification, restoration technology of native woodland plants, and Geographic Information Systems/Global Positioning Systems (GIS/GPS) technology for the study of plant ecosystems. Fieldtrips to a woodland site have allowed students to experience this ecosystem first hand, in the light of ecological subject matter presented in class. This has helped the students see the correlation between their cultural ideals and modern science and inspired them to seek further knowledge concerning their local woodland ecosystem and cultural methods of stewardship. The students have learned to properly collect, identify, and preserve local plants that are an interest to them and the Winnebago tribe. Over thirty plant species have been added to the herbarium cabinets and will aid in future identification and reference work both at the college and in the community. The library resource materials are enabling the students and the community to reference information for course work and/or personal interests. The GPS/GIS materials enable students to learn this technology and how it relates to both environmental studies and computer sciences. This will give the students background in these areas enabling them to compete for the job market on a national scale.

### **PART ASSESSMENTS:**

The following Program Assessment Rating Tool (PART) assessment information is being shown only once under the Research and Education Activities. However, this information applies to Extension, Integrated, Section 2501-Outreach and Technical Assistance for Socially Disadvantaged Farmers and Ranchers, and Beginner Farmer and Rancher Development Program Activities.

NIFA conducts PART reviews based on portfolio performance by goal. 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. The PART review schedule by goal follows:

PART Goal 1 - The portfolio of programs designed to achieve USDA Strategic Goal 1 (Enhance International Competitiveness of American Agriculture) and Strategic Goal 2 (Enhance the Competitiveness and Sustainability of Rural and Farm Economies) was evaluated by the Office of Management and Budget (OMB) in FY 2004. NIFA achieved a score of "moderately effective" from OMB. External expert panels that were convened prior to the PART assigned an average score of 80 (i.e., "meets expectations") to all portfolios under Goals 1 and 2.

Follow-up Action Requests:

- 2005, NIFA continue to improve its long-term measures for these programs.  
**Action completed:** NIFA met with OMB and agreed that new R&D long-term outcomes included in this budget submission capture the degree to which agency R&D are used by direct customers.
- 2005, NIFA emphasize funding through competitive grants, by proposing to increase the AFRI (formerly the National Research Initiative), and increasing competitive grants through the Hatch and McIntire-Stennis programs.  
**Action completed:** FY 2007, 2008, and 2009 budgets proposed this increase in funding and competitive focus.
- 2006, NIFA modify the long-term measures to show actual use of results of research.  
**Action completed:** NIFA has modified all long-term measures to reflect the actual uses of the results of research in addition to the number of methods developed.
- 2006, NIFA improve efficiencies in the grant review process.  
**Action completed:** The 2007 efficiency target for time per proposal processed (196 days) was exceeded in 2007. NIFA is on track to meet its 2008 efficiency target (192 days).
- 2006, NIFA improve the efficiency of the grants review process by using "Grants.gov" (a Web based peer review system), as well as virtual panels when appropriate.

**Action completed:** NIFA has posted 100 percent of competitive discretionary funding information on Grants.gov beginning with FY 2007, and implemented a Web-based virtual panel alternative for agency grant managers using Macromedia Breeze.

- 2007, NIFA improve the focus of grant recipient reporting on outcomes.  
**Action taken:** NIFA has included the Office of Science and Technology Policy (OSTP) standard research project report for competitive research grants in the Current Research Information System (CRIS). Online Software released for use by Land-Grant Universities on October 5, 2007 for use in creating revised Agriculture Research, Extension, and Education Reform Act of 1998 (AREERA) required annual report for Hatch, Smith-Lever, Evans-Allen, and 1890's extension; was used by all States to submit Annual Reports. The National Program Leaders on-line interface for Plan of Work and Annual Report Review was released March 17, 2008. All National Program Leaders completed Plan of Work and Annual Report reviews via this on-line software interface. The agency initiated a series of bi-monthly Web conferences on reporting requirements beginning February 14, 2008 and five were held in 2008. These will continue to occur every two months as necessary.
- 2007, NIFA increase planning and coordination with the Agricultural Research Service (ARS) regarding the collection of stakeholder input.  
**Action taken:** The 2008 Farm Bill created the Research, Extension, and Education Office (REEO) to coordinate the research programs and activities of the Department. Three of the REEO six division chiefs are from NIFA, and the remaining three division chiefs are from ARS, the Forest Service, and Economic Research Service (ERS).

PART Goal 2 - The portfolio of programs designed to achieve USDA Strategic Goal 3 (Support Increased Economic Opportunities and Improved Quality of Life in Rural America) was evaluated by OMB in FY 2006. NIFA achieved a score of "effective" from OMB. External expert panels that were convened prior to the PART assigned an average score of 82 to the Goal 3 portfolio of programs.

Follow-up Action Requests:

- 2006, NIFA continue to emphasize the use of competitive, peer reviewed grants, and proposing that no new funding be provided for unrequested add-ons (earmarks).  
**Action completed:** NIFA proposed increase in budget request for AFRI, and elimination of earmarks in the budget for FY 2007.
- 2006, NIFA improve the efficiency of the grants review process by using "Grants.gov" (a Web based peer review system), as well as virtual panels when appropriate.  
**Action completed:** NIFA has required all competitive discretionary grant applications to be filed through Grants.gov beginning with FY 2007. Also, NIFA has implemented a Web-based virtual panel alternative for agency grant managers.
- 2006, NIFA ensure that all interested parties have the necessary access to grant information, as well as to continue to emphasize grant capacity building as appropriate.  
**Action completed:** NIFA has posted 100 percent of competitive discretionary funding information on Grants.gov beginning with FY 2007.
- 2007, NIFA improve the focus of grant recipient reporting on outcomes.  
**Action taken:** NIFA has included OSTP standard research project report for competitive research grants in CRIS. Online Software released for use by Land-Grant Universities on October 5, 2007 for use in creating revised AREERA required annual report for Hatch, Smith-Lever, Evans-Allen, and 1890's extension; was used by all States to submit Annual Reports. The National Program Leaders on-line interface for Plan of Work and Annual Report Review was released March 17, 2008. All National Program Leaders completed Plan of Work and Annual Report reviews via this on-line software interface. The agency initiated a series of bi-monthly Web conferences on reporting requirements beginning February 14, 2008 and five were held in 2008. These will continue to occur every two months as necessary.

- 2007, NIFA increase planning and coordination with the ARS regarding the collection of stakeholder input.  
**Action taken:** The 2008 Farm Bill created REEO to coordinate the research programs and activities of the Department. Three of the REEO six division chiefs are from NIFA, and the remaining three division chiefs are from ARS, the Forest Service, and ERS.

PART Goal 3 - The portfolio of programs designed to achieve USDA Strategic Goals 4 (Enhance Protection and Safety of the Nation's Agriculture and Food Supply) was evaluated by OMB in FY 2005. NIFA achieved a score of "moderately effective" from OMB. External expert panels that were convened prior to the PART assigned an average score of 86 to the Goal 4 portfolio.

Follow-up Action Requests:

- 2006, NIFA develop measures that show the actual use of discoveries and technologies that are developed by the program as well as to develop targets related to extension activities.  
**Action completed:** NIFA has modified all long-term measures to reflect the actual uses of the results of research in addition to the number of methods developed.
- 2006, NIFA find more innovative and cost-effective ways to review grant proposals on an agency-wide basis.  
**Action completed:** The 2007 efficiency target for time per proposal processed (196 days) was exceeded in 2007. NIFA is on track to meet its 2008 efficiency target (192 days).
- 2006, NIFA re-evaluate the efficiency measures, proposing new ones if appropriate.  
**Action completed:** The efficiency measures were revised in FY 2007 to show actual days per proposal processed and cumulative cost savings.
- 2006, NIFA improve the efficiency of the grants review process by using "Grants.gov" (a Web based peer review system), as well as virtual panels when appropriate.  
**Action completed:** NIFA has required all competitive discretionary grant applications to be filed through Grants.gov beginning with FY 2007. Also, NIFA has implemented a Web-based virtual panel alternative for agency grant managers.
- 2007, NIFA improve the focus of grant recipient reporting on outcomes.  
**Action taken:** NIFA has included the OSTP standard research project report for competitive research grants in CRIS. Online Software released for use by Land-Grant Universities on October 5, 2007 for use in creating revised AREERA required annual report for Hatch, Smith-Lever, Evans-Allen, and 1890's extension; was used by all States to submit Annual Reports. The National Program Leaders on-line interface for Plan of Work and Annual Report Review was released March 17, 2008. All National Program Leaders completed Plan of Work and Annual Report reviews via this on-line software interface. The agency initiated a series of bi-monthly Web conferences on reporting requirements beginning February 14, 2008 and five were held in 2008. These will continue to occur every two months as necessary.
- 2007, NIFA increase planning and coordination with ARS regarding the collection of stakeholder input.  
**Action taken:** The 2008 Farm Bill created REEO to coordinate the research programs and activities of the Department. Three of the REEO six division chiefs are from NIFA, and the remaining three division chiefs are from ARS, the Forest Service, and ERS.

PART Goal 4 - The portfolio of programs designed to achieve USDA Strategic Goal 5 (Improve the Nation's Nutrition and Health) was evaluated by OMB in FY 2006. NIFA achieved a score of "effective" from OMB. External expert panels that were convened prior to the PART assigned an average score of 86 to the Goal 5 portfolio of programs.

Follow-up Action Requests:

- 2006, NIFA continue to emphasize the use of competitive, peer reviewed grants, and proposing that no new funding be provided for unrequested add-ons (earmarks).

**Action completed:** NIFA proposed increase in budget request for AFRI, and elimination of earmarks in the budget for FY 2007.

- 2006, NIFA improve the efficiency of the grants review process by using "Grants.gov" (a Web based peer review system), as well as virtual panels when appropriate.  
**Action completed:** NIFA has required all competitive discretionary grant applications to be filed through Grants.gov beginning with FY 2007. Also, NIFA has implemented a Web-based virtual panel alternative for agency grant managers.
- 2006, NIFA ensure that all interested parties have the necessary access to grant information, as well as to continue to emphasize grant capacity building as appropriate.  
**Action completed:** NIFA has posted 100 percent of competitive discretionary funding information on Grants.gov beginning with FY 2007.
- 2007, NIFA improve the focus of grant recipient reporting on outcomes.  
**Action taken:** NIFA has included OSTP standard research project report for competitive research grants in CRIS. Online Software released for use by Land-Grant Universities on October 5, 2007 for use in creating revised AREERA required annual report for Hatch, Smith-Lever, Evans-Allen, and 1890's extension; was used by all States to submit Annual Reports. The National Program Leaders on-line interface for Plan of Work and Annual Report Review was released March 17, 2008. All National Program Leaders completed Plan of Work and Annual Report reviews via this on-line software interface. The agency initiated a series of bi-monthly Web conferences on reporting requirements beginning February 14, 2008 and five were held in 2008. These will continue to occur every two months as necessary.
- 2007, NIFA increase planning and coordination with ARS regarding the collection of stakeholder input.  
**Action taken:** The 2008 Farm Bill created REEO to coordinate the research programs and activities of the Department. Three of the REEO six division chiefs are from NIFA, and the remaining three division chiefs are from ARS, the Forest Service, and ERS.

PART Goal 5 – The portfolio of programs designed to achieve USDA Strategic Goal 6 (Protect and Enhance the Nation's Natural Resource Base and Environment) was evaluated by OMB in FY 2005. NIFA achieved a score of "effective" from OMB. External expert panels that were convened prior to the PART assigned an average score of 79 to the Goal 6 portfolio of programs.

Follow-up Action Requests:

- 2006, NIFA enhance the tracking of measures in the budget justification, as well as the use of research and technologies  
**Action completed:** Measures were incorporated in the FY 2008 and FY 2009 budget materials.
- 2006, NIFA develop additional measures that show how much of the actual research is reaching users through extension activities.  
**Action completed:** NIFA has developed two research-focused measures: (1) the Number of Ecological-Economic Models for Invasive Species Control and Management; and, (2) the Number of Assessment and Control Technologies for Agricultural Emissions developed and used.
- 2006, NIFA develop innovative ways of improving the efficiency of the grants award process.  
**Action completed:** The 2007 efficiency target for time per proposal processed (196 days) was exceeded in 2007. NIFA is on track to meet its 2008 efficiency target (192 days).
- 2006, NIFA develop a strategic plan for the portfolio in response to the panel evaluation and as guidance for the reallocation of resources.  
**Action completed:** NIFA has developed a strategic plan for this portfolio in FY 2007.
- 2006, NIFA improve the efficiency of the grants review process by using "Grants.gov" (a Web based peer review system), as well as virtual panels when appropriate.

**Action completed:** NIFA has posted 100 percent of competitive discretionary funding information on Grants.gov beginning with FY 2007, and implemented a Web-based virtual panel alternative for agency grant managers using Macromedia Breeze.

- 2007, NIFA improve the focus of grant recipient reporting on outcomes.  
**Action taken:** NIFA has included OSTP standard research project report for competitive research grants in CRIS. Online Software released for use by Land-Grant Universities on October 5, 2007 for use in creating revised AREERA required annual report for Hatch, Smith-Lever, Evans-Allen, and 1890's extension; was used by all States to submit Annual Reports. The National Program Leaders on-line interface for Plan of Work and Annual Report Review was released March 17, 2008. All National Program Leaders completed Plan of Work and Annual Report reviews via this on-line software interface. The agency initiated a series of bi-monthly Web conferences on reporting requirements beginning February 14, 2008 and five were held in 2008. These will continue to occur every two months as necessary.
- 2007, NIFA increase planning and coordination with ARS regarding the collection of stakeholder input.  
**Action taken:** The 2008 Farm Bill created REEO to coordinate the research programs and activities of the Department. Three of the REEO six division chiefs are from NIFA, and the remaining three division chiefs are from ARS, the Forest Service, and ERS.

## 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,  
 1 Micronesia, the Northern Marianas, and American Samoa, [~~\$474,250,000~~, of which \$9,388,000 shall be for the purposes, and in the amounts, specified in the table titled "Cooperative State Research, Education, and Extension Service, Extension Activities, Congressionally-designated Projects" in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act,]\$487,005,000, 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, \$288,548,000; payments for extension work at the 1994 Institutions under the Smith-Lever Act (7 U.S.C. 343(b)(3)), [~~\$3,321,000~~]\$4,321,000; payments for the nutrition and family education program for low-income areas under section 3(d) of the Act, \$66,155,000;  
 2 payments for the pest management program under section 3(d) of the Act, \$9,791,000; [payments for the farm safety program under section 3(d) of the Act, \$4,863,000;] payments for New Technologies for Ag Extension under section 3(d) of the Act, \$1,500,000; payments to upgrade research, extension, and teaching facilities at institutions eligible to receive funds under 7 U.S.C. 3221 and 3222, \$18,000,000, to remain available until expended; payments for youth-at-risk programs under section 3(d) of the Smith-Lever Act, \$8,182,000; for youth farm safety education and certification extension grants, to be awarded competitively under section 3(d) of the Act, \$479,000; payments for carrying out the provisions of the Renewable Resources Extension Act of 1978 (16 U.S.C. 1671 et seq.), \$4,008,000; payments for the federally-recognized Tribes Extension Program under section 3(d) of the Smith-Lever Act, \$3,000,000; payments for

sustainable agriculture programs under section 3(d) of the Act, \$4,568,000; 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; for improved rural quality of life grants, to be awarded competitively under section 3(d) of the Act, \$28,000,000; payments for cooperative extension work by eligible institutions (7 U.S.C. 3221), \$40,150,000, provided that each institution receives no less than \$1,000,000; [for grants to youth organizations pursuant to 7 U.S.C. 7630, \$1,767,000; payments to carry out the food animal residue avoidance database program as authorized by 7 U.S.C. 7642, \$806,000; ]and for necessary expenses of Extension Activities, [~~\$17,374,000~~]\$8,565,000.

