

House Committee on Agriculture
Farm Bill Audit

1. Program Name

1890 Institutions Capacity Building Grants Program

2. Subprograms/Department Initiatives

None.

3. Brief History

This program is authorized by section 1417 (b)(4) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, as amended (NARETPA) (7 U.S.C. 3152 (b)(4)) and pursuant to annual appropriations made available specifically for the 1890 Capacity Building Program.

Section 7107 of the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) (Pub. L. 110-246) amended the authority for the 1890 Capacity Building Program to allow for extension capacity building, as well as teaching and research. In accordance with the statutory authority, subject to the availability of funds, the Secretary of Agriculture may make competitive grants, for a period not to exceed five years, to design and implement food and agricultural programs to build Teaching, Research and Extension capacity at colleges and universities having significant minority enrollments.

4. Purpose/Goals

The purpose of the 1890 Capacity Building Program is to support research, education, and extension as well as integrated research, teaching, and/or extension by awarding grants that address key problems of national, regional, and multi-institutional importance in sustaining all components of agriculture, including farm efficiency and profitability, ranching, renewable energy, forestry (both urban and agroforestry), aquaculture, rural communities and entrepreneurship, human nutrition, food safety, family and consumer sciences, biotechnology, and conventional breeding.

5. Success in Meeting Programmatic Purpose/Goals

The 1890 Capacity Building Grant strengthens teaching, research and extension programs in the food and agricultural sciences by building the institutional capacities of the 1890 Land-Grant Institutions, and Tuskegee University. The program supports projects that strengthen teaching programs in the food and agricultural sciences in the need areas of curriculum design and materials development, faculty development, and others. It supports projects that strengthen research and extension programs in need areas of studies and experimentation, extension program development support systems, and others.

Examples of success include:

As a result of the capacity building grant at **Kentucky State University**, the Geospatial Education and Analysis Center provided ESRI (a GIS software company) authorized training to faculty, staff, and students and to State, regional and local government employees and others

who use the ESRI suite of software products. The KSU GIS Training facility has had 382 students take the Introduction to ArcGIS I and II courses taught by KSU staff. Almost 10 percent of the total number of students that enrolled in the courses were KSU students, faculty, and staff. The Center's ESRI Authorized Training courses have provided the facility the means to be self-sustaining. The center generates funds needed to maintain the equipment, upgrade the facility, and invest in new hardware, software, and data needed to meet the needs of campus users, as well as local GIS users. The KSU GIS resources have been used to produce several map products that are in use by the Frankfort/Franklin County Riverfront Development Commission in their efforts to create better interaction between citizens and the Kentucky Riverfront environment.

An educational effort at **Tennessee State University (TSU)** collaborates with India's G.B. Pant Agricultural University of Agriculture and Technology (GBPUA&T) to internationalize TSU's agriculture program, enhance the competitiveness of Tennessee's agricultural entrepreneurs, and foster on-going research collaborations with GBPUA&T faculty. The new course contents were developed for two courses in agribusiness after the interactive meetings with faculty and students of the GBPUA&T and other Indian agricultural universities on issues related to curriculum in Agribusiness. International content is being integrated in several courses at TSU's undergraduate and graduate agriculture program. The content has greater examples of real-life situations. More interdisciplinary content in courses are being designed to include research opportunities for graduate and undergraduate students. Scientific information is being made available on faculty and student experience with international exchange program, and best management practices and lessons learned. Students now have a better appreciation and understanding of global problems.

Fort Valley State University (FVSU) in Georgia has designed and developed an Outdoor Forestry Classroom/Laboratory to provide hands-on and experiential learning experiences to students enrolled in the FVSU's forestry course, to use the Outdoor Forestry Classroom/Laboratory to train and prepare high school agriculture students for various forestry career development events, and to use the Outdoor Forestry Classroom/Laboratory for summer workshops for high school agriculture teachers throughout the state of Georgia. During Spring 2009, Area 3 of district # 4 of Georgia used the site to conduct Forestry Career Development Event activities. One hundred and fifty high school students were in attendance and had the opportunity to interact and discuss careers in the forestry industry with foresters from USDA, the Georgia Forestry Commission and Weyerhaeuser. In the future this site will be used to train and prepare high school agriculture students (FFA) for various forestry career development events. Forestry Camps (Workshops) will be conducted to upgrade the skills of limited resource forestry, land owners and provide continuing education for FFA teachers.

Participation in global education programs is low and there are deficiencies in gathering and managing data for decision-making in global education programs. A NIFA-funded project at **North Carolina A&T State University** developed a set of best practices and retool curricula to equip faculty and students with the skills needed to function smartly around the world in order to strengthen America's leadership in international agriculture. As outcome, a 30 percent improvement in international content in curricula in agricultural courses; a reported increase of 40 percent in participation in study abroad programs among students enrolled in schools of agriculture in 1890 institutions; a 40 percent increase in awareness of and interest in international

agricultural issues among faculty and students in schools of agriculture in 1890 institutions. In the long run the project will produce students and faculty capable of working with their counterparts in a transnational context to solve complex global agricultural problems.

6. Annual Budget Authority (Fiscal Year (FY) 2007-FY 2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	9,479	11,404	11,411	12,312	12,189	12,375	13,592	15,000	18,250	19,336

7. Annual Outlays (FY 2007-FY 2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	1,238	7,547	13,246	14,762	17,059

8. Annual Delivery Cost (FY 2007-FY 2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	495	544	600	730	773

9. Eligibility Criteria

Applications may only be submitted by 1890 Land-Grant Institutions, including Tuskegee University and West Virginia State University.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	110	None	344
Applications Funded	43	None	118

NOTE: FY 2009 funds were awarded collectively with FY 2010 funds.

11. Duplication or Overlap with Other Programs

USDA’s Research, Education, and Economics (REE) mission area is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go
None.

House Committee on Agriculture
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1. Program Name

Agriculture and Food Research Initiative (AFRI)

2. Subprograms/Department Initiatives

Foundational Program

Childhood Obesity

Climate Change

Global Food Security

Food Safety

Sustainable Bioenergy

NIFA Fellowship Grant Program

3. Brief History

Section 7406 of the 2008 Farm Bill amended section 2(b) of the Competitive, Special, and Facilities Research Grant Act (7 U.S.C. 450i(b)) to authorize AFRI.

4. Purpose/Goals

The Foundational Program Request for Application (RFA) focuses on building a foundation of knowledge in fundamental and applied food and agricultural sciences critical for solving current and future societal challenges.

The Childhood Obesity Prevention Challenge Area RFA focuses on the societal challenge to end child obesity through specific program areas that are designed to achieve the long-term outcome of reducing the prevalence of overweight and obesity among children and adolescents.

The Climate Change RFA focuses on the societal challenge to mitigate and adapt to climate change through specific program areas that are designed to achieve the long-term outcome of reducing the use of energy, nitrogen, and water in the production of food, fiber and fuel, and increase carbon sequestration.

The Global Food Security RFA focuses on the societal challenge to keep American agriculture competitive while ending world hunger through specific program areas that are designed to achieve the long-term outcome of increasing food availability and decreasing the number of food insecure individuals.

The Food Safety Challenge Area RFA focuses on the societal challenge to improve food safety for all Americans through specific program that areas are designed to achieve the long-term outcome of reducing food-borne illnesses and deaths through a safe food supply.

The Sustainable Bioenergy RFA focuses on the societal challenge to secure America's energy future through specific program areas that are designed to achieve the long-term outcome of reducing the national dependence on foreign oil through the production of sustainable bioenergy.

The AFRI NIFA Fellowships Grant Program is focused on developing technical and functional competence for pre-doctoral students, and the research independence and teaching credentials of

postdoctoral scientists in the food, forestry and agricultural sciences that are within NIFA's challenge areas through well-developed and highly interactive mentoring and training activities.

5. Success in Meeting Programmatic Purpose/Goals

AFRI at the National Institute of Food and Agriculture (NIFA) is charged with funding research, education, and extension grants and integrated research, extension, and education grants that address key problems of National, regional, and multi-State importance in sustaining all components of agriculture, including farm efficiency and profitability, ranching, renewable energy, forestry (both urban and agroforestry), aquaculture, rural communities and entrepreneurship, human nutrition, food safety, biotechnology, and conventional breeding. Providing this support requires that AFRI advances fundamental sciences in support of agriculture and coordinates opportunities to build on these discoveries. This will necessitate efforts in education and extension that deliver science-based knowledge to people, allowing them to make informed practical decisions.

Examples of success include:

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

An international team of scientists have mapped the genome of the plant pathogen that causes downy mildew disease which causes major losses to crops such as corn, grapes, and lettuce. The genome sequence of *Hyaloperonospora arabidopsidis*, the pathogen that causes downy mildew disease, is published this week in the journal Science. In the paper, researchers compare the sequence of *H. arabidopsidis* with other fully-sequenced genomes of destructive plant pathogens to shed light on the differences in the ways microbes interact with their host and how those differences evolve. The study could lead to new ways to investigate how these pathogens cause plant disease and find new ways to prevent plant loss in the future.

S. Enteritidis and *C. jejuni* are major foodborne pathogens transmitted through poultry products. Many plant-derived antimicrobials are natural, generally regarded as safe molecules used to preserve foods and enhance food flavor. Preliminary research by **Connecticut** scientists revealed that plant molecules, including trans-cinnamaldehyde, carvacrol, thymol, and eugenol were bactericidal on *S. Enteritidis* and *C. jejuni* in chicken bowel contents in the laboratory. Additionally, trans-cinnamaldehyde and eugenol reduced significant bowel populations of these pathogens in chickens. The current research is investigating the effect of trans-cinnamaldehyde, carvacrol, thymol, and eugenol as dietary supplements to reduce colonization of *S. Enteritidis* and *C. jejuni* in broiler chickens and their safety in chickens. The work will potentially lead to decreased outbreaks of salmonellosis and campylobacteriosis, thereby improving public health and economic opportunities for poultry farmers.

Scientists at the **University of Wisconsin** created a Relative Antioxidant Index (RACI) which provides standardization of information about the antioxidant content of various fruits and vegetables and is useful as a ranking tool for use by the food industry, scientists, and consumers. The RACI statistically integrates the antioxidant capacity values generated using seven different chemical methods and was validated using 20 commonly consumed vegetables.

With funding from NIFA, scientists at the **University of California-Davis** have identified the genes in wheat that are responsible for the plant’s tolerance to freezing temperatures. This discovery may lead to improved crop production since wheat breeders have long recognized the need to produce cultivars with greater resistance to freezing temperatures, but have had limited success to date.

NIFA-funded scientists at the **University of Missouri** in cooperation with the Agricultural Research Service developed a new tool for cattle, called the Illumina BovineSNP50 Chip. This tool allows scientists to examine the animal’s entire genome to detect variations in a more efficient and economical way. Researchers around the world are using the chip to identify regions within the bovine genome that harbor variants that cause animals to differ in the outward expression of important traits. More importantly, the high resolution of this snip chip will allow scientists to predict an animal’s total genetic merit from its SNP profile. Breeding companies are using the chip to assist in the genetic selection process of dairy animals. As a result, the industry is saving millions of dollars annually by more efficiently prescreening young bulls and streamlining the process of identifying elite cows. Producers base these and other decisions on each animal’s genetic merit, as estimated from their SNP profiles.

6. Annual Budget Authority (FY2007-FY2011)

	(thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	120,452	166,045	164,027	179,552	181,170	190,229	190,883	201,504	262,482	264,470

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	9,511	76,124	143,464	198,017	223,339

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	7,609	7,635	8,060	10,499	10,579

9. Eligibility Criteria

AFRI makes awards under two legislative authorities with different eligibilities. Depending on Program Area Priorities and the requested activities, the authority used, and hence eligibility, may differ within a particular Program Area.

Eligibility is also linked to the **project type** requested in Program Area Descriptions.

Eligible applicants for Research Projects include:

- State Agricultural Experiment Stations;
- Colleges and universities (including junior colleges offering associate degrees or higher);
- University research foundations;
- Other research institutions and organizations;
- Federal agencies,
- National laboratories;
- Private organizations or corporations;
- Individuals who are U.S. citizens, nationals, or permanent residents; and
- any group consisting of 2 or more entities identified in 1) through 8).

Eligible institutions do not include foreign and international organizations.

Eligible applicants for Integrated Projects include: 1) colleges and universities; 2) 1994 Land-Grant Institutions; and (3) Hispanic-serving agricultural colleges and universities.

Eligible applicants for the Research, Education, or Extension Projects include: (1) State Agricultural Experiment Stations; (2) colleges and universities (including junior colleges offering associate degrees or higher); (3) university research foundations; (4) other research institutions and organizations; (5) Federal agencies, (6) national laboratories; (7) private organizations or corporations; (8) individuals who are U.S. citizens, nationals, or permanent residents; and (9) any group consisting of 2 or more entities identified in (1) through (8).

Eligible institutions **do not** include foreign and international organizations.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	2417	1569
Applications Funded	None	151	350

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

A peer review panel verifies that the project described in the application is original compared to the published literature; however, a search of the CRIS database is also conducted to ensure that the program is not unwarrantedly repeating work that is not yet published in scientific journals or other outlets. The CRIS search would include any work under the name of the Project Director (PD) and a separate search for key words associated with the specific investigation described in the project application. Search results must be checked for the possibility of supporting duplicative work by two different investigators or the overlapping support of one investigator from two sources for essentially the same work. Should the NIFA National Program Leader (NPL) suspect duplication of effort the NPL must contact the PD to discuss any potential or suspected overlaps or duplication. The AFRI will not fund any project for overlapping objectives receiving funds from another USDA program or that is unnecessarily duplicative. The search is documented on the Competitive Proposal Recommendation Form (Form 3) with the following statement: "A CRIS search performed on (Date) for the PD and using the following key words deemed appropriate for this application: (key words). Results confirm that this is original work and is not inappropriately duplicative of, or overlapping with, other work supported by USDA."

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

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1. Program Name

Beginning Farmer and Rancher Development Program (BFRDP)

2. Subprograms/Department Initiative

None.

