

2013 Southern University and A&M College Combined Research and Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

The mission of the Southern University Agricultural Research and Extension Center; in its land-grant role, is to conduct statewide basic and applied research and to disseminate information to the citizens of Louisiana in a manner that is useful in addressing their scientific, technological, social, economic and cultural needs. In FY 2013, the Southern University Agricultural Research and Extension Center (SUAREC) planned its programs to address NIFA Priority Science Areas and to address other pressing needs of Louisiana citizens. The main focus was to assist diverse audiences who have limited social and economic resources improve their access to positive opportunities through research and outreach education. SUAREC aims to help small-scale and limited resource farmers and ranchers develop and/or maintain viable farming operations that are in harmony with the environment, help communities build capacity to enhance the growth and development of the business and industrial sectors, and improve the quality of life for families and youth throughout the State. To ensure that clientele needs are addressed effectively, the research and extension programs target the same clients. Research projects are designed with inputs from stakeholders and the findings are specially packaged and disseminated by the extension agents and specialists.

Due to budget problems in previous years, state appropriation to the SU Ag Center was again reduced. State funding has been reduced by about 45 percent between 2008-2012 oftentimes in the middle of the fiscal year. Federal budget reduction in FY 2013 worsened the financial problem. Loss of employees and the uncertainty of replacing them was one of the consequences of state and federal budget cuts. Other effects were reduced funding for planned activities, travel, materials and supplies, which in turn negatively affected outcomes. Despite the loss of state and federal funds, the Center's faculty and staff applied for and received about **seven external grants and contracts for over \$2.3 million** to conduct research and offer research-based educational information and services to citizens throughout the state. These grants have provided resources to hire additional staff, but not enough to replace those lost as a result of reduced state funding. However, since some of these grants require matching funds, the Center may be limited in applying for them should the current state budget reductions continue.

Other highlights include:

Obesity prevention research yielded results as 15 participants lost between 5-62 pounds (a total of 190 lbs; an average of 13 lbs) in 24 weeks and a new quarterly publication "**Whey 2 Go Newsletter**" continues to circulate nationally from the project.

Research in hibiscus utilization, development of biofuel and ultraviolet-B monitoring are progressing with 12 graduate students developing their thesis/dissertation from the projects.

The Agricultural Leadership Institute continued to attract participants from several states (so far, 16 states have participated - Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia) to intensive workshops where they gain new knowledge and skills to share and make a difference in their states. Thirty-one small producers graduated from the leadership institute in 2013 bringing the number of graduates to 90 since it first started. Most of the graduates are making a great deal of difference in the lives of their community members in 16 states.

-One participant from Richland Parish used knowledge gained to obtain EQIP program

ASSISTANCE and other assistance from NRCS. More than half of his 400-acre farm was precision leveled. These practices increased his wheat yield two-fold and his annual gross income grew by \$100,000.

-The 2014 Aetna's African American History Calendar spotlights one Leadership Institute graduate in the month of March. The calendar entitled "Community transformations: African Americans creating sustainable neighborhoods" encourages healthy living. Aetna is a member of the Fortune 100. The calendar is available online at www.aetnaafricanamericanhistorycalendar.com

-One graduate developed a website to publicize and market her products at:
<http://backyardgardenersnetwork.org/>

-A member of the class who had never served on any type of governmental committee was appointed to serve on the Advisory Committee on Animal Health by USDA Secretary, Tom Vilsack. The committee is composed of 20 individuals who advise the Secretary on strategies, policies and programs that prevent, control, or eradicate diseases of national significance.

-Two other participants were appointed by Secretary Vilsack to serve on the Advisory Committee on Beginning Farmers and Ranchers. The Committee advises the Secretary on ways to develop programs to provide coordinated assistance to beginning farmers and ranchers while maximizing new farming and ranching opportunities.

-Two participants were awarded research and development grants to test new and emerging agricultural markets, alternative enterprises and new technologies such as hydroponics.

-Two participants opened retail stores to market fresh food to their local communities.

Over 10,000 individuals, youth and families benefited from obesity reduction activities conducted by the Center's personnel.

The procurement conference attracted **340 small business owners and potential owners**, and the **70th Annual Livestock Show had over 291 exhibits in addition to 2,000 visitors.**

The Center holds periodic strategic planning retreats to provide a forum for sharing knowledge and information between research and extension faculty and staff and for creating a model designed to integrate both entities. As a follow up to the strategic planning conference, joint research-extension exchange meetings were held to identify critical areas which warrant research by the Center to better serve the needs of clients. Other methods of seeking inputs were: plan of work conference, parish advisory council, survey of program staff, survey of clients, parish performance and planning review, Louisiana Cooperative Extension Service meetings, and the joint LSU (1862) and Southern University (1890) Agricultural Centers research & extension annual conference.

In order to address the state and national needs, the Southern University Agricultural Research and Extension Center placed emphasis on the following broad areas:

- I. Sustainable Agricultural Systems
- II. Urban Forestry and Natural Resource Management
- III. Nutrition and Health
- IV. Family and Human Development
- V. Youth Development
- VI. Economic and Community Development

Strong and very close multi-disciplinary working relations continued as faculty and staff worked in teams to achieve maximum benefits for audiences among these broad areas. For instance, in order to address global food safety and childhood obesity issues, Nutrition and Health personnel collaborated with personnel from Sustainable Agricultural Systems, Youth Development and Family and Human Development.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	45.0	0.0	44.0
Actual	0.0	40.0	0.0	39.2

II. Merit Review Process**1. The Merit Review Process that was Employed for this year**

- Internal University Panel
- Combined External and Internal University Panel
- Expert Peer Review

2. Brief Explanation

SUAREC conducts internal evaluation of all research projects and extension programs to ensure that they are meeting the needs of its clients. The model and findings of 2004 USDA/NIFA review of research projects served as benchmarks for merit and peer review. Additionally, as part of the Louisiana Cooperative Extension Service (LCES) agreement, extension programs and activities are reviewed annually for relevance and applicability to clients' needs by a joint team of experienced staff from both the Louisiana State University Agricultural Center (LSU AgCenter) and the Southern University Agricultural Research and Extension Center (SUAREC).

Peer Review: all NIFA funded programs/projects and others seeking funding are subjected to a thorough scientific and educational peer review process. A Proposal Review and Evaluation Committee (PREC) comprising of faculty and staff from SUAREC and the greater university community is functioning effectively. It operates as a standing committee to review proposals consistent with standard agency guidelines and other established scientific and educational criteria. Proposals usually undergo strict review, scrutiny and endorsement by discipline peers, program heads, and a select review committee. Additionally, each proposal must show clear evidence of stakeholder input prior to approval by the Vice Chancellor for Research and/or Vice Chancellor for Extension.

Strategic Planning: SUAREC holds periodic strategic planning retreats to provide a forum for sharing knowledge and information between research and extension faculty and staff and for creating a model designed to integrate both entities. The main outcome is the exchange of information to ensure that research and extension programs in the Center as designed are relevant to the needs of the people of Louisiana and implemented to meet and address the needs of citizens. The 2013 planning retreat was held January 7-9 to review research & extension program and plan for the impending state and federal budget cuts.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals

Brief explanation.

All Southern University Agricultural Research and Extension Center's staff are required to seek and obtain stakeholder input in planning programs and activities. Stakeholder inputs are used to establish priorities, goals and objectives consistent with state, regional and national issues based on the land-grant philosophy. The Parish Advisory Council is organized at the grassroots level by each extension program to involve clients, community leaders, state and local government officials, and other stakeholders in the process of identifying community needs and/or resources, programs and projects to address them. Parish advisory council meetings are conducted at least once annually and important discussions are documented and utilized by the extension agents in developing the parish plan of work. All parish (county) personnel conduct surveys of target clients and parish advisory councils. The Louisiana Cooperative Extension Service (LCES) annual parish review also indicates that all SUAREC extension staff do seek and obtain inputs from parish advisory councils, focus groups, public forums, clients and community leaders when planning their work. Extension Agents use information from focus groups, public forums, community leaders, and the client needs assessment to develop their plan of work. Meetings were announced using different forms of media available in the community.