*(Agriculture, Rural Development, Food and Drug Administration, and Related Agencies*

*Appropriations Act, 2009.)*

Explanation of Changes:

The first change deletes the language for Congressionally-designated projects described in Section 4 of the explanatory statement of the Consolidated Appropriations Act.

The second change deletes the language for the farm safety program under section 3(d) of the Smith-Lever Act. The budget does not include funding for this program.

The third change adds the improved rural quality of life program under section 3(d) of the Smith-Lever Act. This is a new competitive program in support of the President's Rural Revitalization Initiative.

The fourth change deletes the language for grants to youth organizations pursuant to 7 U.S.C. 7630 and food animal residue avoidance database program as authorized by 7 U.S.C. 7642. The budget does not include funding for this program.

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Lead-Off Tabular StatementEXTENSION ACTIVITIES

Appropriations Act, 2009 .....	\$474,250,000
Budget Estimate, 2010 .....	<u>487,005,000</u>
Increase in Appropriation .....	<u>+12,755,000</u>

Summary of Increases and Decreases  
(On basis of appropriation)

<u>Item of Change</u>	<u>2009</u> <u>Estimated</u>	<u>Pay Costs</u>	<u>Program</u> <u>Changes</u>	<u>2010</u> <u>Budget</u>
Extension Activities:				
Smith-Lever 3 (d):				
Farm Safety .....	\$4,863,000.00	--	-\$4,863,000	--
Improve Rural Quality of Life .....	-	--	+28,000,000	\$28,000,000
Grants to Youth Serving Institutions .....	1,767,000	--	-1,767,000	--
Extension Services at the 1994 Institutions .....	3,321,000	--	+1,000,000	4,321,000
Food Animal Residue Avoidance Database .....	806,000	--	-806,000	--
Federal Administration (direct approp.):				
General Admin. Including pay cost .....	7,433,000	\$579,000	--	8,012,000
All Other .....	456,060,000	--	-9,388,000	446,672,000
<b>Total Available, Extension</b>				
Activities .....	<u>474,250,000</u>	<u>+579,000</u>	<u>+12,176,000</u>	<u>487,005,000</u>

NATIONAL INSTITUTIONS OF FOOD AND AGRICULTURE

EXTENSION ACTIVITIES

Project Statement by Program  
(On basis of appropriation)

Project	2008 Actual		2009 Estimated		2010 Estimated	
	Amount	Years	Amount	Years	Amount	Years
<b>Extension Activities:</b>						
Smith-Lever Act, Section 3b&c .....	\$274,659,828		\$288,548,000		\$288,548,000	
Payments to 1890 Colleges and Tuskegee University .....	35,850,279		40,150,000		40,150,000	
Smith-Lever, Section 3d Programs:						
EFNEP .....	65,556,867		66,155,000		66,155,000	
Farm Safety .....	4,725,687		4,863,000		-4,863,000	--
New Technologies for Ag Extension .....	1,474,605		1,500,000		--	1,500,000
* Improve Rural Quality of Life .....	--		--		+28,000,000	28,000,000
Pest Management .....	9,790,980		9,791,000		--	9,791,000
Children, Youth, and Families at Risk .....	7,967,832		8,182,000		--	8,182,000
Youth Farm Safety Education and Certification .....	463,731		479,000		--	479,000
Federally-Recognized Tribes Extension Program .....	2,979,000		3,000,000		--	3,000,000
Sustainable Agriculture .....	4,567,800		4,568,000		--	4,568,000
Total Section 3d Programs .....	97,526,502		98,538,000		+23,137,000	121,675,000
Payments to Rural Health and Safety Education .....	1,737,750		1,738,000		--	1,738,000
1890 Facilities (Sec. 1447) .....	17,267,277		18,000,000		--	18,000,000
Grants to Youth Serving Institutions .....	1,737,750		1,767,000		-1,767,000	--
Payments under Renewable Resources Extension Act (RREA) .....	4,007,748		4,008,000		--	4,008,000
*Extension Services at the 1994 Institutions .....	3,297,753		3,321,000		+1,000,000	4,321,000
Food Animal Residue Avoidance Database (FARAD) .....	--		806,000		-806,000	--
Federal Administration (direct approp.):						
Ag in the Classroom .....	553,101		553,000		--	553,000
General Admin. including pay cost .....	6,805,029		7,433,000		+579,000	8,012,000
Other .....	9,821,763		9,388,000		-9,388,000	--
Total Federal Administration .....	17,179,893		17,374,000		-8,809,000	8,565,000
Total Available or Estimate .....	453,264,780	174	474,250,000	174	+12,755,000	487,005,000
Beginning Farmers and Ranchers Program .....	--		18,000,000		1,000,000	19,000,000
Biodiesel Fuel Education Program .....	1,000,000		1,000,000		--	1,000,000
Healthy Urban Food Enterprise Development Center .....	--		1,000,000		--	1,000,000
Risk Management Education .....	5,000,000		5,000,000		--	5,000,000
Total Available or Estimate .....	459,264,780	154	499,250,000	174	+13,755,000	513,005,000
Rescission .....	3,195,220		--			
Beginning Farmers and Ranchers Program .....	--		-18,000,000			

Project	2008 Actual		2009 Estimated		2010 Estimated	
	Amount	Years	Amount	Years	Increase or Decrease	Staff
Healthy Urban Food Enterprise Development Center .....			-1,000,000			
Biodiesel Fuel Education Program.....	-1,000,000		-1,000,000			
Risk Management Education .....	-5,000,000		-5,000,000			
<b>Total, Appropriation .....</b>	<b>456,460,000</b>	<b>154</b>	<b>474,250,000</b>	<b>174</b>		
<b>*Subtotal Rural Revitalization Initiative</b>	<b>--</b>		<b>--</b>		<b>+29,000,000</b>	<b>29,000,000</b>

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

EXTENSION ACTIVITIES

Project Statement by Program

(On basis of available funds)

Project	2008 Actual		2009 Estimated		Increase or Decrease	2010 Estimated	
	Amount	Staff : Years	Amount	Staff : Years		Amount	Staff : Years
<b>Extension Activities:</b>							
Smith-Lever Act, Section 3b&c .....	\$274,614,828	:	\$288,548,000	:	--	\$288,548,000	:
Payments to 1890 Colleges and Tuskegee University .....	35,850,279	:	40,150,000	:	--	40,150,000	:
Smith-Lever, Section 3d Programs:							
EFNEP .....	65,556,867	:	66,155,000	:	--	66,155,000	:
Farm Safety .....	4,725,687	:	4,863,000	:	-4,863,000	--	:
New Technologies for Ag Extension .....	1,474,605	:	1,500,000	:	--	1,500,000	:
*Improve Rural Quality of Life .....	--	:	--	:	+28,000,000	28,000,000	:
Pest Management .....	9,790,980	:	9,791,000	:	--	9,791,000	:
Children, Youth, and Families at Risk .....	7,967,832	:	8,182,000	:	--	8,182,000	:
Youth Farm Safety Education and Certification .....	463,731	:	479,000	:	--	479,000	:
Federally-Recognized Tribes .....	2,979,000	:	3,000,000	:	--	3,000,000	:
Sustainable Agriculture .....	4,567,800	:	4,568,000	:	--	4,568,000	:
Total Section 3d Programs .....	97,526,502	:	98,538,000	:	+23,137,000	121,675,000	:
Payments to Rural Health and Safety Education .....	1,737,750	:	1,738,000	:	--	1,738,000	:
1890 Facilities (Sec. 1447) .....	17,267,277	:	18,000,000	:	--	18,000,000	:
Grants to Youth Serving Institutions .....	1,737,750	:	1,767,000	:	-1,767,000	--	:
Payments under Renewable Resources Extension Act (RREA) .....	4,007,748	:	4,008,000	:	--	4,008,000	:
*Extension Services at the 1994 Institutions .....	3,297,753	:	3,321,000	:	+1,000,000	4,321,000	:
Food Animal Residue Avoidance Database (FARAD) .....	--	:	806,000	:	-806,000	--	:
Federal Administration (direct approp.):							
Ag in the Classroom .....	553,101	:	553,000	:	--	553,000	:
General Admin. including pay cost .....	6,805,029	:	7,433,000	:	+579,000	8,012,000	:
Other .....	9,821,763	:	9,388,000	:	-9,388,000	--	:
Total Federal Administration .....	17,179,893	:	17,374,000	:	-8,809,000	8,565,000	:
Total Available or Estimate .....	453,219,780	154	474,250,000	174	12,755,000	487,005,000	174
Beginning Farmers and Ranchers Program .....	--	:	18,000,000	:	+1,000,000	19,000,000	:
Biodiesel Fuel Education Program.....	1,000,000	:	1,000,000	:	--	1,000,000	:
Healthy Urban Food Enterprise Development Center .....	--	:	1,000,000	:	--	1,000,000	:
Risk Management Education .....	5,000,000	:	5,000,000	:	--	5,000,000	:
Total Available or Estimate .....	459,219,780	154	499,250,000	174	+13,755,000	513,005,000	174

Project	2008 Actual		2009 Estimated		2010 Estimated		
	Amount	Years	Amount	Years	Increase or Decrease	Amount	Years
Lapsing .....	+45,000	:	- -	:	- -	- -	:
<b>Total Available or Estimate .....</b>	<b>459,264,780</b>	<b>154</b>	<b>499,250,000</b>	<b>174</b>	<b>13,755,000</b>	<b>513,005,000</b>	<b>174</b>
Rescission .....	3,195,220	:	- -	:			
Beginning Farmers and Ranchers Program .....	- -	:	-18,000,000	:			
Biodiesel Fuel Education Program.....	-1,000,000	:	-1,000,000	:			
Healthy Urban Food Enterprise Development Center .....	- -	:	-1,000,000	:			
Risk Management Education .....	-5,000,000	:	-5,000,000	:			
<b>Total, Appropriation .....</b>	<b>456,460,000</b>	<b>154</b>	<b>474,250,000</b>	<b>174</b>			
*Subtotal Rural Revitalization Initiative	- -		- -		+29,000,000	29,000,000	

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## Justification of Increases and Decreases

## Extension Activities

1. As part of the President's \$70 million Rural Revitalization Initiative to improve the rural economy through improvements to extension programs, an increase of \$29 million for extension programs (\$3,321,000 available in 2009) as follows (an additional \$41 million is included in Research and Education Activities):
  - a. An increase of \$28,000,000 in Smith-Lever 3(d) programs for the Improve Rural Quality of Life (no funds available in 2009)

An increase of \$23,000,000 is proposed in FY 2010 to support a competitive Smith-Lever 3(d) program focused on developing technology based system competencies for agricultural producers and food processors, and rural citizens. Mounting this program through Smith-Lever 3(d) will take advantage of the powerful existing infrastructure of both 1862 and 1890 land-grant institutions. This program will enhance the adoption and diffusion of broadband, as well as other information access technologies, and other new technologies (sensor systems, monitoring and tracking systems, nanotechnology, and decision systems). These information and other technologies can support rural entrepreneurship, sustain jobs in rural and isolated areas, and address a wide range of agricultural and food production and processing issues.

A cornerstone of this program would be the establishment of an Extension *Rural Technology Corps* which would build on the national infrastructure of Cooperative Extension which serves every location in the country through county and regional offices supported by a Federal/State/Local partnership, and through the nationwide eXtension system. The *Corps* could work in collaboration to educate rural citizens to fully utilize broadband and other information technology access to support entrepreneurship, remote jobs, decision assistance, and community linkages. The *Corps* would complement the expansion of broadband to rural areas and support rapid, creative, and effective use of the technology.

Second, the program would expedite the adoption and diffusion of new technologies to address rural and agricultural issues, to support the vitality of rural areas. For example, sensing, monitoring and tracking weather borne crop diseases can both improve production efficiency and reduce environmental impacts by minimizing expensive pesticide purchases and application. New technologies, properly applied and interpreted can help rural communities cost effectively monitor environmental conditions, such as water quality. In addition, new technologies across a broad spectrum, including energy systems, provide opportunities for rural entrepreneurship. These activities will support the Administration's Agenda to Bring Government into the 21<sup>st</sup> Century through the deployment of modern communications infrastructure to improve America's competitiveness and employ technology to solve our Nation's most pressing problems.

An increase of \$5 million will be used to support professional counseling and referral services to assist agricultural producers manage economic, social and other sources of stress associated with the risks inherent in agricultural production. Assistance would focus on rural and isolated communities through cooperative Extension collaborations with community based and other local organizations.

- b. An increase of \$1,000,000 for Extension Services at the 1994 Institutions (\$3,321,000 available in 2009 as follows:

In FY 2010, an increase of \$1,000,000 is proposed to increase Extension program capacity at 1994 Land-Grant Institutions, address special needs, take advantage of important opportunities, and/or demonstrate long-term sustained benefits of Extension projects at 1994 Land-Grant Institutions. Projects will support one or more of the following Extension base program areas: Agriculture; Community Resources and Economic Development; Family Development and Resource Management; 4-H and Youth Development; Leadership and Volunteer Development; Natural Resources and Environmental Management; and Nutrition, Diet and Health.

2. Reductions in lower priority programs as follows:

- a. A decrease of \$4,863,000 in Smith-Lever 3(d) programs to eliminate funding for Farm Safety (\$4,863,000 available in 2009) as follows:

This action is consistent with the Administration's belief that a more effective use of taxpayer dollars is achieved through competitively-awarded grants that meet national goals. Alternative funding from other programs, State and local governments, and private sources could be used to support aspects of this program deemed to be of priority at State and/or local levels.

- b. A decrease of \$1,767,000 to eliminate funding for Grants for Youth Serving Institutions (\$1,767,000 available in 2009) as follows:

This action is consistent with the Administration's belief that a more effective use of taxpayer dollars is achieved through competitively-awarded grants that meet national goals. Alternative funding from other programs, State and local governments, and private sources could be used to support aspects of this program deemed to be of priority at State and/or local levels.

- c. A decrease of \$806,000 to eliminate funding for Food Animal Residue Avoidance Database (\$806,000 available in 2009) as follows:

This action is consistent with the Administration's belief that a more effective use of taxpayer dollars is achieved through competitively-awarded grants that meet national goals. Alternative funding from other programs, State and local governments, and private sources could be used to support aspects of this program deemed to be of priority at State and/or local levels.

3. A net decrease of \$8,809,000 in Federal Administration activities (\$17,374,000 available in 2009) as follows:

- a. An increase of \$579,000 to fund pay costs (\$7,433,000 available in 2009) as follows:

The NIFA budget consists of numerous programs that award thousands of individual grants to colleges and universities and other eligible recipients. These programs are managed at the national level by a staff of about 360 full time employees at the end of FY 2008 and with a number of temporary and intermittent employees. Grants management includes developing program regulations, establishing broad program goals, reviewing proposals, preparing grant documentation, post-award review of progress, and similar activities necessary to achieve program goals. Between 3 and 4 percent of funds provided for programs may be used to support administration of the programs as established by law.