3. Brief History

Section 7405(c) of the Farm Security and Rural Investment Act of 2002 (2002 Farm Bill) (Pub. L. 107-171) (7 U.S.C. 3319f(c)), as amended by section 7410 of the 2008 Farm Bill, established a competitive grants program for the purpose of providing education, outreach, training and technical assistance to benefit beginning farmers and ranchers in the United States.

Section 7405(d) of the 2002 Farm Bill established beginning farmer and rancher education teams to develop curricula and conduct educational programs and workshops for beginning farmers or ranchers in diverse geographical areas of the United States.

4. Purpose/Goals

The primary goal of BFRDP is to enhance food security by providing beginning farmer and rancher producers and their families in the U.S. and its territories, with the knowledge, skills and tools needed to make informed decisions for their operations, and enhance their sustainability.

5. Success in Meeting Programmatic Purpose/Goals

Training activities are the cornerstone of almost all the BFRDP grantee programs. Types of training included webinars, seminars, internships, mentorships, on-farm field days, etc. Face-to-face training events, such as regular non-credit courses or workshop sessions at farming conferences, were the most frequent types of events. More than 5,000 new and potential farmers were counted as participants in BFRDP project training events. Most attended face-to-face workshops or courses, but many also participated in other types of training, including roundtable discussions, hands-on field days, farm internships, and working with mentor farmers. This outcome indicates that the BFRDP goal to train more than 6,000 beginning farmers and ranchers will most likely be met, if not greatly exceeded. Data from BFRDP training program participants who responded to surveys shows that approximately 17 percent of the 5,339 farmers trained had very little or no experience in farming. About 12-16 percent are farm workers, females, limited resource, and socially disadvantaged.

Examples of success include:

The **Northeast Beginning Farmer Coalition** is a learning network for beginning farmer training programs. Three major strategies to foster the network include the delivering of mentoring, training, and program development resources; developing evaluation resources and outreach strategies to understand and enhance the impacts of training efforts; and engaging K-12 teachers and young farmer activists to shift youth cultural norms about farming career options. During the coalition's first year, it conducted needs assessments of new farm start-ups focused on gaps

in service. A course to train new instructors reached 20 farmers, non-profit, and extension educator participants. Attendees developed five new online courses for beginning farmers. The coalition also developed and reviewed materials and resources and created resources to support teachers at eight schools in New York with agriculture education programs.

The **Western Navajo Nation** Beginning Farmers and Ranchers Project engages, prepares, and supports socially disadvantaged, underserved, and limited resource beginning Navajo farmers and ranchers in eight communities covering 8,000 square miles of the Navajo Nation. The overall goal of the project is to provide Navajo community members who wish to begin farming and ranching with the skills to effectively launch sustainable agricultural operations using traditional and contemporary agricultural techniques in conjunction with effective business practices. Utilizing multiple learning methods, the project features Navajo language-based instruction, intensive experiential education with successful Navajo farmer and rancher mentors, regional peer roundtables with expert facilitators, and production experts. The project is teaching ancestral traditional ways to introduce participants to farming or ranching.

In the first year, the project worked with 13 chapter members through direct agricultural training and networking activities that included two roundtables, two conferences, and weekly classes in technology, business, or introductory farming and ranching to 1,000-plus participants. Fifty percent of participants are women. Seventy percent are farming or ranching less than 1 year, or do not farm/ranch currently. The project staff is comprised of four traditional Navajo locals of varying ages and educational backgrounds. All are bilingual, fluent in Navajo, and culturally sensitive to the target group’s history and challenges

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

6. Annual Budget Authority (FY2007-FY2011)

	FY 2007	FY2008	FY2009	FY2010	FY2011
(in thousands of dollars)	/ 1	/ 1	18,000	19,000	19,000

/ 1 Funding began in FY 2009. Mandatory funding was provided by transfer from Commodity Credit Corporation (CCC).

7. Annual Outlays (FY2007-FY2011)

	FY 2007	FY2008	FY2009	FY2010	FY2011
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(in thousands of dollars)	/ 1	/ 1	1,800	10,000	18,550
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/ 1 Funding began in FY 2009. Mandatory funding was provided by transfer from Commodity Credit Corporation (CCC).

8. Annual Delivery Cost (FY2007-FY2011)

	FY 2007	FY2008	FY2009	FY2010	FY2011
(in thousands of dollars)	/ 1	/ 1	720	760	760

/ 1 Funding began in FY 2009. . Mandatory funding was provided by transfer from Commodity Credit Corporation (CCC).

9. Eligibility Criteria

BFRDP program recipients 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 nongovernmental organization; college or university (including an institution awarding an associate's degree) or foundation maintained by a college or university; or any other appropriate partner, as determined by the Secretary. In accordance with the authorizing legislation, Priority will be given to partnerships and collaborations led by or including nongovernmental and community-based organizations with expertise in new agricultural producer training and outreach.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	196	122
Applications Funded	None	29	40

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None

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1. Program Name

Community Food Projects Competitive Grants Program (CFPCGP)

2. Subprograms/Department Initiatives

None.

3. Brief History

CFPCGP was authorized by Section 25 of the Food Stamp Act of 1977 (7 U.S.C. 2034), as amended by the Food and Nutrition Act of 2008 and reauthorized by Section 4402 of the 2008 Farm Bill.

Since 1996, CFPCGP has promoted self-sufficiency and food security in low-income communities through community food projects (CFP) and Training and Technical Assistance (T&TA) projects. CFPs unite the entire food system, assessing strengths, establishing linkages, and creating systems that improve self-reliance over food needs.

4. Purpose/Goals

CFPCGP was established to meet the needs of low-income people by increasing access to fresher, more nutritious food supplies; increase the self-reliance of communities in providing for their own food needs; promote comprehensive responses to local food, farm, and nutrition issues; meets specific state, local, or neighborhood food and agricultural needs for infrastructure improvement and development; plans for long-term solutions; and create innovative marketing activities that benefit both agricultural producers and low-income consumers. Grants are intended to help eligible private nonprofit entities in need of a one-time infusion of federal assistance to establish and carryout multipurpose community food projects.

5. Success in Meeting Programmatic Purpose/Goals

Examples of success include:

The **Philadelphia Horticultural Society** (PHS) is establishing and developing a network of urban entrepreneurial growers in Philadelphia that will significantly increase the supply of locally grown fruits and vegetables to Philadelphia communities. Over the course of three years, approximately 66 entrepreneurial growers are being supplied with locally grown seedlings as well as soil, tools and all necessary materials for sustainable urban food gardening for market. These growers are developing skills and experience in areas such as organic pest management, season extension, growing for market, crop planning, marketing, and networking through five mandatory workshops and on-going technical assistance delivered by PHS staff. Marketing and distribution opportunities for the growers are being developed by PHS staff (with grower input) and includes community farmers markets, mobile purchase by a local co-op market, purchase by a local food assistance provider, and relationships with 20 wholesale outlets. They are also establishing and operating three Neighborhood Green Centers to serve the network of growers as well as the surrounding community; and improving food security and access to affordable, locally grown produce in targeted neighborhoods by establishing three community farmers

markets with partner organizations to provide 50 market days over the course of three years in targeted areas in which CGA produce can be sold at affordable prices. Over 4300 pounds of naturally grown produce was made available to local residents during this first year of the project. As additional growers are added in years 2 and 3, this annual output will increase.

The **American Friends Service Committee** in New Mexico (AFSC) is to increasing economic development and food security for low-income communities in the South Valley and surrounding areas. They are providing direct technical assistance to farmers to develop farm infrastructure, increase technical farming skills and entrepreneurial capacity; facilitating the development of a network of community-based farms with a joint business plan and set up procurement by institutional buyers, retail outlets, and wholesale distributors and families; 3) documenting training curricula, best practices and lessons learned for farmer-to-farmer information sharing and outreach; and increasing local food sales and nutritional education in Albuquerque Public Schools and among low-income communities in the South Valley. The project has met and exceeded expectations in its first year, especially in terms of training outcomes (meeting trainee learning objectives) and enterprise capacity. Project participants experienced market growth, production growth, and increased income, notable given the farmers limited to no farming experience or training at the beginning of the project. The year one trainees/farmers all have ongoing farm enterprises and expect to continue to earn substantial parts of their household income from farming into the near future. In addition to its market successes, the establishment of ACN promises to represent an important advancement in institutionalized organizational collaboration in the South Valley.

World Hunger Year, Inc. (WHY) is working in conjunction with the Community Food Security Coalition (CFSC) on ongoing evaluation of the Food Security Learning Center (FSLC). These evaluation measures will help gain a better understanding of the FSLC audience, what tools and resources they need to conduct their work or research and how to take action and combat challenges facing our food system. WHY staff is currently evaluating the effectiveness of the FSLC. This includes determining how the outcomes and outputs of the FSLC can be best measured. Finally, WHY will document major initiatives that take place as a result of this project through event surveys, meeting minutes, photographs and video, etc. These will be used to inform future decisions, delegate responsibilities and write final reports.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	5,000	5,000	5,000	5,000	5,000	5,000	0 *	10,000	5,000	5,000

* FY 2008 funds were made available to NIFA in FY 2009.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	*	*	*	*	*

*Mandatory funding was provided by transfer from the Food and Nutrition Service. Therefore, NIFA does not report outlays for the program.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	200	0	400	200	200

9. Eligibility Criteria

A. Community Food Projects (CFP) and Planning Projects (PP) Eligibility

Only private, nonprofit entities, meeting the following three (3) requirements are eligible to receive a CFP or PP grant:

- (a) have experience in the area of
 - (i) community food work, particularly concerning small and medium-size farms, including the provision of sustainably produced food to people in low-income communities and the development of new markets in low-income communities for agricultural producers; or
 - (ii) job training and business development activities for food-related activities in low-income communities;
- (b) demonstrate competency to implement a project, provide fiscal accountability, collect data, and prepare reports and other necessary documentation; and
- (c) demonstrate a willingness to share information with researchers, evaluators, practitioners, and other interested parties, including a plan for dissemination of results.

B. Partners and Collaborators

Applicants with CFP and PP proposals are encouraged to seek and create partnerships with public or private, nonprofit or for-profit entities, including links with academic institutions (including minority-serving colleges and universities), and/or other appropriate professionals, community-based organizations, and local government entities. **Only the applicant must meet the eligibility requirements.** Project partners and collaborators need not meet the eligibility requirements.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	113	159	171
Applications Funded	None	50	27

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's

leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

Complainant (an employee of the grantee, Our School of Blair Grocery, New Orleans) contacted NIFA alleging that grantee has depleted most of the approx. \$299,000 award without fulfilling the required budgetary items or the programming listed in the proposal. Complaint was received March 29, 2011 and review is ongoing.

13. Effect of Administrative Pay-go

None.

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1. Program Name

Distance Education Grants for Insular Areas

2. Subprograms/Department Initiatives

None.

3. Brief History

The Distance Education Grants for Insular Areas (DEG) program is administered under the Provisions of 7 U.S.C. 3362, to strengthen the capacity of Insular Area institutions to carry out *distance education* programs in the food and agricultural sciences. This program was first funded in FY 2010.

4. Purpose/Goals

The purpose of this program is to strengthen the capacity of institutions of higher education in Insular Areas to carry out resident instruction, curriculum, and teaching programs in the food and agricultural sciences through distance education technology. The Distance Education Grants Program for Institutions of Higher Education in Insular Areas (DEG) is a NIFA-administered competitive grants program focused on improving formal, postsecondary agricultural sciences education.

5. Success in Meeting Programmatic Purpose/Goals

Although this grant program is too new to have any discernable success to date examples of expected success include:

These new funds will strengthen the **University of Guam**'s Distance Education for the Consortium of Caribbean and Pacific Island institutions (CariPac) and are a key strategy for fulfilling the mission. The Caribbean and Pacific Island students contribute to sustaining a balanced and healthy society, and provide excellent higher education in Agriculture and Food Science, within the Insular Areas, to meet the evolving needs of a global society supports the Distance Education program goals: (1) to increase the number of graduates with a degree in the food and agricultural sciences and (2) helps students achieve their career goals and help meet workplace needs by increasing the quality of undergraduate instruction. The goals of CariPac are to harness research and education to help address local food, agricultural, and environmental needs; support local economic growth; and to prepare students to achieve their own personal career goals.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	/ 1	/ 1	/ 1	750	749

/ 1 Funding began in FY 2010.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays				38	112

∟ 1 Funding began in FY 2010.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	0	0	0	30	30

∟ 1 Funding began in FY 2010.

9. Eligibility Criteria

Applications may only be submitted by an institution of higher education, as defined in section 101(a) of the Higher Education Act of 1995 (20 U.S.C. 1001(a)), that is located in an Insular Area and that has a demonstrable capacity to carry out teaching and extension programs in the food and agricultural sciences. Individual land-grant colleges and universities, and other institutions that have secured land-grant status through Federal legislation, **and** which are located in Insular Areas are automatically eligible for awards under the DEG grants program, either as direct applicants or as parties to a consortium agreement. The eight insular areas are the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, and the Virgin Islands of the United States.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	None	1
Applications Funded	None	None	1

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Farm Business Management and Benchmarking Program (FBMB)

2. Subprograms/Department Initiatives

None.

3. Brief History

The authority for this program is under Section 7208 of the 2008 Farm Bill which amended the Food, Agriculture, Conservation and Trade Act of 1990 by adding section 1672D (7 U.S.C. 5925f) which established a competitive research and extension grants program to support improved farm management. The FBMB program was newly authorized by the FCEA and initially funded in FY 2010.

4. Purpose/Goals

The Farm Business Management and Benchmarking (FBMB) Competitive Grants Program provides funds to (1) improve the farm management knowledge and skills of agricultural producers; and (2) establish and maintain a national, publicly available farm financial management database to support improved farm management.

5. Success in Meeting Programmatic Purpose/Goals

Although this grant program is too new to have any discernable success to date examples of expected success include:

This competitive grants program provides funds to improve the farm management knowledge and skills of agricultural producers; and establish and maintain a national, publicly available farm financial management database to support improved farm management.