Agents' plans of work, needs assessment, and information from the forums are submitted to the specialists at the state office. The state specialists meet monthly with the Vice Chancellor for Extension to report on progress of work (and problems) and to review and/or revise where necessary. Additionally, joint research-extension exchange meetings are held periodically to identify critical areas that warrant research by the Center to better serve the needs of clients. Furthermore, the Chancellor's Executive Council serves to advise the Chancellor on ways that would ensure greater stakeholder input in identifying and planning meaningful, effective and efficient research, education and outreach programs to benefit the citizenry of the state of Louisiana. The Center's research and extension programs, the federal plan of work and the state strategic plan are developed based on the information received from the grassroots such as, Parish Advisory Councils, parish plan of work, the Louisiana Cooperative Extension Service, parish review team, needs assessment, evaluation studies, Strategic Planning Meeting, Joint Research-Extension Exchange Meetings, Chancellor's Executive Council, Federal and State Agencies, Commodity Organizations, and Land Grant Institutions. The Office of Planning and Evaluation conducts regular surveys of program activities. Participants/respondents at these program activities continue to provide positive feedback regarding the knowledge and skills they gain as a result of their participation in the SUAREC educational programs and activities. Data collected from these sources by the Office of Planning and Evaluation are made available to the Research and Extension administrators who in turn utilize them to plan and prioritize their program/projects to address

needs/problems of Louisiana citizens.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Needs Assessments
- Use Surveys

Brief explanation.

SUAREC extension personnel are required to establish parish advisory committees and conduct meetings to seek inputs necessary for planning their educational activities. These advisory committees involve clients, community leaders, state and local government officials, and other stakeholders in identifying community needs and/or resources, programs and projects to address them. Parish advisory council meetings are conducted regularly, and important discussions are documented and shared in the joint research-extension exchange meetings. For some planned programs, internal focus groups were used as an additional source of identifying the changing needs of the community and the citizens. Also, as part of the customer satisfaction survey, needs assessments were conducted particularly to obtain information regarding unmet needs or changing needs. In addition, SUAREC research and extension personnel conducted various activities in FY 2012/2013 such as field days, workshops, classes, training, livestock show, etc. Surveys were employed to seek participants' views regarding knowledge and skills gained and also to solicit their suggestions regarding the types of activities they desire in the future.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public

Brief explanation.

Stakeholder input is an important source of information for planning programs and activities at SUAREC. The parish advisory committee was the primary source of inputs for the extension agents and the extension personnel communicated these inputs to research personnel. And to ensure quality input, the parish advisory committees were comprised of a diverse group of individuals in the community; also traditional and nontraditional individuals and groups were invited to join the advisory committee. To encourage further inputs and ensure consistency, surveys were conducted at various program activities to solicit participants' opinion/suggestions regarding their needs. Traditionally, such information is used to plan and/or adjust future activities to meet these identified needs. To ensure a wide coverage, different types of media were used to advertise and publicize

SUAREC activities.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities
- Other (Determining strategic directions)

Brief explanation.

Information from the extension agents was channeled to the extension specialists and brought for discussion at the state monthly meetings with the vice chancellor for extension. The monthly meeting is conducted as stated to include extension specialists from the six planned programs and the directors of special projects involving outreach education. Decisions on dealing with issues were reached and issues requiring research expertise were channeled to the vice chancellor for research at the joint research-extension exchange meeting. At the joint research-extension exchange meeting, there was information sharing on emerging issues and followed with plans of action. Critically important issues were normally brought to the attention of the Chancellor's Advisory Council which also meets monthly, for further actions. The Chancellor's Advisory Council is comprised of persons who have budgetary authority at the Center. The Louisiana Cooperative Extension Service (LCES), the joint annual meeting of the Louisiana State University Agricultural Center and the Southern University Agricultural Research and Extension Center served as the other media where stakeholders inputs were sought for (through the joint meeting of extension and research professionals), deliberated and strategic directions planned.

Brief Explanation of what you learned from your Stakeholders

{NO DATA ENTERED}

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	1539641	0	1861427

2. Totaled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	0	1539641	0	1847427
Actual Matching	0	1539641	0	1847427
Actual All Other	0	0	0	33627
Total Actual Expended	0	3079282	0	3728481

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous				
Carryover	0	0	0	0

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Global Food Security and Hunger
2	Climate Change
3	Food Safety
4	Childhood Obesity
5	Sustainable Energy
6	Economic and Community Development
7	Family and Human Development
8	Youth Development

V(A). Planned Program (Summary)**Program # 1****1. Name of the Planned Program**

Global Food Security and Hunger

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships		10%		10%
205	Plant Management Systems		20%		20%
301	Reproductive Performance of Animals		10%		10%
302	Nutrient Utilization in Animals		20%		20%
307	Animal Management Systems		30%		30%
313	Internal Parasites in Animals		5%		5%
601	Economics of Agricultural Production and Farm Management		5%		5%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	7.0	0.0	20.0
Actual Paid Professional	0.0	8.0	0.0	16.4
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	257669	0	792355
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	218990	0	658093
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	15087

V(D). Planned Program (Activity)**1. Brief description of the Activity**

1. Conducted research and experiments using cattle, goats, swine, poultry, vegetables, pasture, forage, and other plants.
2. Continued to maintain facilities, modernize facilities and acquire adequate land for research and extension programs.
3. Conducted workshops, demonstrations, training sessions, and field days for farmers especially small and limited resource producers and encouraged client and potential client participation.
4. Delivered services to producers and potential producers. Conducted assessment; work with media to disseminated important information to clients and stakeholders.
5. Conducted farm and site visits to work with individual (or group of) clients .
6. Collaborated, cooperated and partnered with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens and worked to eliminate hunger in the population.
7. Continued to create and enhance marketing opportunities in traditional and alternative outlets, such as farmer's markets, community supported agriculture (CSA), and other outlets.
8. Provided nutrition and healthy lifestyle education to citizens.

2. Brief description of the target audience

Our target audience includes (but is not limited to) , small producers, limited resource producers, socially and economically disadvantaged individuals, the underrepresented, the underserved, women, and minorities. Others are youth 13 - 18 years, policy makers, community leaders/stakeholders, interested agencies and organizations.

3. How was eXtension used?

Clients who had urgent questions concerning areas that the SU Ag Center does not have experts on board such as, horse, aquatic products, etc. were often referred to eXtension for answers to such questions.

V(E). Planned Program (Outputs)**1. Standard output measures**

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	16391	68887	0	0

2. Number of Patent Applications Submitted (Standard Research Output)**Patent Applications Submitted**

Year: 2013

Actual: 0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

2013	Extension	Research	Total
Actual	2	6	8

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- 1. Number of educational program activities

Year	Actual
2013	255

Output #2**Output Measure**

- 2. Number of educational contacts

Year	Actual
2013	85278

Output #3**Output Measure**

- 3. Number of published materials distributed

Year	Actual
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2013

17017

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year

Actual

2013

40

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	1. Percent of clients who gained new knowledge/skills, awareness and/or changed attitudes
2	NATIONAL Outcome #1: Enhanced capacity of a sustainable global food system including new/improved plans, animals, technologies and management systems
3	NATIONAL OUTCOME #2: More sustainable, diverse, and resilient food systems across scales.
4	NATIONAL OUTCOME #3: Improved national and global capacity to meet growing food demands.

Outcome #1

1. Outcome Measures

1. Percent of clients who gained new knowledge/skills, awareness and/or changed attitudes

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Small-scale producers faced tough economic times due to challenges of rising input costs coupled with unstable prices of food and the resulting problem of generating sufficient income and being profitable. Small agricultural producers who adopt alternative livestock and crop enterprises such as, goats, rabbits, vegetables, fruits, and herbs can earn profit while addressing global food security and hunger issues. According to USDA/ERS, about 50.1 million people (in 20.6% of US households with children) lived in food insecure households in 2011; about 33 million adults (14.4 percent of all adults) and 17 million children (22.5 percent of all children). Louisiana was ranked at number 45 in food insecurity with about 12 percent of its citizens living in food insecure households. Working to ensure sustainable animal and plant productivity and profitability are of paramount importance to the agricultural sector of Louisiana. Addressing these close knit and perennial problems through research in alternative crops could benefit the farmers, consumers, and governments worldwide.