These operating activities are also supported by the direct Federal Administration funds provided in annual appropriations to pay for increased pay costs. Without these funds, the agency will be unable to maintain staffing levels needed to ensure high quality grants management of the Department's main extramural research and education programs supporting the food and agriculture system.

- b. A decrease of \$9,388,000 to eliminate earmarked projects (\$9,388,000 available in 2009) as follows:

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 a specific recipient. The FY 2010 budget proposes to eliminate these targeted earmarks.

Some broad aspects of many topics currently addressed by earmarked projects are may be included in the scope of other broader based, competitively-awarded Federal programs or programs supported with non-Federal funds administered by State-level scientific program managers.

Table 1A For FY 2008  
Distribution of FY 2008 Extension Funds Awarded in FY 2008

SMITH-LEVER STATE	Net FORMULA	PEST MGMT	FARM SAFETY	1890's UNIV & TUSK UNIV	FEDERALLY-RECOGNIZED TRIBES	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	ARPA-RISK MANAGEMENT EDUCATION PARTNERS	Biodiesel Fuel EDUCATION PROGRAM (SECTION 9004)	TOTAL FEDERAL FUNDS
						EFNEP													
ALABAMA	6,764,427	245,917	0	3,511,984	0	2,184,648	0	0	0	1,832,590	107,828	0	0	0	0	0	0	0	14,647,394
ALASKA	1,053,014	56,308	0	0	88,129	180,965	0	100,000	0	0	83,109	0	0	0	0	0	0	0	1,561,525
AMERICAN SAMOA	830,829	24,408	0	0	0	101,498	0	0	0	0	0	0	0	0	0	0	0	0	956,735
ARIZONA	1,962,551	100,408	0	0	742,541	643,856	0	525,801	0	0	72,438	0	0	0	0	170,000	0	0	4,217,595
ARKANSAS	5,847,081	265,325	0	1,561,120	0	1,363,743	0	0	0	849,210	95,633	0	0	0	0	0	0	0	9,982,112
CALIFORNIA	6,885,168	337,536	199,000	0	0	3,839,417	0	0	0	0	99,877	0	0	0	0	0	0	0	11,360,998
COLORADO	2,928,477	100,408	199,000	0	0	594,687	0	0	0	0	61,768	0	0	0	0	0	0	0	3,884,340
CONNECTICUT	1,965,183	135,819	0	0	0	477,079	0	128,430	0	0	110,025	0	0	0	0	0	0	0	2,816,536
DELAWARE	1,197,659	68,408	199,000	1,066,154	0	325,715	0	0	650,410	57,525	0	0	0	0	0	0	900,000	0	4,564,871
DISTRICT OF COLUMBIA	1,055,866	0	0	0	0	0	0	0	11,000	0	0	0	0	0	0	0	0	0	1,067,866
FLORIDA	4,512,272	257,094	0	1,512,166	72,489	2,302,979	0	1,046,147	0	858,230	97,158	0	0	0	0	0	0	0	10,655,535
GEORGIA	7,661,290	368,139	180,000	2,120,004	0	2,295,836	0	0	965,868	194,352	0	1,024,076	0	0	0	0	0	0	14,809,565
GUAM	883,294	24,421	0	0	0	101,578	0	300,000	0	0	0	0	0	0	0	0	0	0	1,309,293
HAWAII	1,265,633	68,408	0	0	0	271,641	0	0	0	46,525	0	0	0	148,902	0	0	0	0	1,801,109
IDAHO	2,648,082	100,408	199,000	0	245,814	308,073	0	134,000	0	0	54,146	0	0	0	0	0	0	0	3,889,523
ILLINOIS	9,262,878	355,777	0	0	0	2,235,281	0	134,000	0	0	55,670	0	0	0	0	0	0	200,000	12,043,606
INDIANA	8,276,680	203,808	729,376	0	0	1,232,809	0	0	0	52,622	549,000	0	0	0	0	0	0	0	11,044,295
IOWA	9,080,890	295,742	0	0	0	906,717	0	134,000	0	0	46,525	0	0	0	680,642	0	0	0	11,144,516
KANSAS	5,452,115	168,608	179,860	0	0	707,871	0	954,000	0	0	46,525	0	0	0	0	85,000	0	0	7,993,979
KENTUCKY	9,051,948	121,656	0	2,654,648	0	1,772,352	0	316,000	1,065,916	80,390	0	0	0	0	0	0	0	0	15,665,383
LOUISIANA	5,172,968	273,589	0	1,417,464	0	1,997,059	0	184,000	797,242	92,585	0	0	0	0	0	0	0	0	9,934,907
MAINE	2,144,894	115,408	0	0	0	430,250	0	0	0	66,241	0	0	0	285,984	0	0	0	0	3,042,877
MARYLAND	3,185,298	130,408	0	1,128,381	0	965,369	0	234,000	742,457	57,524	570,240	9,807	0	0	0	0	0	0	7,023,484
MASSACHUSETTS	2,443,576	100,408	0	0	0	1,014,684	0	0	0	110,024	0	0	0	0	0	0	0	0	4,055,725
MICHIGAN	8,424,394	236,689	180,000	0	92,061	1,855,226	0	80,418	0	80,060	0	0	0	0	0	178,998	0	0	11,127,846
MICRONESIA	918,795	24,408	0	0	0	102,813	0	100,000	0	0	0	0	0	0	0	0	0	0	1,146,016
MINNESOTA	8,792,527	276,847	195,965	0	114,195	1,012,581	0	284,000	60,244	0	1,024,076	339,701	0	0	170,000	300,000	0	0	12,570,136
MISSISSIPPI	6,622,817	327,847	180,000	1,681,640	67,986	1,809,010	0	134,000	1,086,252	104,779	0	0	0	0	438,032	0	0	0	12,452,363
MISSOURI	8,220,469	246,940	180,000	2,663,517	0	1,671,606	0	134,000	853,908	81,914	0	0	0	0	0	0	0	759,585	14,811,939
MONTANA	2,500,828	273,211	0	0	499,362	309,426	0	100,000	0	63,292	0	0	656,069	0	0	984,805	0	0	5,386,993
NEBRASKA	4,866,165	234,608	199,000	0	0	546,095	0	0	1,415,621	46,524	0	0	0	0	177,366	0	1,200,000	0	8,685,379
NEVADA	1,165,200	56,308	0	0	73,937	200,697	0	134,000	0	48,049	0	0	0	0	0	0	0	0	1,678,191
NEW HAMPSHIRE	1,606,760	68,408	0	0	0	246,276	0	134,000	0	46,524	0	0	0	0	0	0	0	0	2,101,968
NEW JERSEY	2,578,910	112,308	0	0	0	1,127,685	0	0	0	46,524	0	0	0	0	0	0	0	0	3,865,427
NEW MEXICO	2,086,959	68,408	0	0	158,880	539,510	0	134,000	0	67,865	0	0	0	291,894	255,000	0	0	0	3,602,516
NEW YORK	8,268,736	189,508	0	0	0	3,621,438	0	458,179	0	52,255	549,000	0	0	0	133,459	0	0	0	13,313,575
NORTH CAROLINA	11,608,646	287,757	0	3,062,467	69,510	2,642,843	0	134,000	1,079,485	106,304	0	17,135	0	0	0	0	0	0	19,008,147
NORTH DAKOTA	3,323,717	100,407	0	0	102,633	346,958	0	0	0	46,524	0	0	0	0	0	424,970	0	0	4,345,209
NORTHERN MARIANAS	812,361	24,407	0	0	0	101,434	0	0	0	64,817	0	0	0	0	0	0	0	0	1,003,019
OHIO	9,842,042	234,607	0	0	0	2,269,203	0	0	0	68,195	0	0	0	1,358,424	0	0	0	0	13,772,471
OKLAHOMA	5,275,405	232,977	199,000	1,609,411	100,893	1,173,321	0	0	902,227	90,731	0	0	0	0	107,244	0	0	0	9,691,209
OREGON	3,573,965	134,507	0	0	63,552	533,781	0	0	0	172,682	0	0	0	322,718	0	0	0	0	4,801,205
PENNSYLVANIA	9,443,375	140,507	199,000	0	0	2,767,370	223,441	0	0	0	0	0	0	0	313,819	0	0	0	13,087,512
PUERTO RICO	6,282,092	49,707	0	0	0	1,575,905	0	134,000	0	46,524	0	0	0	0	0	0	0	0	8,088,228
RHODE ISLAND	986,200	56,307	0	0	0	313,304	0	99,979	0	84,963	0	0	0	0	208,768	0	0	0	1,749,521
SOUTH CAROLINA	5,379,788	374,806	0	1,529,788	0	1,633,201	0	134,000	844,857	46,524	0	0	0	0	165,871	0	0	0	10,108,835
SOUTH DAKOTA	3,357,097	100,407	0	0	174,850	392,601	0	134,000	0	86,487	0	0	0	0	0	254,986	0	0	4,500,428
TENNESSEE	8,885,387	229,790	180,000	2,358,359	0	2,091,414	0	134,000	1,006,903	112,401	0	0	0	0	0	0	0	0	14,998,254
TEXAS	12,258,304	641,335	0	3,404,867	0	4,516,458	0	133,998	1,351,095	49,573	0	0	0	1,646,315	0	1,200,000	0	0	25,201,945
UTAH	1,730,523	68,407	199,000	0	0	331,850	0	96,247	0	46,524	0	2,309,994	0	0	0	0	0	0	4,782,545
VERMONT	1,697,621	56,307	180,000	0	0	239,792	0	0	0	11,000	0	0	0	0	0	0	0	0	2,184,720
VIRGIN ISLANDS	856,904	24,407	0	0	0	101,532	0	134,000	0	100,206	0	0	0	0	0	0	0	0	1,217,049
VIRGINIA	6,840,219	134,507	199,000	1,994,815	0	1,804,969	0	0	931,056	78,536	0	0	0	0	0	0	0	0	11,983,102
WASHINGTON	4,076,293	134,507	0	0	88,088	742,439	0	0	0	69,719	0	0	0	77,406	185,000	0	1,200,000	0	6,573,452
WEST VIRGINIA	3,905,802	56,307	180,000	1,139,483	0	1,078,228	221,059	134,000	758,880	77,011	0	0	348,489	77,406	0	0	0	0	7,976,665
WISCONSIN	8,211,118	212,218	199,000	0	0	986,980	0	100,000	0	51,097	0	0	0	2,505,220	270,000	0	0	0	12,535,633
WYOMING	1,483,442	68,407	181,004	0	104,920	195,219	0	0	0	0	0	0	0	0	0	0	0	0	2,032,992
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEER PANEL/CSAA	0	2,852	455	0	0	0	682	296,920	0	0	0	0	0	1,263	0	9,718	0	415	312,305
REIMBURSABLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>267,415,934</b>	<b>9,399,341</b>	<b>4,536,660</b>	<b>34,416,268</b>	<b>2,859,840</b>	<b>65,135,272</b>	<b>445,182</b>	<b>7,649,119</b>	<b>1,415,621</b>	<b>16,576,586</b>	<b>3,847,438</b>	<b>1,668,240</b>	<b>4,385,088</b>	<b>1,668,240</b>	<b>9,428,892</b>	<b>3,165,843</b>	<b>4,800,000</b>	<b>960,000</b>	<b>439,773,564</b>
<b>FEDERAL ADMINISTRATION</b>	<b>7,198,894</b>	<b>391,639</b>	<b>189,027</b>	<b>1,434,011</b>	<b>119,160</b>	<b>421,595</b>	<b>18,549</b>	<b>318,713</b>	<b>58,984</b>	<b>690,691</b>	<b>160,310</b>	<b>69,510</b>	<b>182,712</b>	<b>69,510</b>	<b>7,751,001</b>	<b>131,910</b>	<b>200,000</b>	<b>40,000</b>	<b>19,446,216</b>
<b>SUBTOTAL OBLIGATIONS</b>	<b>274,614,828</b>	<b>9,790,980</b>	<b>4,725,687</b>	<b>35,850,279</b>	<b>2,979,000</b>	<b>65,556,867</b>	<b>463,731</b>	<b>7,967,832</b>	<b>1,474,605</b>	<b>17,267,277</b>	<b>4,007,748</b>	<b>1,737,750</b>	<b>4,567,800</b>	<b>1,737,750</b>	<b>17,179,893</b>	<b>3,297,753</b>	<b>5,000,000</b>	<b>1,000,000</b>	<b>459,219,780</b>
<b>UNOBLIGATED BALANCE</b>	<b>45,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45,000</b>
<b>TOTAL</b>	<b>274,659,828</b>	<b>9,790,980</b>	<b>4,725,687</b>	<b>35,850,279</b>	<b>2,979,000</b>														

Table 2A For FY 2009  
Distribution of Federal Payments for Extension Activities

STATE	Smith-Lever Formula	1890's Univ. & Tusk. Univ. (ea)	Youth at Risk	Youth Farm Safety Education and Certification	Farm Safety	New Technologies for Ag Extension	Improved Rural Quality of Life	Sustainable Agriculture	Pest Mgmt.	EFNEP	Federally- Recognized Tribe Extension	Renewable Resources	Rural Health & Safety	1890 Facilities	Ext. Services at the 1994 Institutions	Food Animal Residue Avoidance Database	Grants to Youth Serving Institutions	Federal Adm-Special Projects	Total Federal Funds
FEDERAL ADMIN	7,799,420	1,606,000	327,280	19,160	194,520	60,000	-	182,720	391,640	445,520	120,000	160,320	69,520	720,000	132,840	32,240	70,680	8,361,520	20,693,380
SUBTOTAL, OBLIGATIONS	7,799,420	1,606,000	327,280	19,160	194,520	60,000	-	182,720	391,640	445,520	120,000	160,320	69,520	720,000	132,840	32,240	70,680	8,361,520	20,693,380
UNOBLIGATED BALANCE	280,748,580	38,544,000	7,854,720	459,840	4,668,480	1,440,000	-	4,385,280	9,399,360	65,709,480	2,880,000	3,847,680	1,668,480	17,280,000	3,188,160	773,760	1,696,320	9,012,480	453,556,620
TOTAL	288,548,000	40,150,000	8,182,000	479,000	4,863,000	1,500,000	-	4,568,000	9,791,000	66,155,000	3,000,000	4,008,000	1,738,000	18,000,000	3,321,000	806,000	1,767,000	17,374,000	474,250,000