The University of Minnesota is leading the effort by developing and maintaining a national, publicly available online farm financial database that any U.S. producer can use for benchmarking and improving their farm management. The project will improve the profitability and competitiveness of small and mid-sized U.S. farms and ranches by providing benchmarking resources using high-quality farm financial management data. Benchmarking allows producers to compare their performance to farms and ranches of similar size that produce the same products. The benchmarking database will let producers identify their businesses strengths and weaknesses. To develop and expand a national benchmarking database of actual farm data, the data will be collected by farm business management education programs and associations that deliver financial analyses to producers. Data collection and aggregation into a national database will be accomplished through increased collaboration between state-level farm management education programs and associations. A National Farm Management Center is being established to develop and maintain the benchmarking database and to facilitate collaboration among the many state level programs that will partner to implement the database. The national center will coordinate development of standardized procedures and training for financial analysis and data collection methodologies to ensure the database provides uniform benchmarking data. Twelve farm business management education programs and associations in eleven states will

collaborative to implement this project. Several additional programs will be involved in a task force to discuss how to expand the database to include more states. The national database will be publicly available to all U.S. producers. Use of the database for benchmarking will improve producers' abilities to successfully manage risk and financial challenges and to become more globally competitive.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	∟ 1	∟ 1	∟ 1	1,500	1,497

∟ 1 Funding began in FY 2010.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	∟ 1	∟ 1	∟ 1	150	825

∟ 1 Funding began in FY 2010.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	∟ 1	∟ 1	∟ 1	60	60

∟ 1 Funding began in FY 2010.

9. Eligibility Criteria

Pursuant to 7 U.S.C. 450i(b)(7), eligible applicants means: (A) State agricultural experiment stations; (B) colleges and universities; (C) university research foundations; (D) other research institutions and organizations; (E) Federal agencies; (F) national laboratories; (G) private organizations or corporations; (H) individuals; or (I) any group consisting of 2 or more of the entities described in subparagraphs (A) through (H).

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	None	6
Applications Funded	None	None	1

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS,

others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

Program Name

Food and Agriculture Defense Initiative (FADI)

2. Subprograms/Department Initiatives

National Animal Health Laboratory Network (NAHLN)

National Plant Diagnostic Network (NPDN)

Extension Disaster Education Network (EDEN)

3. Brief History

Section 1484 (7 U.S.C. 3351) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), which was amended by the 2002 Farm Bill, provides amounts for agricultural research, extension, and education. There are also amounts authorized to be appropriated for agricultural research, education, and extension activities for biosecurity planning and response.

According to NARETPA of 1977, using any authority available to the Secretary, the Secretary shall use funds made available under this section to carry out agricultural research, education, and extension activities (including through competitive grants) for the following:

- (1) To reduce the vulnerability of the United States food and agricultural system to chemical or biological attack.
- (2) To continue partnerships with institutions of higher education and other institutions to help form stable, long-term programs to enhance the biosecurity of the United States, including the coordination of the development, implementation, and enhancement of diverse capabilities for addressing threats to the Nation's agricultural economy and food supply with special emphasis on planning, training, outreach, and research activities related to vulnerability analyses, incident response, and detection and prevention technologies.
- (3) To make competitive grants to universities and qualified research institutions for research on counterbioterrorism.
- (4) To counter or otherwise respond to chemical or biological attack.

4. Purpose/Goals

- a. The National Animal Health Laboratory Network (NANLN) -** The United States Department of Agriculture established the NAHLN as part of a national strategy to coordinate and network the diagnostic testing capacities of the Federal veterinary diagnostic laboratories with the extensive infrastructure (facilities, professional expertise, and support) of State and university veterinary diagnostic laboratories. This network enhances the Nation's early detection of, response to, and recovery from animal health emergencies, including bioterrorist events, newly emerging diseases, and foreign animal disease (FAD) agents that threaten the Nation's food supply and public health. NIFA and the Animal and Plant Health Inspection Service cooperatively provide leadership for this network.

- b. **National Plant Diagnostic Network (NPDN)** - The NPDN mission is to quickly detect, diagnose and communicate outbreaks of newly introduced and emerging high consequence pests in over 1 billion acres of forest, pasture, and crop lands of the United States of America (please see attached Impact of the NPDN). Early detection leads to early response and successful remediation.
- c. **Extension Disaster Education Network (EDEN)** - The Extension Disaster Education Network (EDEN) mission is to reduce the impact of disasters through extension education. Seventy institutions from all 50 states and three U.S. territories participate in EDEN. This valuable network of multidisciplinary professionals ensures that the cooperative extension system can appropriately respond to local, state, regional, and national education needs during a crisis. This network and its management fit well into the nation's Homeland Security framework.

5. Success in Meeting Programmatic Purpose/Goals

The National Animal Health Laboratory Network (NAHLN) is a national network of non-Federal public animal diagnostic laboratories; under the leadership of NIFA, Animal and Plant Health Inspection Service (APHIS), and the American Association of Veterinary Laboratory Diagnosticians. It has 12 core laboratories who receive NIFA support; which are located at **Cornell University (New York), Louisiana State University, University of Georgia, Texas A&M, University of Wisconsin, Iowa State University, Colorado State University, Washington State University, University of California at Davis, University of Arizona, North Carolina Department of Agriculture and Consumer Services, and Florida Department of Agriculture and Consumer Services.** In addition to these core laboratories, NIFA provides a reduced amount of funding for laboratories in 16 other States: **Oregon, Utah, New Mexico, Wyoming, South Dakota, Nebraska, Kansas, Minnesota, Mississippi, Tennessee, Indiana, Michigan, Kentucky, Ohio, Pennsylvania, and New Jersey.** Animal disease-detection criteria have been developed for the following ten high-consequence diseases: *Foot-and-Mouth Disease, Exotic Newcastle Disease, Classical Swine Fever (or hog cholera), High Pathogen Avian Influenza, Low Pathogen Avian Influenza, Bovine Spongiform Encephalopathy, Scrapie, Chronic Wasting Disease, Rift Valley Fever and African Swine Fever.* *African Swine Fever*, added in Fiscal Year 2010, causes swine to have high fevers, reddening of the skin, hemorrhages in lymph nodes and internal organs, and occasionally enlargement of the spleen. NAHLN is part of a national strategy to coordinate the Nation's Federal, State and university laboratory resources.

The National Plant Diagnostic Network (NPDN) is a 50 State network of land grant university based plant diagnostic laboratories. The network is led by diagnostic laboratory centers at **Cornell University (New York), University of Florida, Kansas State University, Michigan State University, and University of California at Davis.** These institutions receive direct funding from NIFA and provide support to the other land grant plant diagnostic laboratories in their region through subcontracts, training, and leadership. Because of this, plant laboratories in every State receive Federal funding and other support from the five NPDN centers. All 50 States and many U.S. territories are connected to the NPDN through digital distance diagnostics, used throughout the Nation to speed early detection of high consequence plant pathogens and solve other agricultural problems. This web-based diagnostics system allows plant diagnosticians in

one location to transmit a digital image across the country to someone with special expertise. Plant disease (and insect) detection criteria have been developed for *soybean rust*, *sudden oak death*, *Ralstonia stem rot*, *plum pox virus*, *pink hibiscus mealybug*, *potato wart*, *huanglongbing (citrus greening)*, *Potato Cyst Nematode*, *Late Blight and Beet Curly Top*. The laboratory network partnered with other cooperative extension officials to quickly and efficiently conduct a widespread outreach and detection campaign on tomato and potato Late Blight, which became a significant problem in 2009 for the first time since the network was established. A new diagnostic test was implemented for Beet Curly Top, a disease spread by insects that affects tomatoes, sugar beets, table beets, beans, and cucurbits.

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

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)							
	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	7,953	8,928	9,900	9,900	9,830	9,830	9,830	5,988

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)					
	FY06	FY07	FY08	FY09	FY10	FY11
Annual Outlays		495	3,957	7,397	9,848	9,638

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)					
	FY06	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost		396	393	393	393	240

9. Eligibility Criteria

Although applications may be submitted by universities and qualified research institutions for research on counterbioterrorism, NIFA makes awards through non-competitive cooperative agreements.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	35	35	36
Applications Funded	35	35	35

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Food Animal Residue Avoidance Database Program (FARAD)

2. Subprograms/Department Initiatives

There are no subprograms.

3. Brief History

Section 604 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7642) authorized this program. Section 7312 of the 2008 Farm Bill authorized appropriations and reauthorized the program through FY 2012.

4. Purpose/Goals

This funding is used to establish and maintain FARAD, a computer-based decision support system designed to provide livestock producers, extension specialists, and veterinarians with practical information on how to avoid drug, pesticide, and environmental contaminant residue problems.

5. Success in Meeting Programmatic Purpose/Goals

NIFA administers the funding that establishes and maintains the Food Animal Residue Avoidance Databank (FARAD), a computer-based decision support system designed to provide livestock producers, extension specialists, and veterinarians with practical information on how to avoid drug, pesticide, and environmental contaminant residue problems. The drugs and pesticides used in modern animal agriculture improve animal health and thereby promote more efficient and humane production.

Wherever drugs are used to treat sick animals or prevent disease, there is a potential that residues may be incurred. The U.S. Food and Drug Administration (FDA), which must approve all drugs meant to be marketed for use in animals, establishes tolerances for drug residues (similar to speed limits) to ensure food safety. The FDA also establishes “withdrawal times” or “withholding periods,” which are times after drug treatment when milk and eggs are not to be used for food and during which animals are not to be slaughtered. This allows time for the animals to eliminate the drug residues.

FARAD is a repository of comprehensive residue avoidance information. FARAD also is sanctioned to provide these estimates to the U.S. Pharmacopeia-Drug Information (USP-DI) Veterinary Medicine Advisory Committee. Since 1982, FARAD has been working with producers, extension specialists and agents, and veterinarians to help avoid and mitigate residue problems. As a cooperative multistate program, FARAD is available nationwide to offer advice about residue avoidance.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)				
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011

Annual Budget Authority	∟ 1	∟ 1	806	1,000	998
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∟ 1 Funding began in FY 2009.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Annual Outlays	∟ 1	∟ 1	484	898	977

∟ 1 Funding began in FY 2009.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Annual Delivery Cost	∟ 1	∟ 1	32	40	40

∟ 1 Funding began in FY 2009.

9. Eligibility Criteria

The Secretary shall offer to enter into a contract, grant, or cooperative agreement with 1 or more appropriate colleges and universities to operate the FARAD program.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	5	4
Applications Funded	None	5	4

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Grants for Youth Serving Institutions (Rural Youth Development Grants Program or RYD)

2. Subprograms/Department Initiatives

None.

3. Brief History

Section 410 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7630) authorized this program.

Section 7309 of the 2008 Farm Bill reauthorized 7 U.S.C. 7630 and also amended to provide additional flexibility in content delivery to each organization receiving funds and to allow recipients to redistribute all or part of the funds to individual councils or local chapters without further need of approval from the Secretary.

4. Purpose/Goals

The goals are to support and enhance the goals, objectives, and priorities of the eligible youth organizations; Support programs which address issues and needs of rural youth; Involve youth in design and implementation of their educational activities; Increase knowledge, skills, attitudes and behaviors necessary for rural youth to live productive, contributing, and fulfilling lives; and Increase economic opportunities and sustainability and improve quality of life in rural communities through enhanced human, social, civic, natural, financial, cultural, and built capital.

5. Success in Meeting Programmatic Purpose/Goals

NIFA makes grants available to the Girl Scouts of the United States of America, the Boy Scouts of America, the National 4-H Council, and the National FFA Organization to establish pilot projects to expand the programs carried out by the organizations in rural areas and small towns.

Examples of success:

The **Girl Scouts in Rural Communities** (GSRC) project utilizes Girl Scouting to facilitate the training and experiences that will empower rural girls with the leadership and personal development assets and skills to improve their lives and their communities. Funds enable the implementation of the "Challenge and Change: Challenge Yourself, Change Your World", a social entrepreneurship curriculum-based project for rural teen girls (ages 14-17) that was launched in FY 2005. Through this program the Girls Scouts recruit and train rural girls in social entrepreneurship (Challenge and Change Curriculum); provide opportunities for rural girls to assess the needs of their rural communities; provide opportunities for rural girls to identify, plan and lead projects aimed at solving identified needs in their communities; recruit and train adults to facilitate girl participation and serve as caring adults; and develop partnerships with other organizations in their communities to facilitate social entrepreneurship projects and the development of rural girls.

National FFA Organization is providing outreach and dissemination of their “Living to Serve” materials to over 7,000 chapters serving a membership base of approximately 500,000. They deliver tools that motivate and mobilize rural youth to partner with adults in joint ventures to create change in their communities that address identified needs and build capital. This program was the catalyst to move FFA from a model of "community service" to a much more rich and meaningful model of "service-learning". The “Living to Serve” instructional materials provide education on the principles of service-learning. These projects have dealt with specific community needs identified by the FFA members, plus the overarching goal of civic engagement and youth leadership.

The **National 4-H Council** implemented the “Engaging Youth, Serving Community” (EYSC) program that supports land-grant university efforts to develop, implement, and evaluate community based issues forums and action plans in rural communities. Projects provide youth with adult partners and constructive peer interaction through youth-adult partnerships and empower youth through meaningful leadership roles and life skills development. Youth and adults gain the life skills and experience needed to emerge as effective leaders and contributing members of society; develop positive attitudes towards the roles of youth in communities; improve their abilities to work with diverse community members to identify local issues and develop strategies for addressing these issues; and provide more opportunities for youth and families in rural communities for positive youth development experiences during out-of-school time.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	8,000	2,981	2,667	2,646	1,980	1,980	1,737	1,767	1,784	1,780

NOTE: In FY 2002, Grants for Youth Serving Institutions were funded by transfer to the agency from Commodity Credit Corporation funds.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	1,188	1,775	1,723	1,761	1,783

NOTE: In FY 2002, Grants for Youth Serving Institutions were funded by transfer to the agency from Commodity Credit Corporation funds.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	79	70	71	71	71

NOTE: In FY 2002, Grants for Youth Serving Institutions were funded by transfer to the agency from Commodity Credit Corporation funds.