What has been done

Faculty and staff received one research grant each in FY 2012 and FY 2013 for additional funding to implement projects in sustainable agriculture focusing on alternative crops. The grants were for \$500,000 each. The first grant studied alternative uses of Roselle Hibiscus as small farm and niche market crop and the second grant studied specialty mushroom as a niche market crop for limited resource small family farms. NIFA Formula Grants were used to fund other research projects in the areas of grazing cattle and goat together to improve yield, utilization of alternative fertilizer (burnt corn gluten) on field crops. In FY 2013, nine sustainable agriculture field days were conducted with over 304 producers in attendance. Two goat field days were conducted in collaboration with LSU Veterinary School with 153 producers and potential producers in attendance.

A new initiative called WISTERIA Alliance has been started to provide practical hands on training

for women who live on farms, and those with interest in starting a farm, and/or urban & community gardeners.

Research-based educational information was packaged and disseminated through extension agents to the clients. Farm visits were conducted by research and extension personnel to advise clients and sometimes provide "on the spot" solutions to problems they may have.

Results

- Ninety-three percent of participants in the sustainable agriculture goat field days stated that they gained new knowledge and skills;
- 89 percent said they will certainly utilize knowledge and skills gained.
- The participants also gained knowledge/skills about the benefits of the FAMACHA chart. They used the chart and saved money in goat health care costs.
- Fifty farmers are actively growing hibiscus, making hibiscus-related products such as, tea, jelly, jam, and cookies and selling them in the local farmers' market.
- with the assistance of faculty and staff, one 972 acre farm transitioning to organic production has adopted burnt corn gluten meal in their fertilizer program due to the abundance and low cost.
- WISTERIA Alliance provided practical hands on training for women to enhance their farming and gardening skills.
- Faculty and staff wrote two research grants for additional funding in FY 2012 & 2013 to implement sustainable agriculture projects which were funded for \$1,000,000.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
313	Internal Parasites in Animals

Outcome #2

1. Outcome Measures

NATIONAL Outcome #1: Enhanced capacity of a sustainable global food system including new/improved plans, animals, technologies and management systems

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Parasite infestation is one of the biggest threats to the small ruminant producers in the southeastern region of the US. Damage to the goat occurs when the parasites attach to the lining of the gastrointestinal tract and ingest blood. Parasites cause diseases when they are present in large numbers or when the host animal is weakened by another disease or poor nutrition. If the parasites are present in large numbers, they can cause anemia due to blood loss, along with weight loss, poor growth, and maybe, sudden death. According to USDA/NASS Sheep and Goat Death Loss 2010 report, goat farmers in the US lost 255,000 heads (or 46%) of the total deaths to diseases and other known causes. These numbers can be reduced if producers could employ a proactive approach to examining the health of their animals, and especially monitor & prevent them from parasites.

What has been done

To help local producers tackle this issue, in FY 2013, the SU Ag Center in collaboration with the Louisiana Goat Producers Association hosted three goat field days and an animal clinic for ruminant producers. At the clinic (which lasted seven hours), farmers learned how to test fecal samples collected from their farms for parasites; and also how to identify and count the parasites present. Producers were instructed on how to collect, store and encouraged to bring at least six samples each from cattle, goat and sheep. They also came with a list of de-wormers used on their farms. Another instruction was to keep samples separate and properly labeled. Twelve goat producers and five potential producers attended the hands on clinic. They processed the samples and examined them under powerful microscopes to identify and count the parasites and also used FAMACHA Scores chart to examine their goats.

Results

The hands-on Animal Clinic was a great experience for the farmers as they were able to conduct the hands-on fecal analyses and parasite count for themselves and save money. In the FY 2013 animal clinic, producers saved about \$1,000 (value of what they would have paid to analyze their samples, and another \$800 that they would have paid to consultants. Additionally, the analytical laboratory continued to assist producers in analyzing samples. We estimate that producers may have saved \$25,000 in treatment costs and another \$120,000 in income due to reduced loss of animals.

A survey of participants indicated as follows:

100% said they would recommend the animal clinic to others.

100% said that Knowledge & skills gained at the clinic would be useful to them in dealing with animal disease issues.

100% indicated that materials provided at the clinic would be useful to them.

Some comments from the participants were as follows:

-"Gave me confidence to want to purchase my own microscope, I plan to get a microscope, etc. to do my own testing."

-"I Gained knowledge, skills and abilities; my knowledge & skills will be useful and shared with the groups of socio-economically disadvantaged farmers & ranchers for their herds."

- This is "a wonderful process, very educational, hands-on and beneficial, please keep me on your email list for future goat events"
- "Very practical & useful information."
- "Very well done, I like the hands-on part very much."

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
313	Internal Parasites in Animals
601	Economics of Agricultural Production and Farm Management

Outcome #3

1. Outcome Measures

NATIONAL OUTCOME #2: More sustainable, diverse, and resilient food systems across scales.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Formal training and instruction in leadership development is a crucial skill which had not been offered to small, limited resource agricultural producers in the state of Louisiana (and possibly in the country). Economic crisis over the past decade, especially the high cost of farm inputs during FY 2013 made it difficult for producers to compete and remain profitable. The existence of many small farmers is in serious jeopardy as they are debt-ridden and are in the verge of being bankrupt. The Small Farmer Agricultural Leadership Training Institute at Southern University Agricultural Research & Extension Center was designed to address these needs with the goal of promoting small & family farm sustainability, survival and profitability through enhanced decision making skills and leadership development. The goal was to help farmers become better leaders

while enhancing their overall farm management skills.

What has been done

In FY 2013, we conducted the third annual Louisiana Small Farmers conference to provide information to farmers by experts about the latest educational tools and resources which they can use to improve productivity and sustainability of their agricultural enterprises. About 45 producers participated in the 3-day conference and gained knowledge and skills on Record Keeping and Other Strategies to Create Profitable Enterprises; Estate Planning; Healthy Soils: The Foundation to All Farming; Marketing Strategies and Techniques; Diversifying your Farm Operation; Grant writing; and Round Table Discussion with USDA Panel Discussion: FSA, NRCS, NASS, RD

In addition, seven 4-day intensive training workshops (lasting over 8 hours each day) and tours were held from October 2012 until March 2013 in six states (Louisiana, Texas, North Carolina, Atlanta, South Carolina, and Alabama) with 33 participants in each session. Topics discussed were: Developing the Leader Within, Planning the Business and the Team, Agricultural Legal Issues and Risks, Taking it to the Next Level, Agricultural Opportunities Unlimited (Summer Tour featuring Urban Agriculture), Civic Engagement, The Agricultural Professional, and Promoting the Business. Participants attended and experienced the 69th Professional Agricultural Workers Conference (PAWC), Tuskegee University, Alabama. They also participated at the Graduation Ceremony in Washington, DC hosted by USDA. In addition, participants had opportunity to interact and network with their peers from six states, research scientists, extension specialists, and legal scholars from six universities and agricultural professionals from the USDA.