Table 3A For FY 2010  
Distribution of Federal Payments for Extension Activities

STATE	Smith-Lever Formula	1890's Univ. & Tusk. Univ. (ea)	Youth at Risk	Youth Farm Safety Education and Certification	Farm Safety	New Technologies for Ag Extension	Improved Rural Quality of Life	Sustainable Agriculture	Pest Mgmt.	EFNEP	Federally- Recognized Tribe Extension	Renewable Resources	Rural Health & Safety	1890 Facilities	Ext. Services at the 1994 Institutions	Food Animal Residue Avoidance Database	Grants to Youth Serving Institutions	Federal Adm-Special Projects	Total Federal Funds
FEDERAL ADMIN	7,799,420	1,606,000	327,280	19,160	-	60,000	1,120,000	182,720	391,640	445,520	120,000	160,320	69,520	720,000	172,840	-	-	8,565,000	21,759,420
SUBTOTAL, OBLIGATIONS	7,799,420	1,606,000	327,280	19,160	-	60,000	1,120,000	182,720	391,640	445,520	120,000	160,320	69,520	720,000	172,840	-	-	8,565,000	21,759,420
UNOBLIGATED BALANCE	280,748,580	38,544,000	7,854,720	459,840	-	1,440,000	26,880,000	4,385,280	9,399,360	65,709,480	2,880,000	3,847,680	1,668,480	17,280,000	4,148,160	-	-	-	465,245,580
TOTAL	288,548,000	40,150,000	8,182,000	479,000	-	1,500,000	28,000,000	4,568,000	9,791,000	66,155,000	3,000,000	4,008,000	1,738,000	18,000,000	4,321,000	-	-	8,565,000	487,005,000

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

CLASSIFICATION BY OBJECTSExtension Activities2008 Actuals and Estimated 2009 and 2010

Personnel Compensation:	<u>2008</u>	<u>2009</u>	<u>2010</u>
Washington, D.C. ....	\$11,156,339	\$11,480,000	\$11,949,000
Field .....	0	0	0
11 Total personnel compensation .....	11,156,339	11,480,000	11,949,000
12 Personnel benefits .....	2,578,395	2,653,000	2,763,000
13 Benefits for former personnel .....	5,795	5,900	5,900
Total pers. comp. & benefits .....	13,740,529	14,138,900	14,717,900

**Other Objects:**

21 Travel .....	1,010,286	1,020,000	1,030,000
22 Transportation of Things .....	11,339	12,000	12,000
23.1 Rent to GSA.....	7,043	7,100	7,100
23.2 Rent Paid to others .....	35,537	36,000	36,000
23.3 Communications, Utilities, etc. ....	299,586	300,000	309,000
24 Printing and Reproduction .....	118,561	121,000	122,000
25.1 Advisory & assist. Services .....	333,347	333,000	343,000
25.2 Other Services .....	1,743,239	1,507,000	1,616,505
25.3 Purchases of G&S from Govt. ....	43,835	45,000	45,000
25.4 Operation and Maintenance of facilities .....	143,264	146,000	147,000
25.5 Research and Development Contracts .....	2,762,985	2,696,000	2,717,395
25.6 ADP Services and Supplies (NFC) .....	3,371	3,400	3,500
25.7 Operation and maintenance of equipment ...	52,686	53,000	54,000
25.8 Subsistence and support of persons .....	24,277	25,000	26,000
26 Supplies .....	182,630	183,000	185,000
31 Equipment .....	101,456	103,000	104,000
41 Grants, Contracts, etc. ....	432,575,559	453,520,600	465,529,600
42 Litigation Fees .....	29,956	0	0
43 Interest Prompt Payment .....	294	0	0
Total, other objects .....	439,479,251	460,111,100	472,287,100
Total Obligations .....	453,219,780	474,250,000	487,005,000

## Position Data:

Average Salary, ES .....	\$160,838	\$165,503	\$170,799
Average Salary, GS .....	\$88,166	\$90,723	\$93,626
Average Grade, GS .....	11.6	11.6	11.6

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## STATUS OF PROGRAM

**EXTENSION ACTIVITIES:****Current Activities:**

1. **Smith-Lever 3(b) and (c).** Federal contributions for cooperative extension work are primarily derived from Section 3(b) and (c) formula funds appropriated under the Smith-Lever Act of 1914. These funds comprise about two-thirds of the total Federal funding for extension activities. Federal funds are matched by non-Federal sources, primarily States and counties, and support the major educational efforts that are central to the mission of the Cooperative Extension System and common to most extension units, such as agricultural production; nutrition, diet, and health; natural resources and environmental management; community resources and economic development; family development and resource management; 4-H and youth development; and leadership and volunteer development. Smith-Lever 3(b) and (c) funds must be matched by non-Federal funds. As a result of provisions contained in AREERA, States must expend 25 percent, or two times the level spent in FY 1997 (whichever is less), on cooperative extension activities in which two or more States cooperate to solve problems that concern more than one State. This also applies to activities that integrate cooperative research and extension. These requirements can be met concurrently.
2. **Smith-Lever 3(d).** Other sources of Federal funding for extension activities include the Smith-Lever section 3(d) or targeted funds, which are provided to the States to address special programs or concerns of regional and national importance and are distributed through administrative or non-statutory formulas and merit-reviewed projects. The following extension programs are funded under the Smith-Lever 3(d) funding mechanism: Expanded Food and Nutrition Education Program (EFNEP); Pest Management; Farm Safety; 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 7121 of 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).** The RREA Program provides funding for expanded natural resource education programs. Funds are distributed by an administratively-derived formula to all States for educational programs and projects. 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. **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.
7. **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.

#### **Selected Examples of Recent Progress:**

1. **Smith-Lever 3(b) and (c).** Mastitis is the most costly disease of dairy cattle--through reducing protein in milk, cheese maker yields, shelf life, palatability, and dairy farm income. Milk quality is measured by the somatic cell count. To increase milk quality, 478 farms participated in the **University of Wisconsin Extension Milk Money** team process. As a result, producers adopted best management practices such as performing bulk tank cultures; culturing for clinical mastitis; keeping better treatment records; developing standard, written milking routines; wearing gloves during milking; training Spanish-speaking workers in best practices, consulting with dairy professionals, and using team management. After 4 months in the program, the average farm improved their milk quality by about 77,000 somatic cells per milliliter and increased income by \$1,650 per month.
2. **Smith-Lever 3 (d).** The EFNEP program continues to help Americans improve their overall health and well-being by learning and adopting healthier eating habits. The **University of Missouri Extension EFNEP** reported over 96 percent of the EFNEP adult participants made positive changes in one or more food groups. **The Iowa State University EFNEP** survey found that 97.7 percent of EFNEP program participants reported positive changes in any food group at program exit. **The University of Nebraska** reported over 86 percent of its EFNEP families made a positive change in consumption of at least one food group, 76 percent made a change in one or more nutritional practices and 94 percent of youth improved in eating a variety of foods.
3. **1890 Institutions.** The **Alcorn State University Extension (Mississippi)** Sustainable Animal Production Program resulted in 620 Mississippi producers being educated on best management practices for improved production efficiency of pasture-raised pork through workshops on production management practices, a demonstration on management practices, and seminars on management practices. As determined through evaluation of (pre/post) test and observation by extension educators and animal science specialists, 80 percent of producers gained additional knowledge of best management practices for pasture-raised pork production, and 20 percent have adopted practices that improve production.

Because of the increasing demand for goat milk products, **Langston University (Oklahoma)** has conducted training courses for goat milk cheeses and goat milk soap production; in addition to their annual cheese-making workshops. Goat producers without cheese-making and soap-making experiences were taught basic skills. The majority of them have recently started cheese-making and/or soap-making at home and several are going commercial. By making goat milk products and adding value to goat milk, goat producers are increasing their income in goat production.

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

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, \$56,864,000, as follows: for competitive grants programs authorized under section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7626), \$41,990,000, including \$12,649,000 for the water quality program, \$14,596,000 for the food safety program, \$4,096,000 for the regional pest management centers program, \$4,388,000 for the Food Quality Protection Act risk mitigation program for major food crop systems, \$1,365,000 for the crops affected by Food Quality Protection Act implementation, \$3,054,000 for methyl bromide transition program, and \$1,842,000 for the organic transition program; 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), to remain available until expended, \$3,000,000; for grants programs authorized under section 2(c)(1)(B) of Public Law 89-106, as amended, \$732,000, to remain available until September 30, [2010]2011, for the critical issues program; \$1,312,000 for the regional rural development centers program; and \$9,830,000 for the Food and Agriculture Defense Initiative authorized under section 1484 of the National Agricultural Research, Extension, and Teaching Act of 1977, to remain available until September 30, [2010]2011. (7 U.S.C. 450i(c)(1)(B), 3292b, 3351, 7626; Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2009.)

Explanation of Changes:

The first and second changes allow these funds to remain available until September 30, 2011.

**13-54**

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Lead-Off Tabular Statement

INTEGRATED ACTIVITIES

Appropriation Act, 2009.....	\$ 56,864,000
Budget Estimate, 2010 .....	<u>56,864,000</u>
Change in Appropriation.....	<u>0</u>

Summary of Increases and Decreases

<u>Item of Change</u>	<u>2009 Estimated</u>	<u>Pay Costs</u>	<u>Program Changes</u>	<u>2010 Budget</u>
Integrated Activities:				
Total Available, Integrated Activities.....	<u>\$ 56,864,000</u>	<u>--</u>	<u>--</u>	<u>\$56,864,000</u>

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

INTEGRATED ACTIVITIES

Project Statement  
(On basis of Appropriation)

Project	2008 Actual		2009 Estimated		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
<u>Integrated Activities:</u>							
Food and Agriculture Defense Initiative (Homeland Security) .....	\$9,830,700		\$9,830,000		--	\$9,830,000	
Water Quality .....	12,648,834		12,649,000		--	12,649,000	
Food Safety .....	14,596,107		14,596,000		--	14,596,000	
Regional Pest Management Centers .....	4,096,125		4,096,000		--	4,096,000	
Organic Transition Program .....	1,842,015		1,842,000		--	1,842,000	
FQPA Risk Mitigation Program for Major Food Crop Systems .....	4,388,067		4,388,000		--	4,388,000	
Crops at Risk from FQPA Implementation .....	1,365,375		1,365,000		--	1,365,000	
Methyl Bromide Transition Program .....	3,053,475		3,054,000		--	3,054,000	
Critical Issues - Plant and Animal Diseases .....	731,841		732,000		--	732,000	
Regional Rural Development Centers .....	1,311,753		1,312,000		--	1,312,000	
International Science and Education Grants .....	1,986,000		3,000,000		--	3,000,000	
Total Available or Estimate .....	55,850,292	8	56,864,000	8	--	56,864,000	8
Rescission.....	393,708		--				
Total Appropriation .....	56,244,000	8	56,864,000	8			

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
INTEGRATED ACTIVITIES

Project Statement  
(On basis of Available Funds)

Project	2008 Actual		2009 Estimated		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
<u>Integrated Activities:</u>							
Food and Agriculture Defense Initiative (Homeland Security) .....	\$9,830,700		\$9,830,000		--	\$9,830,000	
Water Quality .....	12,648,834		12,649,000		--	12,649,000	
Food Safety .....	14,581,018		14,596,000		--	14,596,000	
Regional Pest Management Centers .....	4,096,125		4,096,000		--	4,096,000	
Organic Transition Program .....	1,842,015		1,842,000		--	1,842,000	
FQPA Risk Mitigation Program for Major Food Crop Systems .....	4,388,067		4,388,000		--	4,388,000	
Crops at Risk from FQPA Implementation .....	1,365,375		1,365,000		--	1,365,000	
Methyl Bromide Transition Program .....	3,053,475		3,054,000		--	3,054,000	
Critical Issues - Plant and Animal Diseases .....	849,406		732,000		--	732,000	
Carryover .....	--		+569,762		-569,762	--	
Regional Rural Development Centers .....	1,311,753		1,312,000		--	1,312,000	
International Science and Education Grants .....	2,350,364		3,000,000		--	3,000,000	
Carryover .....	--		623,397		-623,397	--	
Total Obligations Estimate .....	56,317,132	8	58,057,159	8	1,193,159	56,864,000	8
Unobligated Balance:							
Available, start of year .....	-1,740,030		-1,193,159		1,193,159	--	
Lapsing .....	+15,089						
Available, End of Year .....	+1,193,159						
Prior Year Recoveries .....	+64,942						
Total Available or Estimate .....	55,850,292	8	56,864,000	8	--	56,864,000	8
Rescission .....	+393,708						
Total Appropriation .....	56,244,000	8	56,864,000	8			

TABLE 1B - FISCAL YEAR 2008

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

INTEGRATED PROGRAMS

STATE	Critical Issues - Plant and Animal Diseases	Homeland Security	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	TOTAL FEDERAL FUNDS
ALABAMA	0	0	100,000	0	0	0	0	0	0	0	521,222	621,222
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0
AMERICAN SAMOA	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	0	298,000	0	0	0	0	0	0	0	0	943,000	1,241,000
ARKANSAS	0	0	0	0	0	699,521	0	0	0	0	0	699,521
CALIFORNIA	0	1,172,190	0	531,511	0	0	1,132,470	0	974,878	0	620,000	4,431,049
COLORADO	0	298,000	0	0	0	579,612	0	0	0	0	590,000	1,467,612
CONNECTICUT	0	0	0	0	0	0	0	0	0	0	0	0
DELAWARE	0	0	0	0	0	596,847	0	0	0	0	0	596,847
DISTRICT OF COLUMBIA	0	0	100,000	0	0	0	0	0	0	0	0	100,000
FLORIDA	0	1,122,190	199,911	0	0	50,000	575,270	0	0	0	0	1,947,371
GEORGIA	0	298,000	99,999	240,250	1,750,000	599,414	0	0	0	0	0	2,987,663
GUAM	0	0	0	0	0	0	0	0	0	0	0	0
HAWAII	0	0	0	0	0	487,619	0	0	0	0	475,000	962,619
IDAHO	0	0	0	0	1,250,000	0	0	0	0	0	585,000	1,835,000
ILLINOIS	0	0	100,000	0	0	1,189,984	0	0	974,878	0	0	2,264,862
INDIANA	0	825,717	99,718	0	0	0	0	0	0	0	0	925,435
IOWA	0	298,000	0	0	0	0	0	855,629	0	312,197	800,000	2,265,826
KANSAS	59,836	874,190	0	0	0	0	784,805	0	0	0	600,000	2,318,831
KENTUCKY	0	50,000	100,000	0	0	0	0	0	0	0	0	150,000
LOUISIANA	0	298,000	0	215,390	0	0	0	0	0	0	0	513,390
MAINE	0	0	0	0	0	0	0	0	0	0	555,000	555,000
MARYLAND	0	0	0	0	0	599,264	0	0	0	0	600,000	1,199,264
MASSACHUSETTS	0	0	0	0	0	0	0	0	0	0	0	0
MICHIGAN	0	979,190	0	21,368	1,160,264	1,208,764	0	0	0	0	230,000	3,599,586
MICRONESIA	0	0	0	0	0	0	0	0	0	0	0	0
MINNESOTA	392,888	50,000	0	0	0	0	0	0	0	0	0	442,888
MISSISSIPPI	0	50,000	0	0	0	0	0	0	0	312,197	0	362,197
MISSOURI	0	0	0	0	0	0	0	0	0	0	0	0
MONTANA	0	0	0	282,010	0	0	0	0	0	0	0	282,010
NEBRASKA	0	49,805	99,981	0	0	1,249,488	0	0	0	0	0	1,399,274
NEVADA	0	0	0	0	0	0	0	0	0	0	175,000	175,000
NEW HAMPSHIRE	0	0	0	0	0	0	0	0	0	0	0	0
NEW JERSEY	0	50,000	100,000	0	0	0	0	0	0	0	0	150,000
NEW MEXICO	0	50,000	0	0	0	0	0	0	0	0	0	50,000
NEW YORK	0	1,122,190	99,109	0	0	1,636,366	0	0	0	0	0	2,857,665
NORTH CAROLINA	0	298,000	0	0	0	1,556,852	0	347,815	974,878	0	0	3,177,545
NORTH DAKOTA	0	0	199,612	0	0	0	0	0	0	0	0	199,612
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0
OHIO	0	50,000	99,979	0	0	50,000	0	0	0	0	1,030,000	1,229,979
OKLAHOMA	0	0	0	0	0	0	0	0	0	0	0	0
OREGON	0	50,000	0	0	0	407,072	0	0	0	0	0	457,072
PENNSYLVANIA	269,983	50,000	200,000	0	0	555,819	0	0	974,877	312,197	0	2,362,876
PUERTO RICO	0	0	0	0	0	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	0	0	0	0	0	1,460,000	1,460,000
SOUTH CAROLINA	90,000	0	0	0	0	577,061	0	0	0	0	0	667,061
SOUTH DAKOTA	0	50,000	99,988	0	0	0	0	0	0	0	0	149,988
TENNESSEE	0	50,000	199,601	0	0	597,399	0	0	0	0	0	847,000
TEXAS	0	298,000	100,000	0	0	599,840	0	0	0	0	1,897,000	2,894,840
UTAH	0	50,000	0	0	0	0	0	0	0	312,198	0	362,198
VERMONT	0	0	0	0	0	0	0	0	0	0	240,000	240,000
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0	0	0	0
VIRGINIA	0	0	98,281	0	0	584,224	395,972	0	0	0	0	1,078,477
WASHINGTON	0	308,000	98,955	0	0	0	0	0	0	0	75,546	482,501
WEST VIRGINIA	0	0	0	0	0	0	0	0	0	0	0	0
WISCONSIN	0	298,000	66,788	0	0	0	0	550,154	0	0	600,000	1,514,942
WYOMING	0	50,000	0	0	0	0	0	0	0	0	0	50,000
BIOTECH	3,440	0	0	0	0	0	0	0	0	0	0	3,440
SBIR	17,564	0	0	10,923	35,105	116,769	24,428	14,736	32,769	10,494	101,191	363,979
PEER PANEL	1,421	0	19,002	9,308	17,175	70,348	18,391	0	0	0	44,922	180,567
FEDERAL ADMINISTRATION	14,274	393,228	69,440	54,615	175,523	568,755	122,139	73,681	163,845	52,470	505,953	2,193,923
SUBTOTAL	849,406	9,830,700	2,350,364	1,365,375	4,388,067	14,581,018	3,053,475	1,842,015	4,096,125	1,311,753	12,648,834	56,317,132
LAPSING	0	0	0	0	0	15,089	0	0	0	0	0	15,089
UNOBLIGATED BALANCE	569,762	0	623,397	0	0	0	0	0	0	0	0	1,193,159
TOTAL	1,419,168	9,830,700	2,973,761	1,365,375	4,388,067	14,596,107	3,053,475	1,842,015	4,096,125	1,311,753	12,648,834	57,525,380