9. Eligibility Criteria

Pursuant to 7 U.S.C. 7630(a), only the Girl Scouts of the United States of America (GSUSA), the National 4-H Council (4-H), the Boy Scouts of America (BSA), and the National FFA Organization (FFA) are eligible.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	3	3	4
Applications Funded	3	3	3

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Healthy Urban Food Enterprise Development Center (HUFED)

2. Subprograms/Department Initiatives

There are no subprograms.

3. Brief History

The Healthy Urban Food Enterprise Development Center (HUFED) legislative authority is located in Section 25 (h) (7 U.S.C. 2034(h)) of the Food and Nutrition Act of 2008. The HUFED Center program was created to respond to the need to redevelop a food enterprise structure in the United States in order to make more healthy, affordable food available in low-income areas, to improve access for small and mid-sized agricultural producers, and to promote positive economic activities generated from attracting healthy food enterprises into underserved communities.

Section 4402 of the 2008 Farm Bill provided mandatory funding for the HUFED Center and program-specific requirements.

4. Purpose/Goals

The purpose of the HUFED Center grant program is 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. The HUFED Center will provide training and technical assistance for food enterprises and award sub-grants to eligible entities for healthy food enterprise development.

5. Success in Meeting Programmatic Purpose/Goals

The purpose of the this program is to establish and support a Healthy Urban Food Enterprise Development Center (HUFED) to increase access to healthy affordable foods, including locally produced agricultural products, to underserved communities.

Since the Center started, several high profile federal initiatives interested in food access have emerged: Let's Move; Know Your Farmer, Know Your Food; and Healthy Food Financing Initiative. They have been actively pursuing news, information, and research to better position the Center to take advantage of the direction and interest in food access and regional food systems. The Center's understanding of the need for funding for healthy food enterprises was significantly deepened. They received 538 Letters of Interest (LOIs) within a 4-week outreach period. The LOIs spanned across the country, and included 47 states, as well as the District of Columbia and the US Virgin Islands. A preliminary analysis of the applicant database has provided further insight on the landscape of food access work, which will inform future strategies not only for HUFED, but also for USDA. The enterprises for Year 1 grantees are underway and outcomes and impacts from their enterprises will be reported in Year 2's Accomplishments Report. Due to the new high profiled initiatives, the Center has taken a stronger effort in meeting and sharing information with USDA Deputy Undersecretaries and Senior Advisors to further link the Center's resources and knowledge. After designing and

managing the proposal process for Year 1, an evaluation was conducted to identify efficiencies and areas of improvement for future RFAs. The grant making process will be streamlined towards the needs of the applicants, as well as the review panel. As the grantees begin the enterprises, HUFED is working with the internal evaluator, Kingslow Associates LLC, to ensure that metrics and indicators are in place so that the Center as well as the individual enterprises, can effectively measure their successes and challenges, with the long term goal of documenting best practices and lessons learned. The Center is also providing grantees guidance, and coaching around evaluation, and assisting with reporting and working with government grants, as needed.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	∟1	∟1	1,000	1,000	1,000

∟1 Funding began in FY 2009. Mandatory funding was provided through direct appropriation from the Farm Bill.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	∟1	∟1	100	550	1,000

∟1 Funding began in FY 2009. Mandatory funding was provided through direct appropriation from the Farm Bill.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	∟1	∟1	100	100	100

∟1 Funding began in FY 2009. Mandatory funding was provided through direct appropriation from the Farm Bill.

9. Eligibility Criteria

Eligible Applicants are nonprofit organizations are eligible to apply for and receive awards under the HUFED Center authority (7 U.S.C. 2034 (h)(2)).

Regarding Eligible Applicants for Subgrants, the term “eligible entity” for the purpose of subgrants means (A) a nonprofit organization; (B) a cooperative; (C) a commercial entity; (D) an agricultural producers; (E) an academic institution; (F) an individual; and (G) such other entities as the Secretary may designate. Award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the conduct of the project.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	13	1
Applications Funded	None	1	1

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Hispanic-serving Agricultural Colleges and Universities (HSACU)

2. Subprograms/Department Initiatives

None.

3. Brief History

The authority for this program is under Section 7101 of the 2008 Farm Bill which amended section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 to add a definition for a new group of cooperating educational institutions known as Hispanic-Serving Agricultural Colleges and Universities.

Additionally, Section 7129 of the 2008 Farm Bill authorizes the following five new programs for HSACUs: (1) HSACU Endowment Fund (formula-based); (2) HSACU Equity Grants Program (formula-based); (3) HSACU Institutional Capacity-Building Grants Program (competitive); (4) HSACU Extension Grants Program (competitive); and (5) HSACU Fundamental and Applied Research Grants Program (competitive).

As of FY 2011, none of the five new programs have received an appropriation.

4. Purpose/Goals

Establishing a process to identify and certify HSACUs supports the Federal government-wide initiative to streamline and standardize all Federal assistance processes across the Federal government. NIFA will be able to apply consistent rules used to determine HSACU eligibility for Federal assistance programs, including programs created or amended by the passage of the FCEA.

Use of funds from the HSACU Endowment Fund and the resulting interest distribution are authorized under the Act of August 30, 1980, (commonly known as the ‘Second Morrill Act’) (7 USC 321 et seq.). These funds benefit the HSACUs by supporting teaching programs in the food and agricultural sciences in the targeted areas of (1) curricula design and instructional materials development, (2) faculty development and preparation for teaching, (3) instruction delivery systems, (4) student experiential learning, (5) equipment and instrumentation for teaching, and (6) student recruitment and retention.

5. Success in Meeting Programmatic Purpose/Goals

This program was not funded by appropriation and, therefore, has no examples of success in meeting programmatic goals. However, another funded program within NIFA, Higher Education – Hispanic Serving Institutions has examples of success which include:

The education program at **California State University** in Fresno has improved and enhanced the capacity of food and agricultural science education on organic agriculture for plant science, food science, dietetic, and culinology. The grant helped create and facilitate an expansion of organic farming for teaching, research, and outreach programs. This project has attracted a number of under-represented student groups who are interested in learning and working with various aspects of healthy farming. CSU-Fresno has been able to establish year-round organic vegetable

operation, organic greenhouse, organic herb garden, compost and vermicompost on campus farm operations for the first time which became an outdoor classroom demonstration to various classes and interested individuals, community, and local organizations such as Fresno City College, 4-H programs, and K-12 schools.

The function of the TREE (Teaching and Research in Environmental Ecology) Program at the **University of Texas** at San Antonio is to recruit, retain and financially support underrepresented undergraduates and graduate students. Workshops, training programs and mentorship from local community entities have been used to foster and develop the student's interest in careers in conservation and natural resources. While only three role-model seminars were planned, twenty-eight (28) role-model seminars were presented by a USDA research scientist, the Endangered Species Grants Coordinator from Texas Parks and Wildlife, faculty from the University of Texas at San Antonio, and faculty from other universities in the United States. The program has increased the number of minority and disadvantaged students participating in conservation and natural resource research from one to twelve.

Through partnerships with USDA Forest Service, **University of California Riverside and University of California Santa Barbara, Mt. San Jacinto College in San Jacinto, California** has implemented a strategic student recruitment and retention plan to increase diversity in the Environmental Studies degree program and facilitate seamless transfer to 4-year universities. As a result there have been significant increases in enrollment and retention of underrepresented groups. There has been a 148% growth in students enrolling and majoring in environmental studies during the first year of the project, and a 205% growth moving into the second year. The Summer Field Institute showed a 400% increase in the enrollment of Hispanic and other underrepresented students, outpacing the 375% growth in overall enrollment over the last year. Students mentored under this program have become increasingly active on campus and in the local communities, which will likely generate future growth as well.

6. Annual Budget Authority (FY2007-FY2011)

This program has not been funded.

7. Annual Outlays (FY2007-FY2011)

This program has not been funded.

8. Annual Delivery Cost (FY2007-FY2011)

This program has not been funded.

9. Eligibility Criteria

HSACUs are defined as colleges and universities that qualify as Hispanic-serving Institutions (HSIs) and offer associate, bachelors, or other accredited degree programs in agriculture-related fields.

HSACUs do not include 1862 land-grant institutions, as defined in section 2 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7601).

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	None	None
Applications Funded	None	None	None

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Integrated Research, Education, and Extension Competitive Grants Program (Section 406)

2. Subprograms/Department Initiatives

- A. Water Quality
- B. Food Safety
- C. Regional Pest Management Centers
- D. Crops at Risk*
- E. Risk Avoidance and Mitigation*
- F. Methyl Bromide Transition
- G. Organic Transitions

*No funds were provided for this program in FY 2011 or FY 2012 Budgets

3. Brief History

Section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7626), as reauthorized by Section 7306 of the 2008 Farm Bill and authorized a competitive grants program that provides funding for integrated, multifunctional agricultural research, extension, and education activities.

Section 7206 of the 2002 Farm Bill amended section 406(b) of AREERA to add the 1994 Land-Grant Institutions as eligible to apply for grants under this authority.

Section 7129 of the FCEA amended section 406(b) of AREERA (7 U.S.C. 7626(b)), adding Hispanic-serving agricultural colleges and universities (HSACUs) as eligible entities for competitive funds awarded under this authority.

4. Purpose/Goals

The purpose of the Integrated Research, Education, and Extension Competitive Grants Program (Section 406) is to provide funding for integrated, multifunctional agricultural research, extension, and education activities through a research, education, and extension competitive grants program. Grants are to be awarded to address priorities in United States agriculture that involve integrated research, education, and extension activities as determined by the Secretary in consultation with the National Agricultural Research, Extension, Education, and Economics Advisory Board (NAREEEAB).

5. Success in Meeting Programmatic Purpose/Goals

Examples of success include:

Water Quality Program

Faculty at the **University of Rhode Island** are heading up the Northeast States and Caribbean Islands (NESCI) Regional Water Program which is promoting collaboration, enhancing delivery of successful programs, and encouraging multi-state efforts to protect and restore water resources. The regional Sustainable Landscaping focus area has developed lawn care recommendations specific for northern and southern New England and is using these recommendations with residents to promote water quality protection. Post-evaluations of private

well water workshops indicate that workshop participants are adopting practices to protect their private well, including: 52% had their well water tested; 67% inspected their wellhead; 18% maintained their water treatment system; 13% had a water treatment system installed. Moreover, Private Wells Nonpoint Education for Municipal Officials (NEMO) programs work with communities are resulting in changes to community plans, land use regulations, development practices, and the local decision making process that include strategies to protect water quality.

The **University of Maine** has worked with four communities which have learned more about groundwater resources, private well water, and water quality testing. Training participants expressed increased awareness and interest in local groundwater issues and solutions to address quality and quantity concerns. To date, the trainings enabled 90 students and parents to participate in “GET WET!” (a K-12 environmental education program) and private well water screening for contaminants. At three different academic conferences, they shared preliminary findings regarding a) social capital production through community-based research about groundwater and private wells, and b) the factors that influence private well water testing as a result of extension activities, and intergenerational learning between students and parents of environmental education content.

Food Safety Program

Scientists at the **University of Wisconsin** are assisting small and very small plants in HACCP validation through: 1) development of methods for in-plant validation of heating/drying regimes used in making ground and formed beef jerky and for in-plant validation of beef carcass interventions, using lactic acid bacteria as pathogen surrogates; and 2) development of a multi-media outreach program to disseminate project results and assist processors and regulators in validating Critical Limits. This research showed that methods commonly recommended to consumers for drying beef jerky in home-style products do not produce a safe product. Recommendations are being prepared to share with consumers wishing to make ground-and-formed beef jerky safely at home.

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

Regional Pest Management Centers

The goal of the Regional Integrated Pest Management Centers (IPM Centers) is to promote the development and implementation of IPM by facilitating collaboration across states, disciplines, and purposes. IPM Centers will establish and maintain information networks, build partnerships to address pest management challenges and opportunities, evaluate the impact of IPM implementation, communicate positive outcomes to key stakeholders, and manage funding

resources effectively. The IPM Roadmap addresses pest management needs for production agriculture, natural resources and recreational environments, and residential and public areas.

Examples of success include:

The **Integrated Pest Management Pest Information Platform for Extension and Education** (ipmPIPE) informs growers about seasonal development and spread of Asian soybean rust, a devastating disease of legumes. The Regional IPM Centers manage this program that has allowed soybean growers to save a conservative estimate of \$1 billion or more since 2005. Most of the savings derive from the ability by growers of 98% of the crop to avoid unnecessary fungicide applications. USDA's Economic Research Service estimated farmers avoided as much as 0.2 lb of fungicide per acre per season, which works out to about 74 million pounds of fungicide avoided since 2005. Soybean growers in Gulf Coast states, where the disease is more prevalent, use the program to properly choose fungicides and time applications to protect their crop. In a similar program, pecan growers estimated gains of \$268/acre from the ipmPIPE Pecan system representing a potential benefit of \$77 million for the 288,000 acres in participating states. Another ipmPIPE component for vine crops (cucumber, pumpkin, melons, etc.) saved many participants 2-3 fungicide sprays in 2009.

The Regional IPM Centers are collaborating with the EPA Tribal Pesticide Program Council (TPPC), USDA Tribal Education Equity and Extension Programs, 1994 and 1862 Land-Grant institutions, First American Land-Grant College and Organization Network (FALCON), American Indian Higher Education Consortium and First Nations to increase IPM practices and reduce pesticide usage and risk on reservations. The development of culturally sensitive IPM curricula and training modules allows for greater acceptance and implementation of IPM practices on the 56 million acres of tribal land. The program focuses on developing relationships at the state, regional and national levels to share knowledge of existing practices and foster adoption of these practices by other First Nations.

The Regional IPM Centers are coordinating "IPM Training in Public Housing," a national project to reduce pest-related risks that can trigger asthma. This collaborative effort between the Regional IPM Centers, U.S. Department of Housing and Urban Development's Healthy Homes Initiative, the Environmental Protection Agency, Land-Grant institutions, and public housing personnel and residents is implementing IPM to reduce human health risks. There are 1.2 million public housing units in the U.S. This project addresses many urban pest issues including bed bug infestations that are increasing at an alarming rate across the U.S. Partnering with the public housing personnel and residents will allow this sustainable approach to have long-term impacts in reducing asthma and other human health problems resulting from pest infestations.