Results

Several current participants (and former participants) are already assuming leadership roles indicating change in their conditions as follows:

- One participant from Richland Parish used knowledge gained to obtain NRCS EQIP program and others. More than half of his 400 acre farm was precision leveled. This one practice increased his wheat yield two-fold and his income by \$100,000 annually.
- The 2014 Aetna's African American History Calendar spotlights one Leadership Institute graduate in the month of March. The calendar entitled "Community transformations: African Americans creating sustainable neighborhoods" encourages healthy living. Aetna is a member of the Fortune 100. The calendar is available online at www.aetnaafricanamericanhistorycalendar.com
- One graduate developed a website to publicize and market her products at: <http://backyardgardenersnetwork.org/>
- A member of the class who had never served on any type of governmental committee was appointed to serve on the Advisory Committee on Animal Health by USDA Secretary, Tom Vilsack. The committee is composed of 20 individuals who advise the Secretary on strategies, policies and programs that prevent, control, or eradicate diseases of national significance.
- Two other participants were appointed by Secretary Vilsack to serve on the Advisory Committee on Beginning Farmers and Ranchers. The Committee advises the Secretary on ways to develop programs to provide coordinated assistance to beginning farmers and ranchers while maximizing new farming and ranching opportunities.
- Two participants were awarded research and development grants to test new and emerging agricultural markets, alternative enterprises and new technologies such as hydroponics.
- Two participants opened retail stores to market fresh food to their local communities.
- Several participants have been recruited, invited and selected to serve as grant reviewers for the competitive USDA grant programs.

A survey of participants showed the following: 100 percent of participants said they gained new knowledge and skills; 100 percent indicated that new knowledge and skills gained will be very useful; and 100 percent indicated that they will definitely use new knowledge and skills gained.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management

Outcome #4

1. Outcome Measures

NATIONAL OUTCOME #3: Improved national and global capacity to meet growing food demands.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
313	Internal Parasites in Animals
601	Economics of Agricultural Production and Farm Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

- 53 percent of participants in our programs are ready to adopt new techniques.
- Despite the number of communication technologies available, over 70 percent of farmers and producers still prefer face-to-face form of communication.
- Participants in the Leadership Institute agreed that peer training is an added asset to understanding new cultural practices.

- WISTERIA Alliance (Women in Agriculture) indicated they can perform tasks better when taught by women.

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 2****1. Name of the Planned Program**

Climate Change

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources		10%		10%
124	Urban Forestry		45%		45%
132	Weather and Climate		10%		10%
133	Pollution Prevention and Mitigation		10%		10%
134	Outdoor Recreation		5%		5%
205	Plant Management Systems		5%		5%
403	Waste Disposal, Recycling, and Reuse		15%		15%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	3.0	0.0	5.0
Actual Paid Professional	0.0	1.8	0.0	6.5
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	50000	0	299418
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	51000	0	293473
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	5980

V(D). Planned Program (Activity)**1. Brief description of the Activity**

1. Research and quantified the environmental benefits of urban forests, carbon sequestration and the urban forest effects on air quality.

2. Research and quantified urban forest effects on UV exposure in relation to proper vegetation design.
 3. Communicated research results and other information to citizens through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.

4. Prepared publications such as research reports and highlights on climate/weather studies and disseminated information to citizens through extension personnel in the form of conferences, workshops, field days, home/office visits, demonstrations and other educational venues.

5. Areas affected by past hurricanes and other natural disasters received specific attention to enable them rebuild their tree population.

6. Collaborated, cooperated and partnered with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.

7. Assisted citizens in developing disaster/emergency plan including mechanisms for assistance to victims

2. Brief description of the target audience

Target audience includes all citizens such as homeowners, metro areas, garden clubs, arborists, small producers, limited resource producers, socially and economically disadvantaged, women, minorities, and communities. Others are youth (13 - 18 years and even those in grades K-8), community leaders/stakeholders, interested agencies and organizations.

3. How was eXtension used?

Clients who had urgent questions concerning areas that the SU Ag Center does not have expertise were often referred to eXtension for such answers.

V(E). Planned Program (Outputs)**1. Standard output measures**

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4477	28981	0	0

2. Number of Patent Applications Submitted (Standard Research Output)**Patent Applications Submitted**

Year: 2013

Actual: 0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

2013	Extension	Research	Total
Actual	0	9	0

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- 1. Number of educational program activities

Year	Actual
2013	87

Output #2**Output Measure**

- 2. Number of educational contacts

Year	Actual
2013	33458

Output #3**Output Measure**

- 3. Number of published materials distributed

Year	Actual
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2013 4502

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	1. Percent of clients who gained new knowledge/skills, and awareness
2	2. Percentage of adoption rate for recommendations by clients.
3	National Outcome #1: Development of new knowledge and technologies

Outcome #1

1. Outcome Measures

1. Percent of clients who gained new knowledge/skills, and awareness

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Ozone depletion in the upper atmosphere has resulted in a significant increase in solar ultraviolet-B radiation (UV-B, 280-315nm) on the earth surface. Effects of the enhanced UV-B on living organisms and ecosystems have been a major concern for more than two decades. Nearly two-thirds of 400 plant species/cultivars, mainly annual crops, appear to be UV-B sensitive. Relatively little information exists on the effects of UV-B radiation on forest tree species, which account for 80% of the global net primary production. With the future uncertainty of ozone recovery and climate change, there is a critical need for systematic evaluation of UV-B impacts on forest/tree species. UV-B impacts are many and some have serious economic consequences. Many United States residents do not have sufficient knowledge about these impacts especially as they relate to health.

What has been done

Research scientists applied for and received grants to study Ultraviolet-B Radiation protection strategies especially in selected southern trees. The study is helping to identify and quantify UV-B absorbing compounds (flavonoids/phenolics) using UV-VIS Spectroscopy and HPLC, and to measure leaf epidermal screening effectiveness to enhanced UVB using a fiber-optic microprobe system. Information gathered through this research is being prepared and shared to citizens and the scientific community. The aim is to provide reader-friendly fact sheets that citizens can use to increase knowledge on ways of selecting trees that can help to protect the environment from the adverse effects of UV-B. Information sessions, workshops, and seminars about climate change were also provided. The project made two presentations at the USDA-NIFA PD Conference in Huntsville, Alabama and also at 1890 ARD Symposium Jacksonville, FL. One MS thesis was generated relative to the expanded effort on tree canopy UV transfer model. The leaf UV optical property data have been used in the USDA-UV-B Monitoring Network and USDA-FS Urban Forest Effect Modeling. Other publications have been disseminated via Southern University Ag

Center webpage. We are sharing findings of this study with citizens through the Louisiana Cooperative Extension Service.

Results

The results of the UV-B research was shared with the scientific and extension communities and also with the target audience - homeowners, garden clubs, arborists, small producers, limited resource producers, socially and economically disadvantaged, women, minorities, and communities. They gained new knowledge about climate change, the impacts of UV-B on the environment, and the possible adaptation strategies. Implementation of these projects has resulted in strengthened relationship and collaboration with other states and institutions. Based on the current findings, citizens have become more aware of the dangers of UV-B and how to select trees to plant that can help to minimize potential harmful effects.

One MS thesis was generated relative to the expanded effort on tree canopy UV transfer model. One doctoral dissertation is underway and two other students are gaining knowledge of conducting climate change research through their involvement in data collection for dissertation. Additionally, 12 students in the urban forestry program gained knowledge about climate change and UV-B research.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
132	Weather and Climate
134	Outdoor Recreation
403	Waste Disposal, Recycling, and Reuse

Outcome #2

1. Outcome Measures

2. Percentage of adoption rate for recommendations by clients.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Knowledge of urban wood waste utilization and mulch management is lacking due to insufficient research and low availability of research-based educational information. Knowledge urban wood waste utilization and mulch management could allow for more efficient and economic use of urban plant-based residue (including wood waste) by way of organic mulches. Research can assist in assessing the impact of the following Louisiana natural resources: cypress mulch, longleaf pine needles, loblolly pine bark, municipal oak tree residue, and mixed non-oak hardwood mulch products, on soil carbon cycling, sequestration, and chemical composition. Also, the effects of selected tree-based mulch treatments on the dynamics of growth and development (physiology, morphology, and anatomy) of live oak tree species and its associated rhizosphere dynamics can be studied. Research-based educational information can be made available to producers, land owners and home owners on the effects of selected tree-based mulch on root disease severity of live oak tree rhizosphere, microbial population dynamics, and saprophytic survival of selected soil borne plant pathogens.