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

INTEGRATED PROGRAMS

TABLE 2B - FISCAL YEAR 2009

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 Transition Risk Assessment	Regional Pest Management Center	Rural Development Centers	International Science and Education Grants	Water Quality	Homeland Security	Biotech Risk Assessment	TOTAL FEDERAL FUNDS
SBIR	17,568	32,760	105,312	350,304	73,296	44,208	98,304	31,488	75,000	303,576	235,920	0	1,367,736
BIOTECH RISK	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL ADMIN OBLIGATED	29,280	54,600	175,520	583,840	122,160	73,680	163,840	52,480	120,000	505,960	393,200	0	2,274,560
UNOBLIGATED	685,152	1,277,640	4,107,168	13,661,856	2,858,544	1,724,112	3,833,856	1,228,032	2,805,000	11,839,464	9,200,880	0	53,221,704
TOTAL	732,000	1,365,000	4,388,000	14,596,000	3,054,000	1,842,000	4,096,000	1,312,000	3,000,000	12,649,000	9,830,000	0	56,864,000

TABLE 3B - FISCAL YEAR 2010

INTEGRATED ACTIVITIES

INTEGRATED PROGRAMS

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 Transition Risk Assessment	Regional Pest Management Center	Rural Development Centers	International Science and Education Grants	Water Quality	Homeland Security	Biotech Risk Assessment	TOTAL FEDERAL FUNDS
SBIR	17,568	32,760	105,312	350,304	73,296	44,208	98,304	31,488	75,000	303,576	235,920	0	1,367,736
BIOTECH RISK	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL ADMIN OBLIGATED	29,280	54,600	175,520	583,840	122,160	73,680	163,840	52,480	120,000	505,960	393,200	0	2,274,560
UNOBLIGATED	685,152	1,277,640	4,107,168	13,661,856	2,858,544	1,724,112	3,833,856	1,228,032	2,805,000	11,839,464	9,200,880	0	53,221,704
TOTAL	732,000	1,365,000	4,388,000	14,596,000	3,054,000	1,842,000	4,096,000	1,312,000	3,000,000	12,649,000	9,830,000	0	56,864,000

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

CLASSIFICATION BY OBJECTSIntegrated Activities2008 Actuals and Estimated 2009 and 2010

Personnel Compensation:	<u>2008</u>	<u>2009</u>	<u>2010</u>
Washington, D.C. ....	\$515,171	\$530,111	\$547,075
Field .....	0	0	0
11 Total personnel compensation .....	515,171	530,111	547,075
12 Personnel benefits .....	107,080	110,185	113,711
13 Benefits for former personnel .....	712	712	712
Total pers. comp. & benefits .....	622,963	641,008	661,498
<b>Other Objects:</b>			
21 Travel .....	29,108	29,690	29,987
22 Transportation of Things .....	1,653	1,686	1,703
23.1 Rent to GSA.....	896	914	923
23.2 Rent Paid to others .....	4,372	4,459	4,504
23.3 Communications, Utilities, etc. ....	6,116	6,238	6,301
24 Printing and Reproduction .....	6,662	6,795	6,863
25.1 Advisory & assist. Services .....	17,360	17,707	17,884
25.2 Other Services .....	17,560	17,911	18,090
25.3 Purchases of G&S from Govt. ....	6,020	6,140	6,202
25.4 Operation and Maintenance of facilities .....	8,892	9,070	9,161
25.5 Research and Development Contracts .....	16,667	17,000	17,170
25.6 ADP Services and Supplies (NFC) .....	415	423	428
25.7 Operation and maintenance of equipment ...	9,138	9,321	9,414
25.8 Subsistence and support of persons .....	3,350	3,417	3,451
26 Supplies .....	12,322	12,568	12,694
31 Equipment .....	16,483	16,813	16,981
41 Grants, Contracts, etc. ....	55,531,721	57,250,498	56,035,193
42 Litigation Fees .....	5,391	5,499	5,554
43 Interest Prompt Payment .....	43	0	0
Total, other objects .....	55,694,169	57,416,151	56,202,503
Total Obligations .....	56,317,132	58,057,159	56,864,000
<b>Position Data:</b>			
Average Salary, ES .....	\$160,838	\$165,503	\$170,799
Average Salary, GS .....	\$88,166	\$90,723	\$93,626
Average Grade, GS .....	11.6	11.6	11.6

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

### STATUS OF PROGRAM

#### INTEGRATED ACTIVITIES:

##### 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, Food Quality Protection Act Risk Mitigation Program for Major Food Crop Systems, Methyl Bromide Transition Program, and Organic Transition Program. 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. The Food and Agriculture Defense Initiative 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 a 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.** Excessive irrigation and unmanaged fertilization contribute to nutrient leaching into the groundwater in Florida. The **University of Florida** is developing and implementing water conservation and nutrient management best management practices (BMPs) and evaluating their environmental and economic benefits. Several agricultural growers have implemented recommended BMPs. Implementation of the selected BMPs is resulting in an estimated economic impact of 10 percent savings for irrigation and up to 50 percent savings for fertilizers. The environmental impact is expected to be substantial, with early results indicating a 75-90 percent water savings during the rainy season with no significant impact on agricultural products.
2. **Food Safety Program.** Researchers at the **University of Nebraska** are working to improve the safety of shell eggs and egg products by addressing critical research needs for Salmonella Enteritidis and Salmonella spp. Heat transfer models for cooling of eggs, and dynamic growth model for Salmonella Enteritidis (SE) in egg yolk have been developed. The models were integrated to develop a tertiary model that could predict the potential growth of SE in egg yolks in case the eggs are contaminated. The research has been provided to the egg processing industry. These models will be critical to evaluate the safety of the egg cooling practices followed in the egg processing industry. Moreover, the models can be used by the industry, regulators, as well as, food safety policy personnel to evaluate the risk of salmonellosis from eggs and egg products. The information also can be used to identify risk reduction and management strategies.
3. **Crops at Risk from FQPA Implementation Program.** The Mexican rice borer (MRB) is a potentially serious insect pest threat to rice and sugarcane in Texas and Louisiana. Researchers at **Louisiana State University** are helping scientists and regulatory personnel stay aware of the MRB movement; therefore, the detrimental effects of the now instituted quarantine are minimized (compared to quarantining the entire crop). They found that multiple control tactics (resistant varieties, irrigation, insecticides) must be compatibly implemented to enhance appropriate levels of MRB pest suppression,

also reducing area-wide pest populations. Comparative potential yield losses in sugarcane with similar MRB infestations observed in several Texas counties were greater than \$4,000 per hectare. Biological resistance to MRB has been identified in both rice and sugarcane, but the major breeding programs have not yet developed high yielding MRB resistant varieties.

4. **FOPA Risk Mitigation Program.** The use of biological controls, such as predatory mites, is one component of a grower's integrated pest management program. Research being conducted at **The Pennsylvania State University** found high numbers of the beneficial predatory mite *Typhlodromus pyri* (*T. pyri*) in a commercial apple orchard in Adams County, Pennsylvania. The research found that *T. pyri* is capable of tolerating the hotter summers of Pennsylvania and can exist in multiple sites. Because of this discovery, Pennsylvania tree fruit growers could potentially save up to \$1 million per year in pesticide applications, reduce their pesticide usage by almost one ton of active ingredient, as well as receive Federal conservation payments.
  
5. **Food and Agriculture Defense Initiative (FADI) 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 nine 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, and Rift Valley Fever.* *Rift Valley Fever*, added in Fiscal Year 2008, is a fever-causing disease that affects livestock (including cattle, buffalo, sheep, and goats) and humans. In FY 2008, NAHLN personnel participated in diagnostic training to develop the diagnostic capability for this disease. 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. In many States, county extension agents also have the ability to transmit photos of insects and diseased plants to campus based scientists, who diagnose the problem and pose a solution. 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), and Potato Cyst Nematode.* *Potato Cyst Nematode* was added in FY 2008. This is a major pest of potato crops that can cause up to 80 percent yield loss.

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NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

SECTION 2501, OUTREACH

Project Statement by Program  
(On basis of Appropriation)

Project	2008 Actual		2009 Estimated a/		Increase or Decrease	2010 Estimated a/	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
<u>Section 2501</u>							
Outreach for Socially Disadvantaged Farmers .....	\$6,394,920		--		--	--	
Total Available or Estimate .....	6,394,920	2	--	--	--	--	--

a/ Section 14004 of the Food, Conservation, and Energy Act of 2008 provides mandatory funding for this program starting in FY 2009.

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NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

SECTION 2501, OUTREACH

Project Statement by Program  
(On basis of Available Funds)

Project	2008 Actual		2009 Estimated a/		Increase or Decrease	2010 Estimated a/	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
<u>Section 2501</u>							
Outreach for Socially Disadvantaged Farmers .....	\$4,773,979		--		--	--	
Carryover.....	--		--		--		
Total obligations Estimate .....	4,773,979		--		--	--	--
Unobligated Balance:	-158,400		-2,004,975		+2,004,975		
Prior, year Recoveries.....	-225,634		--		--	--	
Available at the End of Year.....	+2,004,975		--		--		
Total Available or Estimate .....	6,394,920	2	--	--	+2,004,975	--	--
Recission.....	45,080		--				
	6,440,000		--				

a/ Section 14004 of the Food, Conservation, and Energy Act of 2008 provides mandatory funding for this program starting in FY 2009.

<u>STATE</u>	Section 2501, Outreach for Socially Disadvantaged Farmers <u>2008</u>
ALABAMA	600,000
ALASKA	297,513
ARKANSAS	579,436
FLORIDA	598,990
GEORGIA	299,370
HAWAII	300,000
MASSACHUSETTS	299,617
MISSISSIPPI	299,331
NEW MEXICO	296,000
NORTH CAROLINA	300,000
SOUTH DAKOTA	289,245
TENNESSEE	300,000
PEER PANEL	<u>58,680</u>
SUBTOTAL	4,518,182
FEDERAL ADMIN	<u>255,797</u>
Subtotal Obligations	4,773,979
Unobligated	<u>2,004,975</u>
SUBTOTAL	2,004,975
TOTAL	6,778,954

TABLE 2C-FISCAL YEAR 2009 a/  
SECTION 2501, OUTREACH FOR SOCIALLY DISADVANTAGED FARMERS

FEDERAL ADMIN	\$0
UNDISTRIBUTED	<u>2,004,975</u>
TOTAL	<u>\$2,004,975</u>

TABLE 3C- FISCAL YEAR 2010  
SECTION 2501, OUTREACH FOR SOCIALLY DISADVANTAGED FARMERS

FEDERAL ADMIN	\$0
UNDISTRIBUTED	<u>-</u>
TOTAL	<u>\$0</u>

a/ Section 14004 of the Food, Conservation, and Energy Act of 2008 provides mandatory funding for this program starting in FY 2009.

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

CLASSIFICATION BY OBJECTSSection 2501 Activities2008 Actuals and Estimated 2009 and 2010

Personnel Compensation:	<u>2008</u>	<u>2009</u>	<u>2010</u>
Washington, D.C. ....	\$183,806	\$0	\$0
Field .....	0	0	0
11 Total personnel compensation .....	183,806	0	0
12 Personnel benefits .....	35,587	0	0
13 Benefits for former personnel .....	87	0	0
Total pers. comp. & benefits .....	219,480	0	0
<b>Other Objects:</b>			
21 Travel .....	13,660	0	0
22 Transportation of Things .....	176	0	0
23.1 Rent to GSA.....	104	0	0
23.2 Rent Paid to others .....	531	0	0
23.3 Communications, Utilities, etc. ....	3,950	0	0
24 Printing and Reproduction .....	1,768	0	0
25.1 Advisory & assist. Services .....	2,107	0	0
25.2 Other Services .....	33,912	0	0
25.3 Purchases of G&S from Govt. ....	735	0	0
25.4 Operation and Maintenance of facilities .....	2,936	0	0
25.5 Research and Development Contracts .....	35,158	0	0
25.6 ADP Services and Supplies (NFC) .....	50	0	0
25.7 Operation and maintenance of equipment ...	1,117	0	0
25.8 Subsistence and support of persons .....	363	0	0
26 Supplies .....	3,007	0	0
31 Equipment .....	1,554	0	0
41 Grants, Contracts, etc. ....	4,452,693	2,004,975	0
42 Litigation Fees .....	674	0	0
43 Interest Prompt Payment .....	4	0	0
Total, other objects .....	4,554,499	2,004,975	0
Total Obligations .....	4,773,979	2,004,975	0
<b>Position Data:</b>			
Average Salary, ES .....	\$160,838	\$0	\$0
Average Salary, GS .....	\$88,166	\$0	\$0
Average Grade, GS .....	11.6	0	0

## NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

## STATUS OF PROGRAM

**SECTION 2501, OUTREACH AND TECHNICAL ASSISTANCE FOR SOCIALLY DISADVANTAGED FARMERS AND RANCHERS ACTIVITIES:****Current Activities:**

This program helps African American, Tribal, Hispanic and other minority farmers and ranchers from socially disadvantaged groups participate in specific USDA loan, conservation, technical assistance, and related programs. The program enhances the ability of minority farmers and ranchers to operate farms and ranches independently and to produce income adequate to service debt, maintain operations, and provide a reasonable lifestyle. The program provides grants to educational institutions and community-based organizations to encourage and assist socially disadvantaged farmers and ranchers to own and operate farms and ranches, to participate in USDA agricultural programs, and to become an integral part of the agricultural community.