Crops at Risk

In December 2008, the invasion of the Mexican rice borer (MRB) was discovered in two pheromone traps a few kilometers from the western Louisiana state line, in accordance with previously modeled forecasts. Annual yield losses of \$220 million (sugarcane) and \$45 million (rice) are forecast when the regions of both industries become fully infested. Research at **Louisiana State University** indicates that management techniques to mitigate the infestation which involve irrigation in sugarcane can reduce MRB losses up to 29%, use of environmentally

friendly insecticides can reduce losses up to 53%, and resistant cultivars can reduce losses by 24%. The multi-year quarantine on MRB movement through the transport of sugarcane into Louisiana is projected to save between \$1.1 and \$3.2 billion (depending on management) during the time for complete invasion of both industries.

The **University of California Davis** has developed a polymerase chain reaction (PCR)-based diagnostic assay to differentiate races 1 and 2 of *Verticillium dahliae*, the pathogen that causes Verticillium wilt in lettuce. No resistance in lettuce cultivars is currently available against race 2. This assay has allowed the determination of the current distribution of the two races in coastal California. Based on these results, the growers have been able to avoid planting lettuce in fields that contained race 2. These results have been disseminated widely to the California Leafy Greens Board that is attended by growers, processors, seed company representatives, and everyone associated with the lettuce supply chain.

Risk Avoidance and Mitigation

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

Research by scientists in **California** is developing integrated pest management strategies to control the potato psyllid, a pathogen which is causing millions of dollars in damage to crops. As a result of research there has been a change in the understanding that many pesticides reduce transmission of the bacterial pathogen by the potato psyllid through repellency, not simply by killing the psyllid. As the result of an aggressive effort to disseminate this information, growers are beginning to change their pesticide use patterns from very intensive weekly control efforts that relied on large amounts of chemical pesticides, to a more sustainable approach using greener chemistries and application technique. This more sustainable approach also incorporates sampling to eliminate pesticide applications when the pest is not present, and to manage the potential development of pesticide resistance. As a result fewer pesticide applications are made, resulting in reduced costs to the grower and enhanced profitability, and as importantly, reduced farm worker and consumer exposure to agricultural chemicals.

Methyl Bromide Transition

The goal of the Methyl Bromide Transitions (MBT) program is to support the discovery and implementation of practical pest management alternatives to methyl bromide uses or minimize methyl bromide emissions for which the United States is requesting critical use exemptions. The program seeks to ensure that economically viable and environmentally sound alternatives to methyl bromide are in place and available as soon as possible. The program is focused on

integrated commercial or field scale research that targets short- to medium-term solutions and associated extension activity that will foster the adoption of these solutions.

Kansas State University's objective is to show a reduction in methyl bromide (MB) usage as a structural treatment in food-processing facilities by facilitating adoption of MB alternatives strategies such as sulfuryl fluoride (SF), heat treatment and integrated pest management (IPM) approaches through pilot and commercial scale evaluations. Documenting cost-effectiveness of each strategy is central to adoption of MB strategies. The work also involves quantifying effects of structure air-tightness and weather conditions on fumigant emissions from and dispersion around fumigated structures, an aspect useful in defining buffer zones for MB and SF fumigants. Research results showed that both methyl bromide and sulfuryl fluoride equilibrated throughout the five floors of the 340,000 cubic foot mill within two hours. Results are encouraging. When 1250 pounds of sulfuryl fluoride was applied in a May application, all life stages of the red flour beetle were killed when using forced air heat treatment.

Virginia ranks third in the U.S. in fresh-market tomato production, with the majority of acres grown on plasticulture, utilizing methyl bromide (MeBr). Bell peppers are grown using similar production practices. Both of these crops are highly susceptible to soilborne pests and overgrowth by noxious weeds. The use of MeBr has been the primary tool to suppress these pest problems, and tomatoes and peppers are listed as MeBr Critical Use Nominations for 2009. Results of research at **Virginia Tech** show that field trials in 2008 and 2009 were able to identify a bacterial wilt resistant tomato cultivar (BHN669) that produced commercially acceptable fruit and yield. A small acreage of BHN669 was commercially produced in 2009 by two tomato producing companies and was found to be a suitable cultivar in terms of agronomic qualities and was extremely successful at delivering acceptable yields with high levels of bacterial wilt resistance. In 2010, full scale production using BHN669 was implemented by several producers resulting in successful management of bacterial wilt in historically problematic fields. Cultivar screens are continuing in small research plots to determine if any replacements other than BHN669 are suitable for production on the Eastern Shore of Virginia. In addition to the favorable results obtained with BHN669, the fumigant dimethyl disulfide (DMDS) was discovered to effectively suppress levels of bacterial wilt in small plots.

Organic Transition Program

Georgia scientists examined the feasibility of using protected cultivation in plastic tunnels as a means of producing high quality, organic blueberries, blackberries, and raspberries under southeastern conditions. As a result, high tunnels were found to speed up vegetative and reproductive development of blueberries. Tunnels were effective at advancing the spring harvest of highbush blueberries and the summer harvest of florican blackberries and raspberries. Tunnels also extended the season of autumn-producing primocane blackberries and raspberries. Overall, tunnels advanced spring production and extended fall production of blackberries and raspberries, increasing total harvest and berry size. Upon completion of the research, the high tunnels in Georgia became an integral part of the organic teaching program, assuring that students get hands-on experience with high tunnels.

Organic soybean growers have few options for controlling the soybean aphid, which can severely depress soybean yields. Scientists in **Minnesota** found that planting a rye winter cover crop

prior to soybeans can lead to lower densities of soybean aphids and an increase in yield when soybean aphid pressure is high. This is an important finding for organic farmers that have no reliable insecticides to use against soybean aphid.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	42,853	43,942	39,558	42,714	42,286	42,286	41,990	41,990	45,148	28,942

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	2,114	16,900	29,451	40,384	41,679

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	1,691	1,680	1,680	1,806	1,158

9. Eligibility Criteria

Colleges and universities (as defined in section 1404 of NARETPA) (7 U.S.C. 3103) are eligible to submit applications for the Integrated Research, Education, and Extension Competitive Grants (Section 406) Programs.

Section 1404 of NARETPA was amended by section 7101 of the Food, Conservation, and Energy Act of 2008 (Pub. L. 110-246), to define and include as eligible, Hispanic-serving Agricultural Colleges and Universities (HSACUs), and to include research foundations maintained by eligible colleges or universities.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	289	375	319
Applications Funded	77	95	84

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS,

others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

McIntire-Stennis Cooperative Forestry Research Program

2. Subprograms/Department Initiatives

None.

3. Brief History

Pub. L. 87-778 (76 Stat.806, 16 U.S.C. 582a, et seq.) signed into law on October 10, 1962, is also known as the McIntire-Stennis Cooperative Forestry Research Act. This law provides the basis for Federal funding in forestry research and graduate education programs at State-certified schools of forestry in the United States.

Funding is provided to the States through a formula-based allocation process which depends on several factors. First, a base amount (approximately \$25,000) is allocated to each State; however, this base amount is excluded from the formula. The balance of funding to each State is determined through a ranking process and dependent upon the following three factors: 1) forty percent of the remaining balance is allocated based on the area of non-Federal commercial forest land; 2) forty percent is allocated based upon the volume of timber cut annually from stock; and 3) twenty percent is allocated based on the total expenditures for forestry research from non-Federal sources. Funds are then distributed to the eligible State-certified Institutions within the State as determined by the Governor's designee.

Section 7412 of the Food, Conservation, and Energy Act of 2008 amended section 2 of the McIntire-Stennis Cooperative Forestry Act (16 U.S.C. 582a-1) to include the 1890 Land-grant Institutions and made this change effective October 1, 2008. On an annual basis, USDA contacts the Governors of each state in which an eligible 1890 institution is located and receives the names of the McIntire-Stennis certified institutions and the proportionate amount of the state's McIntire-Stennis funding that is to be allocated to each.

4. Purpose/Goals

The purpose of this program is to increase forestry research in the production, utilization, and protection of forestland; to train future forestry scientists; and to involve other disciplines in forestry research.

5. Success in Meeting Programmatic Purpose/Goals

This program assists all states in carrying out a program of state forestry research at state forestry schools and colleges and developing a trained pool of forest scientists capable of conducting needed forestry research, which should include: (1) ecological restoration; (2) catastrophe management; (3) valuing and trading ecological services; (4) energy conservation, biomass energy and bio-based materials development; (5) forest fragmentation; (6) carbon sequestration and climate change; and (7) ways of fostering healthy forests and a globally competitive forest resources sector.

Examples of success include:

Scientists in Kansas have produced applied knowledge on a series of herbicides to eradicate saltcedar, which is an invasive weed tree found on the flood plains on the Cimmaron National Grasslands in Kansas. From this research, techniques have been developed that result in more effective control with reduced labor and herbicides with a resulting reduction in costs.

An invasive insect, the woodwasp *Sirex noctilio*, has recently become established in North American where it poses a significant threat to pine forests. The wasp transmits a pathogenic fungus and helps the fungus establish lethal infections by injecting a phytotoxic mucus into the trees along with the fungus and its eggs. Basic research at the University of Georgia is using advanced genomic and proteomic approaches to identify the bioactive protein and peptide constituents of the wasp mucus that facilitate fungal colonization of the pine tissues. Better understanding of the constituents and their mechanisms of action will enable development to develop genetic approaches and strategies to improve pine resistance to this pest.

Research at the University of Kentucky on the black bear in both Florida and Kentucky have provided important demographic, resource and habitat use, and movement data valuable to wildlife and other natural resource managers and land stewards. Detailed GPS-based movement data are providing a foundation for new analytical approaches that is changing the way black bear and other large mammal telemetry data are collected and interpreted. These findings continue to inform both professional and public findings and perceptions of these ecologically and economically important species. Both the black bear and elk have the potential to drive a productive recreation-based economy in economically challenged southeastern Kentucky. A science-based understanding and appreciation for the black bear and elk will strongly influence educational efforts and concomitant public perceptions about the species in ways that reduce human-wildlife conflict and that promotes species viability.

Research at the University of Illinois developed methods which were used to map the flooding regimes and internal drainage of soils in newly-acquired Weaver Park in Urbana, Illinois. This information is being used to plan the ecological restoration of native forest, prairie, and wetland plants in the park. A soil moisture regime map with micro-ecosystem level precision and greater accuracy than county soil maps was developed and reported in an article in the journal "Restoration Ecology." Soil moisture adaptations of plants to be used in the ecosystem restoration project are being matched to planting sites across a precisely mapped gradient of soil moisture from flooded to moderately well-drained. This is being done through a collaboration among the University of Illinois Agricultural Experiment Station, the Illinois State Geological Survey, and the Urbana Park District.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	21,884	21,742	21,755	22,205	22,008	30,008	24,791	27,535	29,000	32,934

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	27,007	25,313	27,261	28,854	32,541

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	900	744	826	870	988

9. Eligibility Criteria

Applications may be submitted by State-certified Schools of Forestry as stipulated in accordance with Section 2 of Pub. L. 87-788, McIntire-Stennis Act.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	65	65	65
Applications Funded	65	65	65

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

New Era Rural Technology Program

2. Subprograms/Department Initiatives

None.

3. Brief History

Section 1405 of the National Agricultural Research, Extension, and Teaching Policy Act (NARETPA) of 1977, as amended (7 U.S.C. 3121), designates the U.S. Department of Agriculture (USDA) as the lead Federal agency for agriculture research, extension and teaching in the food and agricultural sciences.

Section 1473E of NARETPA (7 U.S.C. 3319e), as amended, required the establishment of a *New Era Rural Technology Competitive Grants Program* (RTP), which NIFA administers.

The RTP was authorized by Section 7137 of the 2008 Farm Bill and first funded in 2009.

4. Purpose/Goals

The New Era Rural Technology Competitive Grants Program will make grants available for technology development, applied research, and/or training, with a focus on rural communities, to aid in the development of a workforce for bioenergy, pulp and paper manufacturing, or agriculture-based renewable energy.

5. Success in Meeting Programmatic Purpose/Goals

The New Era Rural Technology Competitive Grants Program makes grants available to community colleges or advanced technological centers, located in a rural area, for technology development, applied research, and training necessary to produce graduates capable of strengthening the Nation's technical, scientific and professional workforce in the fields of bioenergy, pulp and paper manufacturing, and agriculture-based renewable energy resources.

Examples of success include:

North Dakota State College of Science is addressing the workforce training needs in emerging technologies through the creation of a Regional Bio-fuels Advanced Technological Center (RBATC) The RBATC is addressing the educational and technical training needs in the bio-fuels industry in Minnesota, North Dakota and South Dakota by establishing an education and training center designed to deliver bio-fuels industry based, educational programs, hands-on skill development and industry training. The workforce challenges addressed by the RBATC include: 1) availability and capacity of education and training; 2) development of entry-level employee skills; 3) enhancement of incumbent employee skills; 4) promotion of career awareness and outreach opportunities for students and the general public.

Treasure Valley Community College in Oregon is conducting regional agriculture-based renewable energy summit with broad-based representation from regional businesses, agencies

and education for the purpose of providing information for identifying: current agricultural renewable energy practices in the rural region, new or expanded renewable energy practices planned in the next 3-5 years, workforce skills related to renewable energy needed by agriculture-related employers where workforce skills are taught in current programs, and where revisions or new programs are required. They are developing and disseminating a final strategic workforce plan to guide curricular improvement, revision and innovation Identify and implement renewable energy curricular revision options to in agriculture, natural resources, and basic manufacturing.