What has been done

A collaborative project between Southern University Agricultural research and Extension Center, USDA-NIFA, and the USDA-FS was conducted to make contributions toward addressing the challenges of the emerging biobased industry with outcomes that support research, development, demonstration, and pre-commercialization activities. Additionally, through collaborative efforts with the Gulf Coast Cooperative Ecosystem Studies Unit (GC-CESU) and non-profit organizations the restoration efforts in Louisiana, Mississippi and other neighboring states are being impacted. Collaboration with the private sector and arboricultural companies has promoted the utilization of wood waste, especially, the urban wood waste in Louisiana. Utilization of urban wood waste and biobased plant residue has several potentials and major impacts such as: expanding and extending the life of the wood fiber supply; contributing to carbon storage, thereby reducing greenhouse gases; reducing the amount of recoverable wood going to landfills; and stimulating new technologies and market to utilize recoverable wood fibers. Students and faculty in urban forestry and traditional agricultural research and extension were involved. The results of this study have been disseminated to the scientific communities through the Society of American Foresters (SAF), International Society of Arboriculture (ISA), 1890 Association of Research Directors Conference, State, regional, and national meetings sponsored by the USDA and other federal partners. In addition, the results have been provided to the Baton Rouge community and the State of Louisiana through media outlets and the extension agents.

<http://theadvocate.com/home/8090463-125/brs-tree-canopy-providing-environmental>

Significant network of partners & organizations were included for this project such as, ISA, SAF, Louisiana State University, Louisiana Department of Environmental Quality, the Louisiana Department of Agriculture & Forestry, the Gulf Coast Cooperative Ecosystem Studies Unit (GC-CESU), and the City of Baton Rouge, LA.

Results

This project has increased the capacity of Southern University Ag Center in biomass utilization research. Seven graduate and 25 undergraduate students have gained knowledge & skills about conducting research through their participation in this project. About 33,458 people (including 550 homeowners) in Louisiana have been reached through direct and indirect research, educational and outreach activities. Significant network of partners & organizations collaborated on this project: ISA, SAF, Louisiana State University, Louisiana Department of Environmental Quality, Louisiana Department of Agriculture & Forestry, the Gulf Coast Cooperative Ecosystem Studies

Unit, and the City of Baton Rouge, LA.

The arboricultural industries: ISA and SAF are utilizing the outcomes of this project for educating their constituents and enhancing their professional goals and objectives. The collaborative efforts with USDA/NIFA and the USDA/FS have made significant contributions toward addressing the challenges of the emerging biobased industry with outcomes that support research, development, demonstration, and pre-commercialization activities. The project has enhanced the graduate programs in urban forestry through students & faculty involvement, thesis & dissertation development, scholarly publications and community outreach & extension activities. Programs in urban forestry at SU have been positively enhanced based on the latest student learning outcome assessment conducted.

Through collaborative efforts with the GC-CESU and non-profit organizations we are impacting the restoration efforts in Louisiana, Mississippi and other neighboring states. Collaboration with the private sector & arboricultural companies has promoted the utilization of wood waste, especially the urban wood waste in Louisiana. Two assessment reports were produced. One new web-site was developed and enhanced. Six mulch formulations were developed (SUAREC M1-SUAREC M6) for testing. Eight scientific presentations, three national and two international articles were published. One Ph.D. dissertation has been produced and One Ph.D. student graduated. One PhD dissertation is being developed and three M.S. students are developing thesis and capstone projects.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
132	Weather and Climate
134	Outdoor Recreation
403	Waste Disposal, Recycling, and Reuse

Outcome #3

1. Outcome Measures

National Outcome #1: Development of new knowledge and technologies

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
------	--------

2013

0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
124	Urban Forestry
132	Weather and Climate
134	Outdoor Recreation
205	Plant Management Systems

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)**Program # 3****1. Name of the Planned Program**

Food Safety

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
502	New and Improved Food Products		10%		10%
702	Requirements and Function of Nutrients and Other Food Components		10%		10%
703	Nutrition Education and Behavior		20%		20%
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources		10%		10%
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins		20%		20%
724	Healthy Lifestyle		30%		30%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	7.0	0.0	6.0
Actual Paid Professional	0.0	4.3	0.0	6.1
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	242102	0	256601
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	221019	0	359847
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	4560

V(D). Planned Program (Activity)**1. Brief description of the Activity**

1. Collaborated and conducted research on food safety and other prevalent foodborne diseases.
2. Promoted focus groups; advisory committees; mentor program; use of food safety, safe school food nutrition curriculums; health tips to ensure food safety during school activities
3. Used focus groups, advisory committees, mentor program, etc. to provide awareness to citizens about the impacts of tobacco and tobacco products.
4. Disseminated publications such as fact sheets, newsletters, technical bulletins, research reports, etc. dealing with proper food safety practices.
5. Communicated research results, findings and other useful information with customers through extension personnel in the form of publications, conferences, workshops, home/office visits, demonstrations and other educational resources.
6. Collaborated, cooperated and partnered with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
7. Received funds from State Appropriations (wiil) hire additional experienced personnel and build capacity to respond to clientele needs.

2. Brief description of the target audience

There is a large number of low income and limited resource families in Louisiana that are found in target areas which SUAREC serves. Most of these families lived below the poverty level. They lacked knowledge, information, and skills to utilize existing resources to improve their diet and ensure food safety. Children and adolescents who are placed at risk and those that are potentially at risk were also be beneficiaries. Additionally, citizens with sedentary jobs who needed information on the benefits of regular physical activity and healthy lifestyles were also targeted. We continue to utilize data to identify and target other audiences.

3. How was eXtension used?

A faculty member participated in providing information and answers to enquiries from users of eXtension. We also referred clients seeking solution to their food safety problems to the eXtension homepage or "Ask an Expert".

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013

Actual: {No Data Entered}

Patents listed

{No Data Entered}

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	1	2	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2013	0

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2013	0

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2013	0

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	National Outcome #1: Increase number of viable technologies to improve food safety
2	National Outcome #3: Increase adoption of recommended safe food handling practices at the individual, family, community, production, and supply system levels.

Outcome #1

1. Outcome Measures

National Outcome #1: Increase number of viable technologies to improve food safety

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food-related diseases affect tens of millions of people and kill thousands. Increasingly, fresh fruit and vegetable products have been implicated as the source for foodborne pathogens causing foodborne illnesses. Outbreaks due to Salmonella and E-Coli contamination were reported during the year. This has led to the development of recommendations for some commodity producers, that precautions be taken in the fields and during post-harvest processing and handling to prevent pathogen contamination. Some Louisiana environmental conditions provide great opportunities for food borne illnesses particularly the hot humid climate. As a way of life, Louisiana citizens participate in many outdoor events where foods are pre-cooked, kept for a longer period and served outside.

What has been done

The Curriculum used was "Let's Eat for the Health of It (Adult and Youth)" which taught the following: Nutrition, Healthy Eating, MyPlate.

Specific topics/lessons covered were:

- MyPlate the Healthful Way
- Make Half Your Plate Fruits and Vegetables
- Switch to Skim or 1 percent Milk
- Make at Least Half Your Grains Whole
- Vary Your Protein Food Choices
- Physical Activity

Research and extension staff provided nutritional instruction, food safety and food resource management workshops to the clientele throughout the state. In collaboration with FF-NEWS staff, nutrition educators reached over 5,516 individuals through schools, head start sites, libraries, churches and other community centers/events.