**Selected Examples of Recent Progress:**

1. **Georgia's Federation of Southern Cooperatives** continues to build a Regional Marketing System that links socially disadvantaged producer cooperatives in **Georgia, Alabama, Mississippi and South Carolina**. This increases the producers' opportunities in both commercial and direct marketing. There was a 20 percent increase in acreage devoted to alternative crops including seedless watermelon and a variety of vegetables giving producers a broader market. There was a 38 percent increase in sales for participating producers through farmers' markets, retail grocers, farmer-owned processing operations and institutional buyers. For example, by moving to production of seedless watermelon (desired in high-end market), farmer prices once \$.05 per pound, went up to \$.30 per pound. The average income of farmers participating in the watermelon project has increased by 5 percent.
2. The **Kentucky State University** Small Farm Program and Section 2501 Project utilizes Extension agents and paraprofessionals to provide one-on-one education to limited-resource cooperators in targeted counties to help them to better manage their farms, to incorporate new enterprises, to make their farms more sustainable, and to strengthen their financial position. The Small Farm Program had nearly 12,000 contacts with farm families with over 5,800 contacts through the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers 2501 Project. Approximately 250 families enrolled in the one-on-one program, show average increases in annual farm income of \$9,000 to \$12,000.

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE**

**Summary of Budget and Performance  
Statement of Goals and Objectives**

NIFA programs contribute to the six strategic goals and fourteen strategic objectives.

<b>Agency Strategic Goal</b>	<b>Agency Objectives</b>	<b>Programs that Contribute</b>	<b>Key Outcome</b>
<b>Agency Goal 1:</b> Enhance International Competitiveness of American Agriculture	<u>Objective 1.2:</u> Support International Economic Development and Trade Capacity Building	Research Integrated Higher Education	<u>Key Outcome 1.2:</u> 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.

<b>Agency Strategic Goal</b>	<b>Agency Objectives</b>	<b>Programs that Contribute</b>	<b>Key Outcome</b>
<b>Agency Goal 2:</b> Enhance the Competitiveness and Sustainability of Rural and Farm Economies	<u>Objective 2.1:</u> Provide Research, Education, and Extension to Expand Domestic Market Opportunities	Research Extension Higher Education Integrated	<u>Key Outcome 2.1:</u> 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.
<b>Agency Goal 2:</b> Enhance the Competitiveness and Sustainability of Rural and Farm Economies	<u>Objective 2.2:</u> Provide Research, Education, and Extension to Increase the Efficiency of Agricultural Production and Marketing Systems	Research Extension Higher Education Integrated Section 2501	<u>Key Outcome 2.2:</u> 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.
<b>Agency Goal 2:</b> Enhance the Competitiveness and Sustainability of Rural and Farm Economies	<b>Objective 2.3:</b> Provide Risk Management and Financial Tools to Farmers and Ranchers	Research Extension Higher Education Integrated Section 2501	<b>Key Outcome 2.3:</b> Increased producers' knowledge of principles and techniques of risk management.

<b>Agency Strategic Goal</b>	<b>Agency Objectives</b>	<b>Programs that Contribute</b>	<b>Key Outcome</b>
<b>Agency Goal 3:</b> Support Increased Economic Opportunities and Improved Quality of Life in Rural America.	<b>Objective 3.1:</b> Expand Economic Opportunities in Rural America by Providing Research, Education, and Extension to Create Opportunities for Growth	Research Extension Higher Education	<b>Key Outcome 3.1:</b> 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.
<b>Agency Goal 3:</b> Support Increased Economic Opportunities and Improved Quality of Life in Rural America.	<b>Objective 3.2:</b> Provide Research, Education, and Extension to Improve the Quality of Life in Rural Areas	Research Extension Higher Education Integrated	<b>Key Outcome 3.2:</b> 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.

<b>Agency Strategic Goal</b>	<b>Agency Objectives</b>	<b>Programs that Contribute</b>	<b>Key Outcome</b>
<b>Agency Goal 4:</b> Enhance Protection and Safety of the Nation's Agriculture and Food Supply.	<b>Objective 4.1:</b> Reduce the Incidence of Foodborne Illnesses and Contaminants Through Research, Education, and Extension	Research Extension Integrated Higher Education	<b>Key Outcome 4.1:</b> 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.
<b>Agency Goal 4:</b> Enhance Protection and Safety of the Nation's Agriculture and Food Supply.	<b>Objective 4.2:</b> Develop and Deliver Research, Education, and Extension to Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks	Extension Research Integrated Higher Education	<b>Key Outcome 4.2:</b> 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.

<b>Agency Strategic Goal</b>	<b>Agency Objectives</b>	<b>Programs that Contribute</b>	<b>Key Outcome</b>
<b>Agency Goal 5:</b> Improve the Nation's Nutrition and Health.	<b>Objective 5.1:</b> Ensure Access to Nutritious Food	Research Higher Education Extension	<b>Key Outcome 5.1:</b> New knowledge that clarifies dietary health relationships in order to support better dietary recommendations and improved food products
<b>Agency Goal 5:</b> Improve the Nation's Nutrition and Health.	<b>Objective 5.2:</b> Promote Healthier Eating Habits and Lifestyles	Research Extension Higher Education Integrated	<b>Key Outcome 5.2:</b> Reduced proportion of adult participants age 20 years and older who are obese, and of children and adolescents who are obese and overweight by increasing healthier food choices and lifestyles.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
<b>Agency Goal 6:</b> Protect and Enhance the Nation's Natural Resource Base and Environment.	<u>Objective 6.1:</u> Ensure Clean, Abundant Water And Clean, Healthy Air	Research Higher Education Extension	<u>Key Outcome 6:</u> 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.
<b>Agency Goal 6:</b> Protect and Enhance the Nation's Natural Resource Base and Environment.	<u>Objective 6.2:</u> Enhance Soil Quality to Maintain Productive Working Lands	Research Higher Education Extension	
<b>Agency Goal 6:</b> Protect and Enhance the Nation's Natural Resource Base and Environment.	<u>Objective 6.3:</u> Protect Enhance, and Manage Forests and Rangelands	Research Extension Higher Education Integrated	
<b>Agency Goal 6:</b> Protect and Enhance the Nation's Natural Resource Base and Environment.	<u>Objective 6.4:</u> Protect and Enhance Wildlife Habitat to Benefit Desired, at-Risk and Declining Species	Research Extension Higher Education Integrated	

Selected Accomplishments Expected at the FY 2010 Proposed Resource Level:

Enhance International Competitiveness of American Agriculture

Objective 1.2: Support International Economic Development and Trade Capacity Building

Key Outcome 1.2 Expected Accomplishment: International Science and Education grant projects are expected to enhance the international content of curricula; promote opportunities for U.S. faculty to work abroad and collect lessons learned; 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.

Through the Higher Education Multicultural Scholars Program and the Food and Agricultural Science National Needs Graduate and Post Graduate Fellowship Grants Program, grants to higher education institutions will increase students at the baccalaureate, masters and doctorate level and 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 national needs in economics and trade.

Enhance the Competitiveness and Sustainability of Rural and Farm Economies

Objective 2.1: Provide Research, Education, and Extension to Expand Domestic Market Opportunities

Key Outcome 2.1 Expected Accomplishment: 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.

The Higher Education Challenge Grants Program has recently emphasized innovative faculty-developed undergraduate instruction to promote the importance of biorenewable resource management. Projects in Iowa and North Carolina will lead in establishing virtual education centers where faculty can find online resources to develop and deliver improved undergraduate coursework.

**Objective 2.2: Provide Research, Education, and Extension to Increase the Efficiency of Agricultural Production and Marketing Systems**

Key Outcome 2.2 Expected Accomplishment: The Agriculture and Food Research Initiative (AFRI) expects to provide support for Plant Health and Production and Plant Products to:

- Increase our knowledge regarding agriculturally-important arthropods and nematodes through study of genomics biology, and development of tools, to enhance use of beneficial species for plant production and to design novel strategies for management of pests and reduction of pesticide use;
- Enhance our understanding of the genomes and biology of agriculturally-important microorganisms, developing improved or new tools, technologies, and approaches to increase productivity and reduce agricultural pest and disease outbreaks;
- Increase our understanding of plant genome structure, function and organization and to incorporate modern molecular breeding technologies and classical breeding practice to improve crop and forestry efficiency and sustainability;
- Improve our knowledge of plant biology, including gene function and regulation, abiotic stress response, growth and development, disease resistance, and biochemical pathways, to enhance yield, quality, and use of plants and plant products through classical breeding or biotechnology approaches;
- Provide training opportunities in plant breeding in agriculturally and economically important plant and forestry species; and
- Develop and support implementation strategies to safeguard U.S. agriculture from critical and emerging high-consequence plant pathogens and arthropods.

AFRI also expects to provide support for Animal Health and Production and Animal Products to:

- Increase the knowledge and technology needed to help prevent or reduce the severity of animal diseases, including costly endemic diseases, new and re-emerging disease threats, and foreign diseases that may be introduced accidentally or intentionally; and, investigate alternatives to antibiotics to control disease outbreaks;
- Enhance animal well-being throughout the food production cycle by providing information on how animals of agricultural importance in the U.S. interact with the production environment and respond to animal management practices; where appropriate, management practices will be developed that improve animal well-being; and
- Increase knowledge and tools to improve agricultural efficiency, sustainability and product quality through enhanced animal growth, reproduction, genetics and breeding, while reducing production costs and minimizing impact on the environment.

With increased funding in FY 2010 for the Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom (SPECA) Grants Program, NIFA will establish a separate “Sustaining Rural Communities through Education” component within that 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 agriscience and agribusiness disciplines. SPECA emphasis would be on curricula improvements and

building faculty expertise. This will increase the number of students encouraged to pursue and complete a 2- or 4-year postsecondary degree in the food and agricultural sciences; help students achieve their career goals; and help meet workplace needs by increasing the quality of secondary and postsecondary education.

Increased funding in FY 2010 for the Hispanic-Serving Institutions (HSIs) Education Grants Program will increase the number of grants to institutions with large enrollments of Hispanic Americans and other minorities. HSI programs will provide access to severely underrepresented and underprivileged members of rural and urban communities in the need areas of natural resources, water quality, nutrition, food safety, and biotechnology. Projects may involve individual institutions, consortia of HSIs, or cooperative initiatives between two or more HSIs collaboratively with other colleges and universities, units of government, or the private sector.

With increased funding, NIFA will increase the number of Higher Education Challenge Grants to institutions, especially at academic institutions serving rural areas, offering courses in food and agricultural sciences. This will strengthen secondary, 2-year postsecondary, and higher education biological, social, and related curricula necessary to meet the challenges of preparing graduates for emerging science, technology, engineering and mathematics. Activities will address program goals to increase the number of graduates with a baccalaureate, or higher degree in the food and agricultural sciences, and the quality of postsecondary instruction within these disciplines.

Increased funding for 1890 Institutional Capacity Building Grants will strengthen teaching and research programs in food and agricultural sciences by building the institutional capacities of the 1890 Land-Grant Institutions, Tuskegee University and West Virginia State University through cooperative linkages with Federal and non-Federal entities. These grants will support projects that strengthen teaching programs in the food and agricultural sciences in the targeted educational need areas of curriculum design and materials development, faculty preparation and enhancement, instructional delivery systems, scientific instrumentation, student experiential learning, and student recruitment and retention. The program also supports projects that strengthen research programs in research need areas of studies and experimentation in food and agricultural sciences, centralized research support systems, technology delivery systems, and other creative applications.

Increased funding for 1994 Land-Grant Institutions extension programs will address special needs, take advantage of important opportunities, and/or demonstrate long-term sustained benefits of extension projects at 1994 Land-Grant Institutions. Projects will support food and agricultural science programs in one or more of the following program areas: Agriculture; Community Resources and Economic Development; Family Development and Resource Management; 4-H and Youth Development; Leadership and Volunteer Development; Natural Resources and Environmental Management; and Nutrition, Diet and Health.

Objective 2.3: Provide Risk Management and Financial Tools to Farmers and Ranchers

**Key Outcome 2.3 Expected Accomplishment:** For every net dollar spent under the RME program, an estimated \$322 in savings will be gained by farmers who change their risk management behavior. This indicates the RME program's effectiveness in convincing farmers to adopt insurance and marketing practices designed to increase their profitability and reduce the variability of their income.

The RME Program provides U.S. agricultural producers with the knowledge, skills and tools needed to make informed risk management decisions for their operations, with the goal of enhancing farm profitability. The program will fund one RME Center in each of four U.S. geographical regions. It will also fund an electronic risk management education support center to provide risk management tools and information distribution networks, facilitating development of agricultural risk management curricula and materials, delivery of agricultural RME to producers, and the verification of program impacts.

## Means and Strategies

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. NIFA supports numerous research and extension activities to enhance the competitiveness and sustainability of rural and farm economies, ranging from the development of new products to improvements in productivity and financial management. Research discovers more productive and environmentally benign ways to produce food and fiber, not only in the U.S., but worldwide. 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 sponsors vital research and development for new food and 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 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, improves marketing and management decisions, develops new products and uses for by-products, and finds new ways of adding value to traditional crops and products. Research includes using genomics to develop hybrids requiring fewer chemical inputs, formulating systems for more informed decision making, and developing new precision technology and nanotechnology to improve management of crops and animals.

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 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 information necessary to improve production and market decision making.

Funds provided by Section 2501 of the Food, Agriculture, Conservation, and Trade Act of 1990 (FACT, Section 2501) enhance the ability of minority and small farmers and ranchers to operate farming or ranching enterprises independently and to produce income adequate to service debt, maintain operations, and provide a reasonable life style. Section 2501 funds support educational institutions and community-based organizations which encourage and assist socially disadvantaged farmers and ranchers to own and operate farms, participate in agricultural programs, and become an integral part of the agricultural community.

NIFA helps ensure that a high-quality higher education infrastructure will be available at the nation's land-grant universities to address national needs. It uses the infrastructure of scientific expertise at these and other colleges and universities, and also of public and private laboratories, to partner in addressing national priorities. NIFA ensures the relevance, quality and productivity of newly funded education, research, and extension projects by guiding the development of applications and annual work plans, funding meritorious competitive proposals and plans, and oversight. NIFA supports the base programs of the State Agricultural Experiment Stations and the Cooperative Extension System nationwide by providing working funds to researchers and extension personnel.