An **Indian Hills Community College** in Iowa project is focusing on improving the quality of bioenergy education through professional development for instructors and creating opportunities for students to gain valuable experiential learning through internships and applied research with bioenergy companies. It is improving the students' marketable skills and exposing them to industry contacts for future employment references and connections. For the industry, this program is helping smaller bioenergy companies realize the value of internships which is, in turn, creating a sustainable pool of companies for student internship opportunities in the future. It is also helping smaller bioenergy companies conduct applied research to support specific product development projects that they might otherwise have been unable to afford.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	∟1	∟1	750	875	873

∟1 Funding began in FY 2009.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	∟1	∟1	75	425	819

∟1 Funding began in FY 2009.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	∟1	∟1	30	35	35

∟1 Funding began in FY 2009.

9. Eligibility Criteria

Applications may be submitted by either: (1) public or private nonprofit community colleges, or (2) postsecondary, degree-granting advanced technological centers, either of which **must**:

- a. be located in a *rural area* (see definition in Part VIII, E.);
- b. have been in existence as of June 18, 2008;

- c. participate in agricultural or bioenergy research and applied research;
- d. have a proven record of development and implementation of programs to meet the needs of students, educators, business, and industry to supply the agriculture-based, renewable energy or pulp and paper manufacturing fields with certified technicians, as determined by the Secretary; and
- e. have the ability to leverage existing partnerships and occupational outreach and training programs for secondary schools, 4-year institutions, and relevant nonprofit organizations.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	13	13
Applications Funded	None	6	5

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers

2. Subprograms/Department Initiatives

None.

3. Brief History

Established by the Food, Agriculture, Conservation, and Trade Act of 1990, Section 2501, Public Law 101-624, 7 U.S.C 2279. In accordance with Section 14013 of the 2008 Farm Bill, the Office of Advocacy and Outreach was established within USDA and authority to carry out this program was transferred to that office.

4. Purpose/Goals

The objective of the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers (OASDFR) program is to provide outreach, training, education, assistance, and technical assistance to encourage and assist socially disadvantaged farmers, ranchers and forest landowners in owning and operating farms, ranches and non-industrial forest lands.

The intent of the competitive grant program is to communicate in a linguistically appropriate manner, to socially disadvantaged farmers, ranchers and forest landowners about participating equitably in the full range of agricultural programs offered by the Department.

5. Success in Meeting Programmatic Purpose/Goals

Examples of success include:

As a result of outreach activities by the **University of Arkansas at Pine Bluff**, approximately 20 individuals were assisted in developing financial plans for their farm operations. Eight producers used their plans to obtain \$763,000.00 in USDA Operating Loans. Six producers were assisted in restructuring their debts, and five producers were assisted in developing plans to determine the feasibility of adding different alternatives to their operation. Many of these producers were assisted in determining crop insurance premium cost, breakeven prices, and in developing marketing plans for their grain crops. Five individuals were assisted in using their local elevators to pre-market portions of their crops using forward contracts. Using Conservation Programs-In Central Arkansas approximately eight Environmental Quality Incentive Program (EQIP) contracts were awarded to Socially Disadvantaged Producers for a total of \$683,575. Most of this went toward helping producers level land to improve drainage and increase irrigation efficiency.

As a result of outreach activities at **Alcorn State University** in Mississippi, 102 borrowers received structured training to increase their knowledge and skills needed to complete a balance sheet, income statement and inventory analysis for their farming operations. Borrowers have gained knowledge of current farm practices, minimize farm risks. Borrowers also met their educational requirement according to the USDA-FSA regulation and qualify to receive

additional funds from USDA and have currently assisted in putting 2.5 million dollars into the Mississippi economy. There were a 100 percent passing rate. In addition, 176 small farmers now have the knowledge, skills and a formulized record keeping system to keep accurate farm records; 72 small farmers have gained knowledge of legal issues associated with family farm operations and the risk management strategies; and 531 small farmers, ranchers and women and business are knowledgeable of new and innovative alternative enterprises that would have a greater return with less startup capital or input cost.

Because of the New Entry Sustainable Farming Project (New Entry) which assists immigrants, refugees, and other underserved producers to develop commercial farming opportunities across Eastern Massachusetts, farmers participating in New Entry since October 2008 have increased their technical crop production skills, trained and shared practical farm skills with each other, and utilized educational resources on New Entry's website. Since October, a total of 29 potential farmers enrolled in the Explore Farming classes to assess their farming interest and a total of 45 people enrolled in the Farm Business Planning Course (FBPC). New Entry graduated total of 23 people from its FBPC, representing 19 farm businesses. All graduates completed a comprehensive business plan. 12 new graduates are currently implementing their business plans on farmland, and another nine New Entry farmers graduates began another season of business/production plan implementation. New Entry farmers are experiencing an increase in production and sales over prior years. A total of 20 New Entry farmers have joined together into a cooperative to sell their produce into the 2009 Community Supported Agriculture (CSA) program. A total of 218 CSA shares were purchased by customers (double over 2008). Combined CSA revenues for New Entry farmers are projected to be about \$67,000 for the 2009 season.

As a result of the Small Farm Program's outreach activities at the University of California, small-scale growers, many of whom speak Spanish, Hmong, or Chinese as their primary language, have gained access to results of applied research on specialty crops, business management skills, relevant market analysis, and irrigation/water quality management in agriculture. Information was disseminated through ongoing personal consultations, workshops, classes, field days, radio and printed newsletters and other printed materials. The diversity of information delivery means that small-scale producers in the five regions covered by the Small Farm Program gained access to one-on-one consultation when relevant, and that this information also reached wider audiences. Workshops and classes typically attracted between 20 and 60 producers, while field days and conferences reached 100 or more during this period.

6. Annual Budget Authority (FY2007-FY2011)

	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	3,243	3,470	5,935	5,888	5,940	5,940	6,395	15,000	0	0

NOTE: Became a mandatory program in FY 2009; Mandatory funding was provided by transfer from CCC. The program was delegated to the Assistant Secretary for Civil Rights, Office of Advocacy and Outreach in FY 2010

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)			
	FY08	FY09	FY10	FY11
Annual Outlays	1,500	8,250	13,500	6,750

NOTE: Became a mandatory program in FY 2002009; Mandatory funding was provided by transfer from CCC. The program was delegated to the Assistant Secretary for Civil Rights, Office of Advocacy and Outreach in FY 2010

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY 07	FY08	FY09	FY10	FY11
Annual Delivery Cost	238	256	750	0	0

NOTE: Became a mandatory program in FY 2002009; Mandatory funding was provided by transfer from CCC. The program was delegated to the Assistant Secretary for Civil Rights, Office of Advocacy and Outreach in FY 2010

9. Eligibility Criteria

As determined in 7 U.S.C. 2279, eligibility is defined as follows: 1890 Land-Grant Institutions, including Tuskegee University and West Virginia State College, Indian Tribal Community Colleges, Alaska Native Cooperative Colleges, Hispanic-serving post-secondary educational institutions, other accredited post-secondary educational institutions, and Indian tribes providing agricultural education or other agriculturally-related services to socially disadvantaged farmers and ranchers in their region, and community-based organizations that: (1) have demonstrated experience in providing agricultural education or other agriculturally related services to socially disadvantaged farmers and ranchers in their region; (2) provides documentary evidence of its past experience in working with socially disadvantaged farmers and ranchers during the 2 years preceding its application for assistance; and (3) does not engage in activities prohibited under Section 501 (c)(3) of the Internal Revenue Code of 1986.

Also eligible are organizations or institutions that received funding under 7 U.S.C. 2279(a) before January 1, 1996, but only with respect to projects that the Secretary considers are similar to projects previously carried out by the organization or institution under such subsection.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	57	91	None
Applications Funded	15	55	None

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also

holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants Program

2. Subprograms/Department Initiatives

There are no subprograms.

3. Brief History

Section 1405 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, as amended, (7 U.S.C. 3121) designates the U.S. Department of Agriculture (USDA) as the lead Federal agency for agriculture research, extension and teaching in the food and agricultural sciences. Section 7109 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) amends authority for this program contained in section 1417(j) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3152(j)).

Section 7109 of the 2008 Food, Conservation, and Energy Act (Pub.L. 110-246) expanded the eligibility to include other institutions of higher education and nonprofit organizations and the objectives to support current Agriculture in the classroom programs for grades Kindergarten through 12.

4. Purpose/Goals

The Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants (SPECA) program seeks to: (a) promote and strengthen secondary education and two-year postsecondary education in agriscience and agribusiness in order to help ensure the existence in the United States of a qualified workforce to serve the food and agricultural sciences system; and (b) promote complementary and synergistic linkages among secondary, two-year postsecondary, and higher education programs in the food and agricultural sciences in order to advance excellence in education and encourage more young Americans to pursue and complete a baccalaureate or higher degree in the food and agricultural sciences.

5. Success in Meeting Programmatic Purpose/Goals

Agriculture in the Classroom (AITC) is a partnership of agriculture, business, education, government, and volunteers, coordinated through NIFA Higher Education Programs, to improve agricultural literacy in the nation's secondary schools. AITC accomplishes this goal through two mechanisms; projects developed by the national office, and projects developed by the individual State programs.

Examples of success include:

New York has developed school food gardens through the New York Ag in the Classroom Kids Growing Food program. Survey data indicates that the gardens impacted well over 65,000 students, teachers, and community members in 2007 by creating opportunities to make links to agriculture, food systems, and good nutrition; increasing student motivation; providing opportunities for peer teaching; teaching life skills; integrating garden-based learning into the

core curriculum; and involving the community in the gardens. Moreover, 40000 elementary age students received instruction during New York’s Ag Literacy Week Program, 150 Educators were trained on the Food, Land and People Curriculum, and over 30,000 passed through the Moo Country area at the New York State Fair.

In **California** Ag in the Classroom (CFAITC), the number of CFAITC ambassadors increased by 10.3% in 2010 (13,427 in December 2010 compared to 12,173 in December 2009), showing significant gains in the target audience. CFAITC is represented by Ambassadors in 44% of California's schools. The CFAITC Web site (www.learnaboutag.org) received 23% more website hits (2,626,608 in total) in 2010 compared to 2009, an increase of more than 492,761 website hits. Moreover, 100 percent of conference attendees agreed that, after attending the conference they would implement the materials/ideas received upon returning to class.

In **Michigan**, Agricultural Literacy activities conducted by volunteers, increased across the state by 30 percent in 2010. The number of students reached through agriculture in the classroom increased by 40 percent in 2010. 80 percent of the volunteers trained at the state level conduct AITC lessons at the local level. Volunteer involvement in Michigan Agricultural Education programs rose by 25 percent in 2010. The number of Project RED (Rural Education Day) events held across the state has increased by 35 percent to 31 counties, 46 percent of all the involved counties across the state. Moreover, teachers reached through in-service activities increased by 25 percent in 2010. Of the teachers trained, 90 percent said they planned to continue to integrate agriculture into their existing curriculum.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	1,000	994	890	992	990	990	983	983	983	981

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	50	148	494	987	983

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Outlays						50	148	494	987	983

9. Eligibility Criteria

Applications may only be submitted by: (1) public secondary schools, (2) public or private nonprofit junior and community colleges, (3) institutions of higher education, or (4) nonprofit organizations.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	43	75	66
Applications Funded	24	24	24

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Smith-Lever 3(d) Extension Activities Programs

2. Subprograms/Department Initiatives

- A. Expanded Food and Nutrition Education (EFNEP)
- B. Pest Management
- C. Farm Safety (aka Assistive Technology Program for Farmers with Disabilities or AgrAbility)
- D. New Technologies for Agricultural Extension
- E. Children, Youth, and Families at Risk (CYFAR)
- F. Youth Farm Safety Education and Certification
- G. Sustainable Agriculture (SARE)
- H. Federally Recognized Tribes (formerly Extension Indian Reservation or EIRP)

3. Brief History

Various Extension Activities are authorized under Section 3(d) of the Smith-Lever Act (7 U.S.C. 343(d)); section 1680 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5933).

Section 7116 of the Food, Conservation, and Energy Act of 2008 (FCEA) provided several amendments to Section 1425 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) (7 U.S.C. 3175); including inserting sec. 1425 Nutrition Education Program and the definition of 1862 and 1890 Institutions for the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7601).

Section 7403 of the Food, Conservation, and Energy Act of 2008 (Public Law 110-246) (FCEA) amended section 3(d) of the Smith-Lever Act (7 U.S.C. 343(d)) to provide the opportunity for 1862 and 1890 land-grant institutions, including Tuskegee University and West Virginia State University, and the University of the District Columbia, to compete for and receive these funds directly from the Secretary of Agriculture. However, section 1425 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) provides a statutory formula for the distribution of funds appropriated for the Expanded Food and Nutrition Education program (EFNEP). Section 7116 of FCEA amended NARETPA section 1425 to revise this statutory formula effective October 1, 2008.

4. Purpose/Goals

Expanded Food and Nutrition Education (EFNEP)

Grants under this program are to assist all States in carrying out a program of extension activities designed to employ and train professional and paraprofessional aides to engage in direct nutrition education of low-income families and in other appropriate nutrition education programs.

Pest Management

Pest management includes a wide range of programs addressing human health, environmental and economic issues related to the management of pest populations through a variety of science

based technologies. Americans want safe, pest and disease-free homes, schools, parks, recreational areas, as well as a safe and affordable supply of blemish-free food products and a wholesome pesticide-free environment. NIFA funds programs and projects which support research, education, and extension activities that promote pest management in general, and reduced risk pest management in particular. The agency's pest management programs are implemented through working partnerships with scientists in our nation's colleges and universities, other federal agencies and the private sector.

Farm Safety (aka Assistive Technology Program for Farmers with Disabilities or AgrAbility)

AgrAbility increases the likelihood that individuals with disabilities and their families engaged in production agriculture (AgrAbility customers) become more successful. The primary outcome is enhanced quality of life for people with disabilities in agriculture. The program supports cooperative projects in which State Cooperative Extension Services (CES) based at either 1862 or 1890 Land-Grant Universities subcontract to private, non-profit disability organizations. Measures of success may include improvements in customers' financial stability or access to life activities and the capacity of states and regions to deliver services this population requires in a timely and satisfying manner. To address the specialized needs of AgrAbility's customers, the program builds service capacity on national, regional, state, and local levels through education and networking. In the absence of capacity, projects provide assistance to customers. Projects use marketing to direct the public to initiatives in education, networking, and assistance.