Results

The 5,516 participants who used the "Let's Eat for the Health of It" curriculum gained new knowledge and skills about food selection, preservation and preparation. Information on fresh food products implicated as the source for foodborne pathogens or causing foodborne illnesses and recent news about Salmonella and E-Coli contamination was disseminated. Participants at workshops and food demonstrations gained knowledge about food safety in the areas of fresh product harvest, post-harvest storage, food preparation, storage, right storage temperature, etc. Ninety-five percent of them learned how to make their own healthy snacks and how to ensure that food safety guidelines are adhered to while doing so.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
703	Nutrition Education and Behavior
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #2

1. Outcome Measures

National Outcome #3: Increase adoption of recommended safe food handling practices at the individual, family, community, production, and supply system levels.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The CDC estimates that each year roughly 1 out of 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die from foodborne diseases. Increasingly, fresh fruit and vegetable products have been implicated as the source for foodborne pathogens causing foodborne illnesses. This may be the result of increased consumption of fresh produce coupled with better understanding of pathogens and their capabilities to cause illness. Outbreaks due to

Salmonella and E-Coli contamination are more frequent. These foodborne outbreaks have induced the FDA to look more closely at fresh produce processing; and to the development of recommendations for some commodity producers, that precautions be taken in the fields and during post-harvest processing and handling to prevent pathogen contamination. Louisiana environmental conditions provide great opportunities for some food borne illnesses particularly the hot humid climate. As a way of life, Louisiana citizens participate in many outdoor events where foods are pre-cooked, kept for a longer period and served outside. Sometimes, there are not enough facilities to keep such foods hot or cold (as the case may be) until all is consumed. Research indicates that handling food correctly can prevent 90 to 95% of food borne illnesses.

What has been done

Southern University Agricultural Research and Extension Center is committed to providing education, training and certification programs through ServSafe in food safety. SU Ag Center research scientist, one of the few ServSafe trainers in Baton Rouge, conducted workshop sessions and ServSafe trainings that were accessible to extension agents in Louisiana and nationally. Also participating at the sessions were restaurants managers and staff, cafeteria staff, school staff, church and hospital cooking staff, families and farmers. Each workshop lasted for 1-2 days, whereby participants will take a test and ServSafe would issue the certification.

Another food safety session dealt with Better Processing School, Meat and poultry Hazard Analysis Critical Control Point (HACCP) and Retail HACCP for food processors in collaboration with LSU food safety extension program.

SU Ag Center faculty & staff also conducted food safety sessions and demonstrations for tailgate participants during football games and other events

Results

One hundred percent of the 80 participants learned how to handle food safely to avoid contamination and how to ensure that food safety guidelines are adhered to while doing so. The successful rate for receiving certificate has been 90-95%. Other organizations who participated in the ServeSafe and HACCP sessions were: Extension agents and research faculty and staff, university cafeteria staff, chocolate factory staff, restaurants (fast food and traditional), bakeries and grocery stores staff, hotels, hospitals, churches, etc. These sessions were provided free of charge to attendees.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)**Program # 4****1. Name of the Planned Program**

Childhood Obesity

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
701	Nutrient Composition of Food		10%		10%
702	Requirements and Function of Nutrients and Other Food Components		30%		30%
703	Nutrition Education and Behavior		10%		10%
724	Healthy Lifestyle		50%		50%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	5.0	0.0	2.0
Actual Paid Professional	0.0	4.5	0.0	4.9
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	240500	0	241652
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	230530	0	276727
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	4000

V(D). Planned Program (Activity)

1. Brief description of the Activity

1. Conducted obesity prevention research and disseminated research-based information to youth, parents, headstart and elementary school teachers, schools administrators, and other citizens/organizations.

2. Research findings and other useful information were communicated to youth through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.

3. PSA'S, fact sheets, etc. were developed. Meetings/workshops, mentoring programs and peer counseling were also conducted.

4. Encouraged physical activities, youth gardening, and collaborate, cooperate and partnered with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to youth and other citizens.

5. Focused on the learning experience of children, youth, and families in communities with at risk environments to increase healthy eating habits.

6. Trained program staff and volunteers to ensure effective and efficient delivery of educational information.

2. Brief description of the target audience

The program targeted youth (K-College) and their families, teachers, faith-based groups, and community organizations. There is a large number of low income and limited resource families in Louisiana that are found in target areas which SUAREC serves. Most of these families live below the poverty level. They lack knowledge, information, and skills to utilize existing resources to improve their diet, nutrition, health, and quality of life. Children and adolescents who are placed at risk and those that are potentially at risk were also beneficiaries. Parents and/or guardians of these children were also targeted. Additionally, teachers, and other school officials who work with children and adolescents who may be at risk of overweight and obesity were targeted.

3. How was eXtension used?

eXtension was used through faculty and staff contribution to information, review and answer to questions, and referral of clients to "Ask an Expert".

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013

Actual: {No Data Entered}

Patents listed

{No Data Entered}

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2013	0

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2013	0

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2013	0

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	National Outcome #1: Children practice healthy eating
2	National Outcome #2: Children engage in healthy levels of physical activity
3	National Outcome #3: Families, children, and youth have access to healthy foods

Outcome #1

1. Outcome Measures

National Outcome #1: Children practice healthy eating

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The prevalence of obesity has steadily increased over the past 35-40 years among children and youth in the U.S. Louisiana youth are among the unhealthiest in the nation; 36 percent of 10-17 year olds are overweight and 53 percent don't exercise regularly. (Louisiana Report Card on Physical Activity and Health for Children and Youth, 2010). A total of 9 bills have been passed since 2004 in the Louisiana Legislature relevant to physical activity or the prevention of obesity among children and youth. In 2005, Senate Bill No. 146/Act 331 of the Louisiana Legislature enacted a vending bill which limited certain food items sold during elementary and secondary schools in Louisiana. While there were also restrictions on beverages offered during the school day, House Bill No. 767/Act No. 306 of the 2009 Legislative Session amended Act 331 to further restrict beverages offered in public high schools.

At the national level, the issue of childhood obesity has been publicized and various positive preventive measures suggested and implemented by the First Lady, Mrs. Michele Obama. An example is the gardening project which provides opportunity for youth to participate in outdoors activity while exercising and to select, grow, maintain, harvest, prepare and eat healthy foods

What has been done

SU Ag Center's Nutrition and Health Program and the Youth Program collaborated to implement activities to reduce childhood obesity. Four research projects initiated previously continued; such as: "Childhood Obesity Risk Reduction Initiative for Children in Louisiana"; "Expanding Nutritional Knowledge and Food Label Use Among College Students in Louisiana"; and "Acceptability of Value-added Goat Products by School-age Children- a Strategy to Combat Obesity".

In the first study, participants were exposed to nutritional strategies that incorporated the federal

government's Dietary Guidelines for Americans to teach them to incorporate healthier eating & activities into their daily life styles. They received nutritional instructions aimed at reducing obesity including: a) Aiming for Healthy Weight, b) Becoming Physically Active each day, c) Eating a Variety of Grains daily, especially Whole Grain, d) Eating a Variety of Fruit and Vegetables Daily, e) Keeping Food Safe to Eat, f) Choosing a Diet Low in Fat, Saturated Fat, and Cholesterol, g) Choosing Beverages and food to Moderate Sugar Intake, and h) Choosing and Preparing Food with Less Salt.

In the second project, survey and quizzes were given to 402 students to measure their use and knowledge of the food labels and basic nutritional information. The pre and Post test method was used to measure knowledge of how to read & interpret food labeling information and to determine whether participants improved their nutritional knowledge. Additional 164 students received training on how to use the Nutritional Facts panels to make healthier food choices.

Recipes for the last project have been collected, sorted, developed and tested according to the menu group.

Fact sheets were developed and disseminated to youth through schools, communities, faith-based organizations, and other related entities. Early nutrition intervention materials (brochures, newsletters, etc.) were developed and used to teach school teachers, volunteers, and children how to make healthy food choices, and the importance of incorporating daily physical activities into each day to achieve optimum health status.

A total of 18 undergraduate students gained knowledge of obesity prevention research and information dissemination through their involvement in the project.

Results

The results showed that participants in the nutritional knowledge and food label use study had a good grasp of how consumption of calcium (89%), dietary fiber (85%), fats (77%), cholesterol (77%), and sodium (81%) affect the body. However, awareness of the roles played by carbohydrate (31%), protein (42%), and the selected vitamins (A-51%, B-55%, C53%, and D-64%) was low or marginal.