### 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

Key Outcome 3.1 Expected Accomplishment: The personal finance component of eXtension, launched in 2007, 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 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.

An increase in funding for the “Improve Rural Quality of Life” Smith-Lever 3(d) program will expedite the adoption and diffusion of broadband, and information access technologies, and other new technologies, such as sensor systems, monitoring and tracking systems, nanotechnology, and decision systems. A cornerstone of this program would be the establishment of an extension *Rural Technology Corps* which would build on the national infrastructure of Cooperative Extension which serves the entire U.S. through county and regional offices supported by a Federal/State/Local partnership, and through the nationwide eXtension system. It also will be used to support professional counseling and referral services to assist agricultural producers manage economic, social and other sources of stress associated with the risks inherent in agricultural production.

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. More than 15,000 persons are expected to attend in-person America Saves Week activities and events with a presence in at least 24 states. Over 4.5 million people will be reached through the media and over 100,000 people reached through Web sites, e-mail and other marketing. It is expected that nearly 7,000 people will open new savings accounts or take measurable action.

Objective 3.2: Provide Research, Education, and Extension to Improve the Quality of Life in Rural Areas

Key Outcome 3.2 Expected Accomplishment: The Rural E-Commerce Extension Initiative (funded by NIFA and coordinated by the Southern Rural Development Center with its three sister Regional Rural Development Centers) will carry out national training for extension educators on e-commerce educational curricula developed through a competitive grants program. It will match or surpass its base training rate of 65 educators from 28 States set in 2007. It will continue to manage a national competitive grants program to invest in the development of high priority and science-based e-commerce related products, roll-out new educational curricula, and continue to conduct multi-state web-based training programs.

The Regional Rural Development Centers will deploy training and conduct research targeted to minority and underserved stakeholders to enhance business and economic development. Centers in the North Central and Western regions will partner with the First Americans Land Grant Consortium to build professional capacity among extension educators and to provide training for First Nations’ members in rural entrepreneurship. The Center in the Northeast region will continue its “Small Farms Industry Clusters” research project (funded by NIFA-AFRI) to research networks of Hmong farmers, new Hispanic farmers, and female-headed farms. The Center’s research will provide a new framework for understanding complex economic, social, biological and environmental forces that interact in agriculture and connect to rural communities. It will provide entrepreneurship training and support for producer networks tailored to these concentrations of farmers and improve the vitality of small US farms and rural communities. The Southern Center will coordinate “The New Hispanic South,” an Information Exchange Network designed to improve extension programs and identify research priorities for Hispanics in the southern region.

The Sustainable Community Innovation Grants Program will competitively fund new projects that pursue local strategies to link sound farm and non-farm economic development with agricultural and natural resource management. Proposals are solicited that will increase knowledge, build capacity, and make connections among on- and off-farm sustainable agriculture activities, economic and community development efforts, civic engagement, nutrition and health, and local government policy.

The electronic deployment of “Growing a Nation, The History of American Agriculture,” will be supplemented by teacher workshops throughout the country. As a result, students will learn about the history and importance of agriculture in their lives. The program will also serve as a mechanism to introduce students to the agricultural sciences and highlight the importance of agriculture in the U.S. and world economies.

### **Means and Strategies**

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. 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 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 for rural issues. NIFA sponsors analysis of policy and translation of 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.

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 helps ensure that a high-quality higher education infrastructure will be available at the nation’s land-grant universities to address national needs. It uses the infrastructure of scientific expertise at these and other colleges and universities, and also of public and private laboratories, to partner in addressing national priorities. NIFA ensures the relevance, quality and productivity of newly funded education, research, and extension projects by guiding the development of applications and annual work plans, funding meritorious competitive proposals and plans, and oversight. NIFA supports the base programs of the State Agricultural Experiment Stations and the Cooperative Extension System nationwide by providing working funds to researchers and extension personnel.

### 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

Key Outcome 4.1 Expected Accomplishment: NIFA will sponsor AFRI food safety projects dealing with nanotechnology for functional foods and food safety to increase understanding of disease-causing pathogens and toxins, the risk factors that influence food-borne organisms and food safety, and the risk factors that lead to the development and implementation of mitigation or control strategies.

**Objective 4.2: Develop and Deliver Research, Education, and Extension to Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks**

**Key Outcome 4.2 Expected Accomplishment:** In addition to reducing risk and increasing the efficiencies of traditional NIFA Integrated Pest Management Programs, the National Plant Diagnostic Network expects to increase the number of specific plant diseases labs and build on past accomplishments which includes:

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

**Means and Strategies**

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 the food supply. 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.

Maintaining an affordable and safe national food supply is essential to 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. NIFA sponsors education, research, extension, and technology development to identify and assess organisms, pathogens, and toxins that cause human disease throughout the agricultural environment, in foods, and in the processing and distribution system. NIFA supports the development and transfer of practices and intervention strategies that manage, reduce or eliminate food safety risk throughout the food chain.

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, and ensure growers can handle additional crops and new pests in an emergency.

NIFA helps ensure that a high-quality higher education infrastructure will be available at the nation's land-grant universities to address national needs. It uses the infrastructure of scientific expertise at these and other colleges and universities, and also of public and private laboratories, to partner in addressing national priorities. NIFA ensures the relevance, quality and productivity of newly funded education, research, and extension projects by guiding the development of applications and annual work plans, funding meritorious competitive proposals and plans, and oversight. NIFA supports the base programs of the State Agricultural Experiment Stations and the Cooperative Extension System nationwide by providing working funds to researchers and extension personnel.

## Improve the Nation's Nutrition and Health

### Objective 5.1: Ensure Access to Nutritious Food

Key Outcome 5.1 Expected Accomplishment: AFRI will provide support for human nutrition for graduate students and postdoctoral fellows. To meet the identified needs of agriculture, the long-term (10-year) goals for this program include identifying the behavioral factors that influence obesity in order to develop effective obesity prevention strategies; developing valid behavioral and environmental instruments for measuring progress in obesity prevention efforts; and promoting effective strategies for preventing overweight and obesity. The ultimate goal of the program is to stem the rising tide of obesity. The milestones toward reaching these long-term goals include developing theories on how behavioral factors influence obesity; testing validity of behavioral measures for evaluating progress in obesity prevention efforts; and testing the effectiveness of strategies for preventing overweight and obesity.

### Objective 5.2: Healthier Eating Habits and Lifestyles

Key Outcome 5.2 Expected Accomplishment: The addition of Expanded Food and Nutrition Education Program (EFNEP) funding for the historically Black 1890 Land Grant institutions will expand the overall base and sustain the growth of program outreach in addition to enhanced support and training from the Federal partner. EFNEP will provide new opportunities for educators in minority neighborhoods to reach at-risk families with culturally appropriate materials to improve the quality of their diets. This will allow all States to enhance EFNEP by increasing the emphasis on appropriate physical activity and enhancing community based support for food security. The expectation is that 93 percent of EFNEP participants will improve their diets toward meeting MyPyramid recommendations following their participation in EFNEP.

## **Means and Strategies**

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. 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 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. 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.

NIFA helps ensure that a high-quality higher education infrastructure will be available at the nation's land-grant universities to address national needs. It uses the infrastructure of scientific expertise at these and other colleges and universities, and also of public and private laboratories, to partner in addressing national priorities. NIFA ensures the relevance, quality and productivity of newly funded education, research, and extension projects by guiding the development of applications and annual work plans, funding meritorious competitive proposals and plans, and oversight. NIFA supports the base programs of the State Agricultural

Experiment Stations and the Cooperative Extension System nationwide by providing working funds to researchers and extension personnel.

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

Key Outcome 6 Expected Accomplishment: New AFRI research projects on the terrestrial carbon cycle under the NIFA Global Change and Climate Program will be developed in collaboration with the National Aeronautics and Space Administration and other U.S. Federal agencies. Projects will focus on identifying the size, variability, and potential future changes to reservoirs and fluxes of carbon within the agricultural and forest ecosystems and provide the scientific underpinning for evaluating options to manage carbon sources and sinks. Projects will contribute to the federally managed North American Carbon Program and will analyze the impact of land-use change and resource management practices on carbon sources and sinks; project future atmospheric carbon dioxide and methane concentrations and changes in land-based carbon sinks; and the distribution of carbon sources and sinks and how they are changing. These projects will also contribute to the U.S. Climate Change Science Program and the U.S. Global Change Research Program.

Crop residue burning is an important land use practice in the U.S. On average 12 percent of all fires detected by satellite in the contiguous U.S. are agricultural fires. These fires are a source of trace gas and particulate emissions and affect local and regional air quality. AFRI Air Quality funds will be used to estimate the seasonal and temporal distribution of emissions released from cropland burning in the contiguous U.S., using satellite and ground based observations. These estimates will support the improvement of the Environmental Protection Agency's National Emissions Inventory. The research will provide significant contributions to understanding the nation's air quality by providing spatially and temporally explicit emission data from cropland burning. In addition, this research could be used as a prototype for an operational system to monitor agricultural burning, fire management practices, and associated air quality.

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.

**Means and Strategies**

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.

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.

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.

NIFA helps ensure that a high-quality higher education infrastructure will be available at the nation's land-grant universities to address national needs. It uses the infrastructure of scientific expertise at these and other colleges and universities, and also of public and private laboratories, to partner in addressing national priorities. NIFA ensures the relevance, quality and productivity of newly funded education, research, and extension projects by guiding the development of applications and annual work plans, funding meritorious competitive proposals and plans, and oversight. NIFA supports the base programs of the State Agricultural Experiment Stations and the Cooperative Extension System nationwide by providing working funds to researchers and extension personnel.

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Summary of Budget Performance  
Key Performance Outcomes and Measures

Application of the Research and Development Criteria at NIFA

NIFA has established a process for assessing the Research and Development (R&D) investment criteria of relevance, quality and performance for a series of discrete portfolios of work that are defined by their contribution to strategic objectives of the NIFA Strategic Plan. The results of these assessments are used in program planning, management, and budget development. Independent, external, expert panels conduct portfolio assessments on a five-year cycle to determine the extent to which NIFA is making progress toward solving targeted national problems. Self-assessments are conducted annually by agency experts to evaluate progress since the last external, expert panel. An assessment tool, framed by the three R&D investment criteria, is used by the external, expert panels and by the self-assessment teams to review the portfolio's relevance, quality, and performance and assign a quantitative assessment score, which becomes the primary performance measure for the portfolio.

NIFA is actively utilizing the results and recommendations from this portfolio evaluation process. Some of the portfolio reviews identified program gaps and the portfolio teams have initiated strategic planning exercises in response. NIFA has also shifted personnel and funding in response to the evaluation results. The agency is also responding with changes in management and reporting processes to improve future evaluations and become more efficient.

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

Goal 1: Enhance International Competitiveness of American Agriculture

Goal 2: Enhance the Competitiveness and Sustainability of Rural and Farm Economies

Key Outcomes:

Agency Objective Number	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.
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.

Key Performance Measure:

- Primary Performance 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 goals.
- Cumulative number of biochemical or thermochemical technologies which are developed and used commercially for the conversion of biomass to fuels.
- Cumulative number of new crops that have been developed and used commercially.
- Cumulative dollars saved each year for grant review.
- Proposal Review Time in Days.

Key Performance Targets:

Performance Measure	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Target	2010 Target
Primary Performance 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.	82	86	89	91	91	91
Units: The reviews assessed the portfolios based on the OMB R&D criteria of relevance, quality & performance. They are then assigned an overall quantitative score from 1-100.						
Cumulative number of biochemical or thermochemical technologies which are developed and used commercially for the conversion of biomass to fuels.	2	3	3	4	4	5
Cumulative number of new crops that have been developed and used commercially	6	6	6	6	7	7
Cumulative dollars saved each year for grant review	\$320,807	\$506,463	\$642,547	\$749,198	\$858,088	\$1,006,325
Proposal Review Time in Days	204	198	194	191	188	184

Goal 3: Support Increased Economic Opportunities and Improved Quality of Life in Rural America

Key Outcomes:

Agency Objective Number	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.
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.

Key Performance Measures:

- Primary Performance 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 goals
- Percentage of Cooperative Extension Educators trained and using evidence-based programming in rural communities to facilitate informed decisions that increase economic opportunities and improve quality of life.
- Benefits to farmers changing their risk management behavior per the net dollar cost of the Risk Management Education Program.
- 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 saved each year for grant review.
- Proposal review time in days.

Key Performance Targets:

<b>Performance Measure</b>	<b>2005 Actual</b>	<b>2006 Actual</b>	<b>2007 Actual</b>	<b>2008 Actual</b>	<b>2009 Target</b>	<b>2010 Target</b>
Primary Performance 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 relevance, quality & performance. They are then assigned an overall quantitative score from 1-100.	NA	82	87	89	89	90
Percentage of Cooperative Extension Educators trained and using evidence-based programming in rural communities to facilitate informed decisions that increase economic opportunities and improve quality of life.	75%	77%	79%	81%	83%	85%
Benefits to farmers changing their risk management behavior per the net dollar cost of the Risk Management Education Program	229	251	284	292	300	322
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	8,870	9,610	10,240	10,800	11,300	11,800
Cumulative dollars saved each year for grant review	\$146,274	\$230,925	\$292,973	\$341,604	\$391,251	\$458,840
Proposal review time in days	204	198	194	191	188	184

## Goal 4: Enhance Protection and Safety of the Nation's Agriculture and Food Supply

Key Outcomes:

<b>Agency Objective Number</b>	<b>Key Outcome</b>
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.

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.
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Key Performance Measures:

- Primary Performance 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 goals.
- 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.
- Cumulative dollars saved each year for grant review.
- Proposal review time in days.

Key Performance Targets:

Performance Measure	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Target	2010 Target
Primary Performance 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 relevance, quality & performance. They are then assigned an overall quantitative score from 1-100.	85	90	91	93	93	93
Methods that reduce food contamination and growth of foodborne organisms	8	10	11	14	16	18
The cumulative number of specific plant diseases labs are prepared to detect	5	6	7	8	9	10
The cumulative number of specific animal diseases labs are prepared to detect	7	8	8	9	9	10
Cumulative dollars saved each year for grant review	\$175,584	\$277,197	\$351,678	\$410,051	\$469,649	\$550,781
Proposal review time in days	204	198	194	191	188	184

## Goal 5: Improve the Nation's Nutrition and Health

Key Outcomes:

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

Key Performance Measures:

- Primary Performance 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 goals.
- 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.
- Cumulative dollars saved each year for Grant Review.
- Proposal review time in days.

Key Performance Targets:

Performance Measure	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Target	2010 Target
Primary Performance 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 relevance, quality & performance. They are then assigned an overall quantitative score from 1-100.	NA	86	90	91	92	93
Dietary improvements by EFNEP participants	93%	92%	93%	93%	93%	93%
Development and use of effective intervention methods and strategies to change behavior and improve diet and physical activity in target populations	1	2	3	4	5	6
Cumulative dollars saved each year for Grant Review	\$102,683	\$162,108	\$205,664	\$239,801	\$274,654	\$322,102
Proposal review time in days	204	198	194	191	188	184

## Goal 6: Protect and Enhance the Nation's Natural Resource Base and Environment

Key Outcomes:

Agency Objective Number	Key Outcome
6.1	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.
6.2	
6.3	
6.4	

Key Performance Measures:

- Primary Performance 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 goals.
- Cumulative number of ecological-economic models developed and used for management of invasive species
- Assessment and control technologies for agricultural emissions developed and used
- Cumulative dollars saved each year for Grant Review.
- Proposal review time in days.