New Technologies for Agricultural Extension

The purpose of the New Technologies for Ag Extension Program (NTAE) is to increase the capacity of each State to contribute expertise and content to the development of eXtension, a national web-based information and education delivery system that provides direct access to science-based educational resources from land-grant and other partner institutions about subjects of high importance to the general public. This initiative is intended to dramatically change how the CES does business with its customers. Applications are being solicited for the NTAE to deliver: state of the art technology and software applications, high quality leaders and staff, training for an exceptional CES workforce, legally binding contractual and financial instruments, and comprehensive evaluation, communications and marketing activities.

Children, Youth, and Families at Risk (CYFAR)

Through an annual Congressional appropriation for the National Children, Youth, and Families at Risk (CYFAR) Program, NIFA allocates funding to land-grant university extension services for community-based programs for at-risk children and their families. Since 1991, CYFAR has supported programs in more than 600 communities in all states and territories. State and local public and private organizations have contributed cash and in-kind resources that match or exceed the federal appropriation. The CYFAR Program is based on research on effective programs for at-risk youth and families and on the human ecological principle of working across the lifespan in the context of the family and community. To assure that critical needs of children and families are met, CYFAR supports comprehensive, intensive, community-based programs developed with active citizen participation in all phases. CYFAR promotes building resiliency and protective factors in youth, families, and communities. CYFAR supports collaboration--forming lasting partnerships to achieve greater outcomes and to provide a support base for sustaining programs for those at risk. CYFAR also promotes the use of technology to improve

programs, provide efficient access to educational resources, and provide essential technological skills for youth and adults in at-risk environments.

Youth Farm Safety Education and Certification

The Youth Farm Safety Education and Certification Program (YFSEC) supports national efforts to deliver timely, pertinent, and appropriate training to youth seeking employment or already employed in agricultural production. The program has critical ties to the current regulations for youth employment in agriculture, especially the exemptions provided in 29 CFR Part 570, subpart E-1 for youth under the age of 16 employed in some agricultural occupations having obtained certification. Significant changes in agricultural production and in the agricultural workforce since this regulation took effect in the early 1970's have encouraged the USDA to consider training and certification innovations along with developing appropriate training and restrictions on youth employment in hazardous agricultural jobs. YFSEC's funding has appeared under the Smith-Lever 3 (d) line for Youth Farm Safety Education and Certification since 2001.

Sustainable Agriculture (SARE)

SARE works to increase knowledge about - and help farmers and ranchers adopt - practices that are profitable, environmentally sound, and good to communities. Several types of competitive grants are awarded by four regional administrative councils. Research and education grants, generally ranging from \$60,000 to \$150,000, fund projects that usually involve scientists, producers and others in an interdisciplinary approach. Professional development grants, generally ranging from \$20,000 to \$90,000, offer educational opportunities for extension, NRCS, and other agricultural professionals. Producer grants, typically between \$1,000 and \$15,000, go to farmers and ranchers who test innovative ideas and share the results with their neighbors. Projects address crop and livestock production and marketing, stewardship of soil and other natural resources, economics and quality of life.

Federally Recognized Tribes (formerly Extension Indian Reservation or EIRP)

The purpose of this program is to support Extension Agents who establish Extension education programs on the Indian Reservations and Tribal jurisdictions of Federally-Recognized Tribes. To the extent practicable, priorities should reflect the following national critical needs areas: 1) Development of sustainable energy; 2) Increased global food security; 3) Adaptation /mitigation of agriculture and natural resources to global climate change; 4) Reduction of childhood and adolescent obesity; and 5) Improved food safety.

5. Success in Meeting Programmatic Purpose/Goals

Expanded Food and Nutrition Education Program

The Expanded Food and Nutrition Education Program (EFNEP) program continues to be highly effective in changing participants' behaviors, resulting in significant improvements in daily living skills. In 2010 94 percent of adults reported improvements in their diets including consuming the equivalent of nearly one additional cup of fruits and vegetables, 84 percent of recent graduates improved food management practices, 89 percent improved nutrition practices, and 67 percent improved food safety practices. Multiple cost-benefit studies in past years show that every dollar invested in EFNEP results in from \$3.63 to \$10.64 in saved health care costs and \$2.48 saved in food expenditures. State success examples include: **Pennsylvania State University's EFNEP** reported over 96% of the EFNEP adult participants made positive changes in one or more food groups including consuming the equivalent of an additional ½ cup of fruits

and vegetables. **Louisiana State University’s EFNEP** survey found that over 96% of EFNEP program participants reported positive change in any food group at program exit including consuming the equivalent of one additional cup of fruits and vegetables. **Utah State University’s EFNEP** reported over 98% of its EFNEP families made a positive change in consumption of at least one food group including consuming the equivalent of nearly one additional cup of fruits and vegetables. The **Mississippi State University Extension EFNEP** reported over ninety-five percent (95%) of the EFNEP adult participants made positive changes in one or more food groups. **The Iowa State University EFNEP** survey found that over 98% of EFNEP program participants reported positive change in any food group at program exit. The **University of Missouri** reported over 87% of its EFNEP families made a positive change in consumption of at least one food group.

Smith-Lever 3(d) Program

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

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Smith-Lever 3(d) Extension Activities Programs (excluding EFNEP)	32,688	31,926	28,563	28,228	29,955	30,979	31,970	32,383	33,199	33,133
Expanded Food and Nutrition Education Program (EFVEP)	32,688	31,926	28,563	28,228	29,955	30,979	31,970	32,383	33,199	33,133

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Smith-Lever 3(d) Extension Activities	18,587	30,644	31,568	32,531	33,117

Programs (excluding EFNEP)					
Expanded Food and Nutrition Education Program (EFVEP)	38,123	62,843	64,584	66,610	67,899

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Smith-Lever 3(d) Extension Activities Programs (excluding EFNEP)	1,131	1,278	1,187	1,328	1,325
Expanded Food and Nutrition Education Program (EFVEP)	341	422	446	522	517

9. Eligibility Criteria

Section 7403 of the Food, Conservation, and Energy Act of 2008 (Public Law 110-246) (FCEA) amended section 3(d) of the Smith-Lever Act (7 U.S.C. 343(d)) to provide the opportunity for 1862 and 1890 land-grant institutions, including Tuskegee University and West Virginia State University, and the University of the District of Columbia, to compete for and receive these funds directly from the Secretary of Agriculture.

10. Utilization (Participation) Data

For Smith-Lever 3(d) Extension Activities Programs (excluding EFNEP):

Fiscal Year	2008	2009	2010
Applications Received	193	269	274
Applications Funded	165	223	234

For Expanded Food and Nutrition Education Program (EFNEP):

Fiscal Year	2008	2009	2010
Applications Received	74	75	75
Applications Funded	74	75	75

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also

holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

One OIG Hotline complaint (PS-1399-0071) was investigated alleging misuse of Federal funds by the grantee (the University of Hawaii) Cooperative Extension Service (CES). The complainant alleged that the university did not use NIFA CES program funds to fill the position of CES Agent for coffee producers left vacant by the former agent's resignation. As a result, the complainant was concerned that CES funding to provide assistance to farmers may have been diverted to other uses. The USDA OIG and NIFA both investigated the allegations and determined that the allegations do not appear to be substantiated, and no further review was warranted.

The funding involved is primarily Smith-Lever 3(b) and (c); and to a lesser extent Smith-Lever 3(d) Extension Activities Programs.

13. Effect of Administrative Pay-go

None.

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1. Program Name

Specialty Crop Research Initiative Program

2. Subprograms/Department Initiatives

None.

3. Brief History

The authority for this program is under Section 7311 of the 2008 Farm Bill which amended Section 412 to the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7621 et seq.) and established the Specialty Crop Research Initiative Program. This represents a newly authorized and newly funded program.

4. Purpose/Goals

The Specialty Crop Research Initiative (SCRI) Program was established 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 including research in plant breeding, genetics, and genomics to improve crop characteristics (such as product, taste, quality, and appearance; environmental responses and tolerances; nutrient management, including plant nutrient uptake efficiency; pest and disease management, including resistance to pests and diseases resulting in reduced application management strategies; and enhanced phytonutrient content); efforts to identify and address threats from pests and diseases, including threats to specialty crop pollinators; efforts to improve production efficiency, productivity, and profitability over the long term (including specialty crop policy and marketing); 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, including fresh produce.

5. Success in Meeting Programmatic Purpose/Goals

The Specialty Crop Research Initiative (SCRI) was established to solve critical industry issues through research and extension activities. SCRI gives 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 five focus areas: research in plant breeding, genetics, and genomics to improve crop characteristics; efforts to identify and address threats from pests and diseases, including threats to specialty crop pollinators; efforts 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.

Examples of success include:

The RosBREED project being led by **Michigan State University** is creating a national, dynamic, sustained effort in research, infrastructure establishment, training, and extension for

applying marker-assisted breeding (MAB) to deliver improved plant materials more efficiently and rapidly. The Rosaceae family (almonds, apples, apricots, blackberries, peaches, pears, plums, sweet cherries, tart cherries, strawberries, raspberries, roses and other ornamentals) provides vital contributions to human health and well-being, and collectively constitutes the economic backbone of many U.S. rural communities. Rosaceae genetics and genomics are developing rapidly but have not been translated to routine practical application. This project will increase the likelihood of new cultivar adoption, enlarge market potential, and increase consumption of rosaceous fruits by using socio-economic knowledge of stakeholder values and consumer preferences to inform breeding; establish sustainable technical infrastructure for an efficient MAB Pipeline in Rosaceae, including crop specific SNP genome scan platforms for breeding-relevant germplasm exploiting the shared ancestry of Rosaceae crops; integrate breeding and genomics resources by establishing a user-friendly U.S.-wide standardized statistical framework and breeding information management system; implement MAB in core RosBREED breeding programs with a common focus on fruit quality traits; and enhance sustainability of cultivar development by transferring MAB technologies to the public and private community of U.S. Rosaceae breeders through training current and future breeders as well as engaging the production, processing and marketing sectors, allied scientists, and consumers.

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

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

Water and nitrogen management in deciduous perennial crops is constrained by a lack of information and an inability to provide targeted management. Currently, the application of fertilizers and water follows standardized practice with little consideration of spatial, temporal and crop variability resulting in lost income and negative environmental impact. The **University of California** is addressing these needs through a multi-discipline, multi-scale activity that integrates remote and local sensing, with modeling and on-farm validation to derive grower

appropriate management tools and sound knowledge to inform policy decisions. Initial activities are being conducted in Almond, Pecan, Grape and Pistachio and are being adapted to the full range of perennial fruit and nut species through collaborative agreements in years 3 through 5 of this project. Thus far, the RESET remote sensing model (which measures evaporation and transpiration) has been published online, and provides email output to users. Researchers in California have tested the model against Almond data and have help improved the operation and user interface of the model.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)				
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Annual Budget Authority	∟1	30,000	50,000	50,000	50,000

∟1 Program was first authorized in 2008.

Note: Mandatory funding was provided by transfer from CCC.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Annual Outlays	∟1	1,500	13,000	30,500	45,000

∟1 Program was first authorized in 2008.

Note: Mandatory funding was provided by transfer from CCC.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Annual Delivery Cost	∟1	1,200	1,720	2,000	2,000

∟1 Program was first authorized in 2008.

Note: Mandatory funding was provided by transfer from CCC.

9. Eligibility Criteria

The Secretary may carry out the SCRI Program through (1) Federal Agencies; (2) national laboratories; (3) colleges and universities; (4) research institutions and organizations; (5) private organizations or corporations; (6) State agricultural experiment stations; (7) individuals; or (8) groups consisting of 2 or more entities described in paragraphs (1) through (7).

In making grants under this section, the Secretary shall provide a higher priority to projects that (1) are multistate, multi-institutional, or multidisciplinary; and (2) include explicit mechanisms to communicate results to producers and the public.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	238	265	149
Applications Funded	27	92	32

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Sun Grant Program

2. Subprograms/Department Initiatives

There are no subprograms.

3. Brief History

The authority for this program is contained in section 7526 of the 2008 Farm Bill. USDA received its first funding for this program in FY 2010.

4. Purpose/Goals

The purpose of this program is to provide grants to the North-Central, Southeastern, South-Central, Western, and Northeastern Sun Grant Centers and the Western Insular Pacific Subcenter (as designated in section 7526 (b)(1)(A-F) of the FCEA). The Sun Grant Centers and Subcenter will use the majority of grant funds for competitive grants and the remainder for research on technology development and implementation.

All activities conducted in this program must seek to (a) enhance national energy security through the development, distribution, and implementation of bio-based energy technologies; (b) promote diversification in, and the environmental sustainability of, agricultural production in the United States through bio-based energy and product technologies; (c) promote economic diversification in rural areas of the United States through bio-based energy and product technologies; and (d) enhance the efficiency of bioenergy and biomass research and development programs through improved coordination and collaboration among the Department of Agriculture, the Department of Energy, and land-grant colleges and universities.

5. Success in Meeting Programmatic Purpose/Goals

Although this grant program is too new to have any discernable success to date examples of expected success include:

This program is providing grants to the North-Central, Southeastern, South-Central, Western, and Northeastern Sun Grant Centers and the Western Insular Pacific Sub-center. All activities conducted in this program are seeking to enhance national energy security through the development, distribution, and implementation of biobased energy technologies; promote diversification in, and the environmental sustainability of, agricultural production in the United States through biobased energy and product technologies; promote economic diversification in rural areas of the United States through biobased energy and product technologies; and enhance the efficiency of bioenergy and biomass research and development programs through improved coordination and collaboration among the Department of Agriculture, the Department of Energy, and land-grant colleges and universities.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)	
	FY 2010	FY 2011
Annual Budget Authority	2,250	2,246

Note: Program was first funded in FY 2010.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)	
	FY 2010	FY 2011
Annual Outlays	225	1,237

Note: Program was first funded in FY 2010.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)	
	FY 2010	FY 2011
Annual Delivery Cost	90	90

Note: Program was first funded in FY 2010.