A total of 23,170 participants gained knowledge about the USDA's food guidance MyPlate, dietary guidelines, selecting, preparing, and eating healthy fruits and vegetables, steps necessary to reduce obesity, reading nutrition labels, and the importance of incorporating physical activities into their daily lifestyles. Post-test results suggest that youth can actually read nutrition label, especially about sodium, cholesterol, carbohydrate, etc., however, we have to teach them and assist them in including these principles in their dietary routines. The results also indicated that participants need more help on how to read and interpret labels about the daily recommended vitamins.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #2

1. Outcome Measures

National Outcome #2: Children engage in healthy levels of physical activity

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The prevalence of obesity has steadily increased over the past 35-40 years among children and youth in the U.S. Louisiana youth are among the unhealthiest in the nation; 36 percent of 10-17 year olds are overweight and 53 percent don't exercise regularly. (Louisiana Report Card on Physical Activity and Health for Children and Youth, 2010). A total of 9 bills have been passed since 2004 in the Louisiana Legislature relevant to physical activity or the prevention of obesity among children and youth. In 2005, Senate Bill No. 146/Act 331 of the Louisiana Legislature enacted a vending bill which limited certain food items sold during elementary and secondary schools in Louisiana. While there were also restrictions on beverages offered during the school day, House Bill No. 767/Act No. 306 of the 2009 Legislative Session amended Act 331 to further restrict beverages offered in public high schools.

At the national level, the issue of childhood obesity has been publicized and various positive preventive measures suggested and implemented by the First Lady, Mrs. Michele Obama. An example is the gardening project which provides opportunity for youth to participate in outdoors activity while exercising and to select, grow, maintain, harvest, prepare and eat healthy foods.

What has been done

SU Ag Center's Youth Program and the Nutrition and Health Program collaborated to implement activities aimed at empowering youth to take personal responsibilities in reducing obesity. This project combined physical activity through gardening with exposing youth to healthy food selection.

SU Ag Center Faculty and staff were successful in receiving three extension grants for \$747,623 to address these issues. The grants were as follows: Eradicating Food Deserts in Neighborhoods through the Development of School Gardens, Using Agriculture as a Fast Track Vehicle for

Change through Experiential Learning and Development of Learning Modules for Assuring Enrichment Support for Youth in Selected Areas of Louisiana. Two hundred and sixty-five (265) youth participated in these programs.

In addition, the Creating Healthy Enjoyable Foods (C.H.E.F.) program which had two sessions engaged youth in experiential learning process of selecting, preparing and eating good healthy meals while exercising as ways of empowering and giving them responsibility for their healthy living. In FY 2013, 29 youth participants ages 12-14 learned how to prepare healthy, low salt, low sugar, low calorie, and low cholesterol meals for themselves and their family members. Findings of obesity reduction studies and First Lady Michele Obama's obesity reduction initiatives were shared with the participants in the form of video, fact sheets, oral presentations, demonstrations, etc.

Results

-The SU Ag Center initiated two collaborations, one with a mega private company, EXXON MOBIL and the other with a public broadcasting company, Louisiana Public Broadcasting (LPB).

-A video was professionally produced and presented by LPB and also placed on Youtube.com: http://www.youtube.com/results?search_query=Plant+It%2C+Grow+It%2C+Try+It+and+Like+It&sm=3

or

<http://www.youtube.com/watch?v=OTurPf9-RX4&feature=youtu.be>

-Through the help of SU Ag Center staff, youth in the Jetson Correctional Center for Youth (JCCY) established a vegetable garden gained knowledge while incarcerated in the state correctional facility located in rural Baker, Louisiana. Some of these youth made presentations about their project to other youth during the annual Youth Expo.

-90% of youth participants increased agricultural and nutritional awareness by demonstrating a change in nutrition choices, which are deemed healthier.

-100 percent of youth participants increased the frequency of physical activity due to participation in the gardening programs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

National Outcome #3: Families, children, and youth have access to healthy foods

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The prevalence of obesity has steadily increased over the past 35-40 years among children and youth in the U.S. Louisiana youth are among the unhealthiest in the nation; 36 percent of 10-17 year olds are overweight and 53 percent don't exercise regularly. (Louisiana Report Card on Physical Activity and Health for Children and Youth, 2010). A total of 9 bills have been passed since 2004 in the Louisiana Legislature relevant to physical activity or the prevention of obesity among children and youth. In 2005, Senate Bill No. 146/Act 331 of the Louisiana Legislature enacted a vending bill which limited certain food items sold during elementary and secondary schools in Louisiana. While there were also restrictions on beverages offered during the school day, House Bill No. 767/Act No. 306 of the 2009 Legislative Session amended Act 331 to further restrict beverages offered in public high schools.

At the national level, the issue of childhood obesity has been publicized and various positive preventive measures suggested and implemented by the First Lady, Mrs. Michele Obama. An example is the gardening project which provides opportunity for youth to participate in outdoors activity while exercising and to select, grow, maintain, harvest, prepare and eat healthy foods.

What has been done

SU Ag Center's Nutrition and Health Program collaborated with the Family and Human Development Program, to receive a \$300,000 grant to conduct research in "Combating Childhood Obesity with Caregivers as Change Agents". Twenty six individuals were recruited to participate in the experimental program. Fifteen (15) participants in the treatment group had "Whey To Go shakes while 11 in the control group consumed placebo shakes made with wheat starch results have varied. This trial lasted for 24 weeks and the goal was to determine the health benefits of whey protein and resistant starch. Whey is a milk-derived substance consisting of protein, lactose, small amounts of fat and assorted minerals. It is usually a by-product from making cheese. During FY 2013, the project staff published and distributed two issues of the 'Whey 2 Go Newsletter', a new initiative to inform the public about the project and to educate citizens on healthy food choices. These newsletters are available in both electronic and printed formats. The PI and post doctoral fellow have attended several national conferences where the results of the project were shared with the scientific community. Information has also been shared with the extension community within and outside the state.

Results

Participants in this 24-week program gained new knowledge about eating healthy to reduce weight. They also gained skills in selecting healthy food for themselves and their family members. All participants experienced weight loss ranging from 5-60 pounds. A total of 190 pounds were

lost by 15 individuals (an average of about 13 pounds each). Some of these individuals have also seen a reduction in the prescription medication that they were taking. The success of this trial was carried by a widely read newspaper in the state and also available online at:

<http://theadvocate.com/csp/mediapool/sites/Advocate/assets/templates/FullStoryPrint.csp...>

Several persons who have read the articles in the newspaper ? The Advocate and the Whey 2 Go Newsletter have enquired and received educational information about reducing obesity.

The post doctoral fellow and undergraduate students working on the project are experiencing hands on activities with this type of research. The post doc was been trained to utilize the DEXA machine and she has trained the students and other faculty and staff in nutrition and health program.

Extension agents and other stakeholders have accessed information and results from this study mainly through the SU Ag Center web site, newsletters, fact sheets, handouts, presentations (posters) and media.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)**Program # 5****1. Name of the Planned Program**

Sustainable Energy

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources		30%		30%
124	Urban Forestry		60%		60%
125	Agroforestry		10%		10%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	3.0	0.0	5.0
Actual Paid Professional	0.0	1.0	0.0	3.4
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	50231	0	143639
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	50209	0	130699
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	2000

V(D). Planned Program (Activity)**1. Brief description of the Activity**

1. Worked with existing organizations to strengthen links between businesses, community based organizations and outreach education.
2. Assisted local farmers and land owners/users to develop alternative enterprise initiatives for rural businesses.
3. Empowered community leaders and residents in the targeted areas to develop strategic plans for optimum utilization of natural resources.
4. Communicated and disseminated research findings to customers through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.
5. Collaborated with local, state and federal agencies, institutions, groups, private organizations /associations in seeking and delivering services to citizens.
6. Encouraged community organizations and resident involvement in developing plans for sustainable energy.
7. Provided community leaders with advice and recommendations regarding best practices in community economic development programs for their communities.