Key Performance Targets:

Performance Measure	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Target	2010 Target
Primary Performance 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 relevance, quality & performance. They are then assigned an overall quantitative score from 1-100.	79	84	83	78	86	87
Cumulative number of ecological-economic models developed and used for management of invasive species	0	1	2	3	5	7
Assessment and control technologies for agricultural emissions developed and used	5	7	8	10	12	14
Cumulative dollars saved each year for grant review	\$140,566	\$221,914	\$281,541	\$328,271	\$375,983	\$440,935
Proposal review time in days	204	198	194	191	188	184

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 1.2:**

Support International Economic Development and Trade Capacity Building

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$3,378	\$3,434	\$2,522
	Administrative (Direct Costs)	89	91	67
	Indirect Costs	52	52	38
	Total Costs	3,519	3,577	2,627
	FTE's	1	1	1
	Education	Program	403	450
	Administrative (Direct Costs)	11	12	22
	Indirect Costs	6	7	13
	Total Costs	420	469	879
	FTE's	0	0	0
Integrated	Program	1,907	1,907	1,945
	Administrative (Direct Costs)	51	51	52
	Indirect Costs	28	28	29
	Total Costs	1,986	1,986	2,026
	FTE's	0	1	1
		Total Costs for Objective 1.2 (program, direct, indirect)	5,925	6,032
	FTE's	1	2	2

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 2.1:** Expand Domestic Market Opportunities

Program	Program Items	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Research	Program	\$68,480	\$70,711	\$53,250
	Administrative (Direct Costs)	1,826	1,885	1,420
	Indirect Costs	1,027	1,061	799
		-----	-----	-----
	Total Costs	71,333	73,657	55,469
	FTE's	17	23	23
Education	Program	4,435	4,100	12,267
	Administrative (Direct Costs)	118	109	247
	Indirect Costs	67	62	139
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	Total Costs	4,620	4,271	12,653
	FTE's	2	2	2
Extension	Program	39,150	40,250	39,913
	Administrative (Direct Costs)	1,044	1,073	1,064
	Indirect Costs	587	604	599
		-----	-----	-----
	Total Costs	40,781	41,927	41,576
	FTE's	16	17	17
Integrated	Program	883	937	897
	Administrative (Direct Costs)	24	25	24
	Indirect Costs	13	14	13
		-----	-----	-----
	Total Costs	920	976	934
	FTE's	0	0	0
Total Costs for Objective 2.1 (program, direct, indirect)		117,654	120,831	110,632
FTE's		35	42	42

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 2.2:** Increase the Efficiency of Domestic Agricultural Production and Marketing Systems

Program	Program Items	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Research	Program	\$182,700	\$191,029	\$165,688
	Administrative (Direct Costs)	4,872	5,084	4,419
	Indirect Costs	2,741	2,860	2,485
	Total Costs	190,313	198,973	172,592
	FTE's	50	71	71
	Education	Program	9,676	11,889
	Administrative (Direct Costs)	258	317	540
	Indirect Costs	145	178	303
	Total Costs	10,079	12,384	24,684
	FTE's	4	5	5
Extension	Program	43,179	45,474	41,022
	Administrative (Direct Costs)	1,151	1,213	1,094
	Indirect Costs	648	682	615
	Total Costs	44,978	47,369	42,731
	FTE's	10	18	18
Integrated	Program	7,345	7,479	7,500
	Administrative (Direct Costs)	196	200	200
	Indirect Costs	110	112	112
	Total Costs	7,651	7,791	7,812
	FTE's	2	0	0
Section 2501	Program	6,139	0	0
	Administrative (Direct Costs)	164	0	0
	Indirect Costs	92	0	0
	Total Costs	6,395	0	0
	FTE's	2	0	0
Total Costs for Objective 2.2 (program, direct, indirect)		259,416	266,517	247,819
FTE's		68	94	94

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 2.3:**

Provide Risk Management and Financial Tools to Farmers and Ranchers

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$9,966	\$10,225	\$8,102
	Administrative (Direct Costs)	266	273	216
	Indirect Costs	149	153	122
	Total Costs	10,381	10,651	8,440
	FTE's	4	3	3
	Education	Program	1,613	1,797
	Administrative (Direct Costs)	43	48	90
	Indirect Costs	24	27	50
	Total Costs	1,680	1,872	7,118
	FTE's	1	1	1
Extension	Program	28,752	30,332	29,688
	Administrative (Direct Costs)	767	809	792
	Indirect Costs	431	455	445
	Total Costs	29,950	31,596	30,925
	FTE's	11	13	13
	Integrated	Program	54	55
Administrative (Direct Costs)		1	1	1
Indirect Costs		1	1	1
Total Costs		56	57	57
FTE's		0	0	0
		Total Costs for Objective 2.3 (program, direct, indirect)	42,067	44,176
	FTE's	16	17	17

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
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**Strategic Objective 3.1**

Expand Economic Opportunities by Using USDA Financial Resources to  
Leverage Private Sector Resources and Create Opportunities for Growth

Program	Program Items	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Research	Program	\$40,424	\$40,443	\$28,101
	Administrative (Direct Costs)	1,078	1,078	749
	Indirect Costs	606	607	422
	Total Costs	42,108	42,128	29,272
	FTE's	16	10	10
	Education	Program	2,421	2,698
	Administrative (Direct Costs)	65	72	135
	Indirect Costs	36	40	76
	Total Costs	2,522	2,810	8,876
	FTE's	1	2	2
Extension	Program	51,820	54,668	53,507
	Administrative (Direct Costs)	1,382	1,458	1,427
	Indirect Costs	777	820	802
	Total Costs	53,979	56,946	55,736
	FTE's	20	23	23
	Total Costs for Objective 3.1 (program, direct, indirect)		98,609	101,884
FTE's		37	35	35

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 3.2**

Improve the Quality of Life Through USDA Financing of Quality Housing,  
Modern Utilities, and Needed Community Facilities

Program	Program Items	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Research	Program	\$9,432	\$9,881	\$8,978
	Administrative (Direct Costs)	252	264	239
	Indirect Costs	141	148	135
	Total Costs	9,825	10,293	9,352
	FTE's	4	4	4
	Education	Program	4,435	4,946
	Administrative (Direct Costs)	118	132	247
	Indirect Costs	67	74	139
	Total Costs	4,620	5,152	9,662
	FTE's	2	2	2
Extension	Program	76,702	81,276	77,359
	Administrative (Direct Costs)	2,045	2,167	2,063
	Indirect Costs	1,151	1,219	1,160
	Total Costs	79,898	84,662	80,582
	FTE's	30	33	33
Integrated	Program	3,217	3,275	3,285
	Administrative (Direct Costs)	86	87	88
	Indirect Costs	48	49	49
	Total Costs	3,351	3,411	3,422
	FTE's	0	1	1
	Total Costs for Objective 3.2 (program, direct, indirect)	97,694	103,518	103,018
	FTE's	36	40	40

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 4.1**

Reduce the Incidence of Foodborne Illnesses Related to Meat, Poultry,  
and Egg Products in the U.S.

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$33,364	\$33,059	\$24,845
	Administrative (Direct Costs)	890	881	662
	Indirect Costs	500	496	373
	Total Costs	34,754	34,436	25,880
	FTE's	12	11	11
Education	Program	2,015	2,248	7,822
	Administrative (Direct Costs)	54	60	113
	Indirect Costs	30	34	63
	Total Costs	2,099	2,342	7,998
	FTE's	1	1	1
Extension	Program	19,389	20,458	20,023
	Administrative (Direct Costs)	517	545	534
	Indirect Costs	291	307	300
	Total Costs	20,197	21,310	20,857
	FTE's	7	9	9
Integrated	Program	3,217	3,275	3,286
	Administrative (Direct Costs)	86	87	88
	Indirect Costs	48	49	49
	Total Costs	3,351	3,411	3,422
	FTE's	1	0	0
Total Costs for Objective 4.1 (program, direct, indirect)		60,401	61,499	58,157
FTE's		21	21	21

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 4.2**

Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$121,107	\$122,657	\$102,990
	Administrative (Direct Costs)	3,229	3,261	2,746
	Indirect Costs	1,817	1,834	1,545
	Total Costs	126,153	127,752	107,281
	FTE's	31	49	49
	Education	Program	4,434	4,945
	Administrative (Direct Costs)	118	132	247
	Indirect Costs	67	74	139
	Total Costs	4,619	5,151	13,267
	FTE's	2	4	4
Extension	Program	13,411	13,632	13,543
	Administrative (Direct Costs)	358	364	361
	Indirect Costs	201	204	203
	Total Costs	13,970	14,200	14,107
	FTE's	5	6	6
	Integrated	Program	18,766	19,106
Administrative (Direct Costs)		500	509	511
Indirect Costs		282	287	287
Total Costs		19,548	19,902	19,958
FTE's		3	2	2
Total Costs for Objective 4.2 (program, direct, indirect)		164,290	167,005	154,613
FTE's		41	61	61

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 5.1**

Ensure Access to Nutritious Food

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$15,457	\$16,042	\$13,627
	Administrative (Direct Costs)	412	428	364
	Indirect Costs	232	240	204
	Total Costs	16,101	16,710	14,195
	FTE's	6	5	5
	Education	Program	1,209	1,349
	Administrative (Direct Costs)	32	36	67
	Indirect Costs	18	20	38
	Total Costs	1,259	1,405	5,635
	FTE's	0	1	1
Extension	Program	19,726	20,809	20,366
	Administrative (Direct Costs)	526	555	543
	Indirect Costs	296	312	306
	Total Costs	20,548	21,676	21,215
	FTE's	8	9	9
		Total Costs for Objective 5.1 (program, direct, indirect)	37,908	39,791
	FTE's	14	15	15

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
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**Strategic Objective 5.2**

Promote Healthier Eating Habits and Lifestyles

Program	Program Items	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Research	Program	\$10,256	\$10,759	\$10,035
	Administrative (Direct Costs)	273	287	268
	Indirect Costs	154	161	150
	Total Costs	10,683	11,207	10,453
	FTE's	4	5	5
	Education	Program	3,627	3,789
Administrative (Direct Costs)		97	101	202
Indirect Costs		54	57	114
Total Costs		3,778	3,947	10,903
FTE's		1	2	2
Extension		Program	91,349	93,394
	Administrative (Direct Costs)	2,436	2,490	2,474
	Indirect Costs	1,370	1,401	1,392
	Total Costs	95,155	97,285	96,660
	FTE's	36	40	40
	Integrated	Program	1,068	1,085
Administrative (Direct Costs)		29	29	29
Indirect Costs		16	17	17
Total Costs		1,113	1,131	1,143
FTE's		0	0	0
Total Costs for Objective 5.2 (program, direct, indirect)		110,729	113,570	119,159
FTE's		41	47	47

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 6.1**

Protect Watershed Health to Ensure Clean and Abundant Water

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$42,787	\$44,043	\$36,073
	Administrative (Direct Costs)	1,140	1,173	962
	Indirect Costs	643	662	541
	Total Costs	44,570	45,878	37,576
	FTE's	17	15	15
	Education	Program	403	450
	Administrative (Direct Costs)	11	12	22
	Indirect Costs	6	7	13
	Total Costs	420	469	879
	FTE's	0	0	0
Extension	Program	4,264	4,392	4,339
	Administrative (Direct Costs)	114	117	116
	Indirect Costs	64	66	65
	Total Costs	4,442	4,575	4,520
	FTE's	2	2	2
		Total Costs by Objective 6.1 (program, direct, indirect)	49,432	50,922
	FTE's	19	17	17

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
FULL COST BY STRATEGIC OBJECTIVE**

**Strategic Objective 6.2**

Enhance Soil Quality to Maintain Productive Working Cropland

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$30,293	\$31,735	\$28,553
	Administrative (Direct Costs)	807	845	762
	Indirect Costs	455	477	428
	Total Costs	31,555	33,057	29,743
	FTE's	12	12	12
	Education	Program	405	450
	Administrative (Direct Costs)	11	12	22
	Indirect Costs	6	7	13
	Total Costs	422	469	879
	FTE's	0	0	0
Extension	Program	4,264	4,392	4,339
	Administrative (Direct Costs)	114	117	116
	Indirect Costs	64	66	65
	Total Costs	4,442	4,575	4,520
	FTE's	2	2	2
		Total Costs for Objective 6.2 (program, direct, indirect)	36,419	38,101
	FTE's	14	14	14

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE  
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**Strategic Objective 6.3**

Protect Forests and Grazing Lands

Program	Program Items	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Research	Program	\$31,142	\$32,934	\$28,888
	Administrative (Direct Costs)	830	877	771
	Indirect Costs	468	495	433
	Total Costs	32,440	34,306	30,092
	FTE's	14	12	12
Education	Program	2,621	2,919	5,483
	Administrative (Direct Costs)	70	78	146
	Indirect Costs	39	44	82
	Total Costs	2,730	3,041	5,711
	FTE's	1	1	1
Extension	Program	21,564	22,747	22,265
	Administrative (Direct Costs)	575	607	594
	Indirect Costs	323	341	334
	Total Costs	22,462	23,695	23,193
	FTE's	8	9	9
Integrated	Program	8,580	8,735	8,760
	Administrative (Direct Costs)	228	233	234
	Indirect Costs	129	131	131
	Total Costs	8,937	9,099	9,125
	FTE's	1	0	0
Total Costs for Objective 6.3 (program, direct, indirect)		66,569	70,141	68,121
FTE's		24	22	22

**NATIONAL INSTITUTE OF FOOD AND AGRICULTURE**  
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**Strategic Objective 6.4**

Protect and Enhance Wildlife Habitat to Benefit Desired, At-Risk and  
Declining Species

<b>Program</b>	<b>Program Items</b>	<b>2008 Amount (\$000)</b>	<b>2009 Amount (\$000)</b>	<b>2010 Amount (\$000)</b>
Research	Program	\$5,530	\$5,909	\$5,681
	Administrative (Direct Costs)	146	156	152
	Indirect Costs	84	90	85
	Total Costs	5,760	6,155	5,918
	FTE's	3	2	2
	Education	Program	2,623	2,921
Administrative (Direct Costs)		70	78	146
Indirect Costs		39	44	82
Total Costs		2,732	3,043	5,711
FTE's		1	2	2
Extension		Program	21,564	22,748
	Administrative (Direct Costs)	575	607	594
	Indirect Costs	324	341	334
	Total Costs	22,463	23,696	23,193
	FTE's	10	9	9
	Integrated	Program	8,580	8,735
Administrative (Direct Costs)		228	233	234
Indirect Costs		129	131	131
Total Costs		8,937	9,099	9,125
FTE's		1	0	0
Total Costs for Objective 6.4 (program, direct, indirect)		39,892	41,993	43,947
FTE's		15	13	13
All Programs	Programs	1,139,526	1,176,973	1,124,845
	Administrative (Direct Costs)	30,383	31,359	29,276
	Indirect Costs	17,096	17,648	16,463
	Total Costs	1,187,005	1,225,980	1,170,584
	FTE's	382	440	440