9. Eligibility Criteria

Eligible applicants are the five centers that will competitively award projects to eligible entities in the states and territories within their regions:

North-Central Center – A north-central sun grant center at South Dakota State University for the region composed of the States of Illinois, Indiana, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wisconsin and Wyoming.

Southeastern Center – A southeastern sun grant center at the University of Tennessee at Knoxville for the region composed of the States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Virginia, the Commonwealth of Puerto Rico, and the United States Virgin Islands.

South-Central Center – A south-central sun grant center at Oklahoma State University for the region composed of the States of Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Texas.

Western Center – A western sun grant center at Oregon State University for the region composed of the States of Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington and a Western Insular Pacific Subcenter at the University of Hawaii for the region of Alaska, Hawaii, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.

Northeastern Center – A northeastern sun grant center at Cornell University for the region composed of the States of Connecticut, Delaware, Massachusetts, Maryland, Maine, Michigan,

New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia.

Funding for the Western Insular Pacific Sun Grant Subcenter at University of Hawaii must come from Western Sun Grant Center at Oregon State University.

Eligible applicants for competitively awarded projects within the respective regions of the individual Sun Grant Centers and Subcenter are: 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 2 or more of the entities described in this paragraph.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	None	5
Applications Funded	None	None	5

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Tribal Colleges Education Equity Grants Program

2. Subprograms/Department Initiatives

None.

3. Brief History

Authority for this program is contained in the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note) as amended by the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7601 note). Under this authority, appropriated funds are to be awarded to the 1994 Land-Grant Institutions (hereinafter referred to as 1994 Institutions) for Education capacity building and funds are to be distributed equally among institutions that meet eligibility requirements.

Section 7402 of the 2008 Farm Bill added Iisagvik College as a 1994 Land-Grant Institution.

4. Purpose/Goals

The purpose of the Tribal Colleges Education Equity Grants Program (TCEG) is to provide funding to enhance educational opportunities for Native Americans in the food and agricultural sciences. The TCEG program is intended to strengthen institutional capacity to deliver relevant formal education opportunities. The TCEG is intended to be a component of the applicant 1994 institution's land grant roadmap or strategic planning process. To the extent practicable, priorities should reflect NIFA's following national critical needs areas: (a) Development of sustainable energy; (b) Increased global food security; (c) Adaptation /mitigation of agriculture and natural resources to global climate change; (d) Reduction of childhood and adolescent obesity; and (e) Improved food safety.

5. Success in Meeting Programmatic Purpose/Goals

This program provides funding to enhance educational opportunities for Native Americans in the food and agricultural sciences; and strengthens institutional capacity to deliver relevant formal education opportunities.

Examples of success include:

As a result of a move of the Equity program to the Math & Science Department at Oglala Lakota College in **South Dakota**, the program has had a 300% increase in contact with new and/or potential students for the Natural Resource degree plan of study. Two Native American men advanced their care goals through hard work earning an Associate of Arts or a Baccalaureate of Science degree in either General Agriculture or Natural Resource Management. The program has been able to serve a larger group of students through instruction of the course Bio 113 People and the Environment, which is a core course to meet the science requirements in the majority of Oglala Lakota College's degree programs. Moreover, a current student working for the Bureau of Indian Affairs in Pine Ridge South Dakota stated that through the programs course content he learned more than he has in any other program, especially courses taught by the project director.

The Omaha Nation and Santee Sioux have epidemic numbers for Health Problems, diabetes, obesity, heart disease, and malnutrition. **Nebraska Indian Community College (NICC)** is enhancing the short-term and long-term educational opportunities for the Omaha Nation and Santee Sioux Nation by strengthening specific instructional programs in the Food, Natural Resources, Native Foods and Agricultural Sciences Area. Twenty-six students were enrolled in courses with a specific focus in agri-science and agri-business. Other courses incorporated these topics to a lesser extent. The impacted students are in a wide-variety of degrees (education, science, business, general liberal arts), allowing for information to be disseminated to a large constituency in these communities.

A **Sinte Gleska University (South Dakota)** project developed curricula and syllabi in Natural Resources History and Management, Tribal Land Management and History, Horticulture and Environmental Law. This project also worked on revision of the Tribal Land Management degree programs and produced new degree programs. They also developed a career guide for students based on available careers on the Rosebud Reservation. As a result, one student completed a bachelor's degree in Environmental Science; ten students have been recruited to the Tribal Lands Management degree program; collaborations have been formed with tribal land programs, federal land programs and with South Dakota state extension programs; Career Guide is available for local schools and as a recruitment tool; and an advisory committee was formed to provide community and stakeholders input into future planning for the USDA programs.

The **Turtle Mountain Community College's (North Dakota)** formed an articulation agreement between the college and a local agricultural high school - St. John Public - to provide Equine Science offerings to its students as dual credit. They designed and implemented agricultural related curriculum in GIS/GPS and NSCA Certified Personal Trainer Certificate which will be part of the college's course catalog. Moreover, the College enhanced the community's knowledge of animal sciences by offering a series of workshops throughout the year and provided educational opportunities to youth and adults in a vast array of subjects in the areas of health, wellness, community wellness, and outreach education. The program has allowed the community to participate in a vast number of educational programming in the agricultural fields. Participating students are now academically prepared to further their education or seek employment in Equine Science, GPS/GIS and Certified Personal Training. The program has perked the interest of the community to be more actively involved in gardening and other agricultural-related disciplines which will in turn contribute to better health and fitness. The college's Anishinabe Center has become a 'One Stop Wellness Center' which actively promotes and has integrated the seven pillars of wellness -- Social, Emotional, Occupational, Spiritual, Physical, Environmental, and Intellectual.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)									
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	1,549	1,689	1,679	2,232	2,228	3,342	3,319	3,342	3,342	3,335

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	167	500	1,669	3,334	3,330

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	0	0	0	0	0

9. Eligibility Criteria

Tribal colleges and universities designated as 1994 Land-Grant Institutions under the Educational Land-Grant Status Act of 1994, as amended. This Act, as amended in Section 533(a), requires that each 1994 Land-Grant Institution be accredited or making progress towards accreditation and be recognized as a legal entity. If accreditation is being sought, a college must demonstrate its progress towards accreditation by a letter from a nationally recognized accreditation agency affirming receipt of application for an accreditation site visit or other such documentation.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	30	31	30
Applications Funded	30	30	30

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA’s leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Veterinary Medicine Loan Repayment Program

2. Subprograms/Department Initiatives

None.

3. Brief History

In January 2003, NVMSA was passed into law adding section 1415A to the National Agricultural Research, Extension, and Teaching Policy Act of 1997. This law established a new Veterinary Medicine Loan Repayment Program (7 U.S.C. 3151a)

Section 7105 of the 2008 Farm Bill amended section 1415A to revise the determination of veterinarian shortage situations to consider (1) geographical areas that the Secretary determines have a shortage of veterinarians; and (2) areas of veterinary practice that the Secretary determines have a shortage of veterinarians, such as food animal medicine, public health, epidemiology, and food safety. This section also added that priority should be given to agreements with veterinarians for the practice of food animal medicine in veterinarian shortage situations.

4. Purpose/Goals

USDA's Veterinary Medicine Loan Repayment Program (VMLRP), authorized by the National Veterinary Medical Services Act (NVMSA) helps qualified veterinarians offset a significant portion of the debt incurred in pursuit of their veterinary medicine degrees in return for their service in certain high-priority veterinary shortage situations. The National Institute of Food and Agriculture (NIFA) will carry out NVMSA by entering into educational loan repayment agreements with veterinarians who agree to provide veterinary services in veterinarian shortage situations for a determined period of time.

5. Success in Meeting Programmatic Purpose/Goals

Veterinarians are critical to the national food safety and food security infrastructures, and to the health and well-being of both animals and humans; however, major studies indicate significant and growing shortages of food supply veterinarians and veterinarians serving in certain other high priority specialty areas. A leading cause for this shortage is the heavy cost of four years of professional veterinary medical training, which can average between \$100,000 and \$140,000. Congress established the VMLRP as a way to remedy this growing need.

In fiscal year 2010, NIFA made 62 award offers of which 53 were accepted for a total of \$5,185,970 (includes loan and tax payments) with the average award at \$97,848 (includes loan and tax payments). The average eligible debt for repayment was \$98,672. Sixty-five percent of recipients received the maximum payment of \$25,000 per year (plus taxes), and 65 percent of awards went to those who obtained their Doctor of Veterinary Medicine within the last three years. Thirty-four states will fill at least one shortage area through VMLRP:

- Iowa will fill five shortage areas
- Idaho, Kansas and Texas will fill four shortage areas

- Kentucky and South Dakota will fill three shortage areas
- Shortage type breakdown
- Type 1 (at least 80 percent private practice): 24 awards
 - Type 2 (at least 30 percent private practice): 24 awards
 - Type 3: (at least 49 percent public practice): 5 awards

Participants are required to serve in one of three types of shortage situations. Type 1 shortage areas are private practice dedicated to food animal medicine at least 80 percent of the time. Type 2 shortages are private practices in rural areas dedicated to food animal medicine up to 30 percent of the time. Type 3 shortage areas are dedicated to public practice up to 49 percent of the time.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)					
	FY06	FY07	FY08	FY09	FY10	FY11
Annual Budget Authority	495	495	869	2,950	4,800	4,790

Note: Funding began in FY 2006.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Outlays	50	310	909	2,199	3,967

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)				
	FY07	FY08	FY09	FY10	FY11
Annual Delivery Cost	50	87	295	480	479

9. Eligibility Criteria

To be eligible to apply to the VMLRP, an applicant must: 1) Have a degree of Doctor of Veterinary Medicine (DVM), or the equivalent, from a college of veterinary medicine accredited by the AVMA Council on Education; 2) Have qualifying educational loan debt as defined in 7 CFR 3431 Section 3; 3) Secure an offer of employment or establish and/or maintain a practice in a veterinary shortage situation, as determined by the Secretary, within the time period specified in the VMLRP service agreement offer; and 4) provide certifications and verifications in accordance with 7 CFR 3431 Section 16.

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	0	0	260
Applications Funded	0	0	53

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.

House Committee on Agriculture
Farm Bill Audit

1. Program Name

Women in Minorities in Science, Technology, Engineering and Mathematics Fields Program (WAMS)

2. Subprograms/Department Initiatives

There are no subprograms.

3. Brief History

Section 7204 of the 2008 Farm Bill amended Section 1672 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 5925), authorizes the Secretary of Agriculture to make competitive grants to support research and extension activities to increase participation by women and underrepresented minorities from rural areas in the fields of science, technology, engineering, and mathematics.

4. Purpose/Goals

Purpose/Goals include:

- 1) To support research and extension projects to increase participation by women and underrepresented minorities from rural areas in science, technology, engineering, and mathematics fields related to the food and agricultural sciences;
- 2) to improve the economic health and viability of rural communities through the development of research and extension initiatives focused on new and emerging employment opportunities in STEM occupations; and
- 3) to fund projects that address the national challenge to increase the number and diversity (i.e., having a food and agricultural sciences workforce representative of the Nation's population) of students entering food and agriculture related STEM disciplines.

5. Success in Meeting Programmatic Purpose/Goals

Although this grant program is too new to have any discernable success to date examples of expected success include:

An education grant to **Twin Cities Public Television** in Minnesota aims to encourage more girls to consider careers in STEM fields via the "SciGirls" program. While girls and women have increased their representation in many fields of science in recent years, their progress is still not keeping pace with the rising demand for skilled workers in many STEM fields. Although women make up nearly half the college-educated workforce, they represent only one quarter of the college-educated workforce in science and engineering occupations. "SciGirls" will be distributed through PBS Plus to the nation's 350 PBS stations. From experience with comparable PBS Plus programs, they project that each episode will attract several million viewers over its broadcast life, nearly half of which will be rural audiences.

A **University of Georgia** project is enhancing the readiness of women and underrepresented males from Georgia's rural communities to successfully transition into careers in STEM in general and food, agriculture, natural resources, and related sciences (UFANRRS) in particular. In addition to addressing the clogs in the existing pipeline of trained women and minorities from high school to undergraduate degrees, the project is also including a component that introduces middle school students to career options in food and agricultural sciences. The innovativeness and significance of this project rest on the project's design in building the pipeline to the undergraduate pool through increased interest in STEM programs early in the education process and recognizing the need to transition students from bachelor's to master's STEM programs through better preparation.

6. Annual Budget Authority (FY2007-FY2011)

	(in thousands of dollars)	
	FY10	FY11
Annual Budget Authority	400	399

Note: Funding began in FY 2010.

7. Annual Outlays (FY2007-FY2011)

	(in thousands of dollars)	
	FY10	FY11
Annual Outlays	240	387

Note: Funding began in FY 2010.

8. Annual Delivery Cost (FY2007-FY2011)

	(in thousands of dollars)	
	FY10	FY11
Annual Delivery Cost	16	16

Note: Funding began in FY 2010.

9. Eligibility Criteria

Eligible applicants are: (a) State agricultural experiment stations; (b) colleges and universities; (c) university research foundations; (d) other research institutions and organizations; (e) Federal agencies; (f) national laboratories; (g) private organizations or corporations; (h) individuals; or (i) any group consisting of 2 or more of the entities described in subparagraphs (a) through (h).

10. Utilization (Participation) Data

Fiscal Year	2008	2009	2010
Applications Received	None	None	13
Applications Funded	None	None	2

11. Duplication or Overlap with Other Programs

REE is committed to maximizing federal dollars by ensuring systematic monitoring and evaluation. While the scientific method requires the flexibility to replicate results, NIFA's leadership, program managers, and researchers rigorously track scientific projects through its Current Research Information System (CRIS) to avoid duplication. Program leadership also holds joint stakeholder meetings and/or coordinates with other science agencies (ARS, ERS, others) to ensure that programs are complementary, and do not duplicate other science programs in USDA and other Federal agencies. The creation and staffing of the USDA Office of the Chief Scientist has bolstered this coordination.

12. Waste, Fraud and Abuse

No such instances have to date been identified.

13. Effect of Administrative Pay-go

None.