2. Brief description of the target audience

Rural and urban dwellers, under-represented, underserved, socially and economically disadvantaged groups in traditionally agricultural and urban communities in the State will be targeted for the purpose of encouraging and educating them on the need for, and the benefits of sustainable energy.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1741	12420	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	0	2	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2013	39

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2013	14161

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2013	2119

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	4

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	NATIONAL OUTCOME #5: Increased knowledge & understanding of the biofuels supply chain
2	NATIONAL OUTCOME #7: Develop a diverse and educated workforce for a biofuels industry

Outcome #1

1. Outcome Measures

NATIONAL OUTCOME #5: Increased knowledge & understanding of the biofuels supply chain

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Long-term rising costs of transportation fuels, dependence on foreign resources and concern that fossil fuels adversely affect climate have stimulated interest in renewable fuels. Instability and price volatility of oil have caused volatility in the US and World economic climate. There are multiple renewable energy resources (wind, solar, etc.) but, the only viable renewable source of transportation fuels that will not affect food, feed, and fiber production, supported by the government, is plant biomass. Louisiana is rich in natural resources such as forestry and other sources suitable for consideration as bioenergy feedstocks. The climate is also highly adaptable to growth of highly productive to non-food feedstocks which could serve as energy sources such as urban wood wastes and cane biomass. Development of methodologies and technologies for the utilization of such natural resources for the purpose of energy is an important priority for our country's energy-based economy. Additionally, there is need to develop screening strategies to understand trees tolerance to changing environmental conditions and the development of new technologies to improve forest health and resistance to pest.

What has been done

One Evans-Allen research grant was funded to study plant-based mulch products for biophysical management of Oak trees in urban areas of Louisiana. Faculty & staff obtained an externally funded grant to develop biofuels from sustainable alternative non-food feedstocks in Louisiana. A third grant which ended August 2013 studied the application of nanotechnology in forest health management. Some of the goals were to quantify urban forest wood waste biomass; secondly, to process energy cane and various type of urban forest waste biomass with solvents and catalysts into high-quality bio-oil via exposure to electromagnetic fields; and to conduct economic analysis and impact assessment.

The SU Ag Center collaborated with scientists from the LSU AgCenter, USDA-FS, ISA, SAF, Louisiana State University (LSU), Louisiana Department of Environmental Quality (LA DEQ), the

Louisiana Department of Agriculture & Forestry (LA DA&F), the Gulf Coast Cooperative Ecosystem Studies Unit (GC-CESU), and the City of Baton Rouge, LA. in these endeavors. A research symposium and two research seminars and one workshop have been conducted on bioenergy and biofuel production in collaboration with the USDA, LSU, and E-Fuel corporation. A web-based educational bioenergy and biofuel video (Biofuel Research in Louisiana: SU Ag Center) was produced in collaboration with the SU Ag Center and made available on the internet. Two national presentations have been conducted through the Society of American Foresters (SAF) and the International Society of Arboriculture (ISA) conventions.

Results

Five innovative laboratory and field techniques have been developed at SU Agricultural Research and Extension Center (SUAREC-Bioenergy 1-5) to process agricultural and urban vegetative waste to biofuel through the utilization of E-Fuel ethanol production technology at small scale. Several Agricultural feedstocks have been processed for utilization in ethanol production e-fuel technology.

Graduate and undergraduate students from both Southern University and LSU gained useful research knowledge and skills through their involvement in these and other projects. Two Ph.D. students from SU are currently working on the utilization of urban wood waste and agricultural wastes for ethanol production in collaboration with LSU. Findings from these research projects have been publicized in the form of presentations at international, national and regional conferences. The extension agents, research scientists, practitioners, land owners, etc. will continue to benefit from findings of these research projects. Of the 1,741 stakeholders participating in programs on production/harvesting/storage systems, 92 percent increased knowledge; and about 35 percent actually adopted BMPs for production/harvesting/storage systems.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #2

1. Outcome Measures

NATIONAL OUTCOME #7: Develop a diverse and educated workforce for a biofuels industry

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Long-term rising costs of transportation fuels, dependence on foreign resources and concern that fossil fuels adversely affect climate have stimulated interest in renewable fuels. Instability and price volatility of oil have caused volatility in the US and World economic climate. There are multiple renewable energy resources (wind, solar, etc.) but, the only viable renewable source of transportation fuels that will not affect food, feed, and fiber production, supported by the government, is plant biomass. Louisiana is rich in natural resources such as forestry and other sources suitable for consideration as bioenergy feedstocks. The climate is also highly adaptable to growth of highly productive to non-food feedstocks which could serve as energy sources such as urban wood wastes and cane biomass. Development of methodologies and technologies for the utilization of such natural resources for the purpose of energy is an important priority for our country's energy-based economy. Additionally, there is need to develop screening strategies to understand trees tolerance to changing environmental conditions and the development of new technologies to improve forest health and resistance to pest.

What has been done

One Evans-Allen research grant was funded to study plant-based mulch products for biophysical management of Oak trees in urban areas of Louisiana. Faculty & staff obtained an externally funded grant to develop biofuels from sustainable alternative non-food feedstocks in Louisiana. A third grant which ended August 2013 studied the application of nanotechnology in forest health management. Some of the goals were to quantify urban forest wood waste biomass; secondly, to process energy cane and various type of urban forest waste biomass with solvents and catalysts into high-quality bio-oil via exposure to electromagnetic fields; and to conduct economic analysis and impact assessment.

The SU Ag Center collaborated with scientists from the LSU AgCenter, USDA-FS, ISA, SAF, Louisiana State University (LSU), Louisiana Department of Environmental Quality (LA DEQ), the Louisiana Department of Agriculture & Forestry (LA DA&F), the Gulf Coast Cooperative Ecosystem Studies Unit (GC-CESU), and the City of Baton Rouge, LA. in these endeavors. Graduate and undergraduate students from both Southern University and LSU gained useful research knowledge and skills through their involvement in these and other projects.

Two Ph.D. students from SU are currently working on the utilization of urban wood waste and agricultural wastes for ethanol production in collaboration with LSU. Findings from these research projects have been publicized in the form of presentations at international, national and regional conferences. The extension agents, research scientists, practitioners, land owners, etc. will continue to benefit from findings of these research projects.

Results

1. Number of undergraduates working in biofuels labs ____6____
2. Number of graduate students working in biofuels labs ____8____
3. Number of biofuels workers trained ____7____

A research symposium and two research seminars and one workshop have been conducted on

bioenergy and biofuel production in collaboration with the USDA, LSU, and E-Fuel corporation. A web-based educational bioenergy and biofuel video (Biofuel Research in Louisiana: SU Ag Center) was produced in collaboration with the SU Ag Center and made available on the internet. Two national presentations have been conducted through the Society of American Foresters (SAF) and the International Society of Arboriculture (ISA) conventions. Eight graduate students, one post-doctoral associate, and six undergraduate students were trained. The extension agents, research and academic communities, practitioners, land owners, etc. will continue to benefit from findings of these research projects.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)**Program # 6****1. Name of the Planned Program**

Economic and Community Development

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
601	Economics of Agricultural Production and Farm Management		10%		10%
602	Business Management, Finance, and Taxation		50%		50%
607	Consumer Economics		10%		10%
608	Community Resource Planning and Development		20%		20%
610	Domestic Policy Analysis		5%		5%
903	Communication, Education, and Information Delivery		5%		5%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	5.0	0.0	2.0
Actual Paid Professional	0.0	7.7	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	231184	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	209263	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

To address economic and community development issues, Southern University Ag Center conducted the following activities:

1. Worked with existing organizations to strengthen links between businesses, community based organizations and outreach education.
2. Assisted established businesses with planning, market assessment, management, and marketing strategies.
3. Assisted local farmers and other producers to develop alternative enterprise initiatives for rural businesses.
4. Encouraged the development of agribusiness enterprises to include utilization of niche markets (vegetables, organic products pasture-raised poultry and beef, etc.) for agricultural producers.
5. Empowered community leaders and residents in the targeted areas to develop strategic plans for optimum utilization of natural resources (examples- BOLD, SET, Turning the Tide on Poverty, etc).
6. Provided research-based educational information to local and regional government leaders to aid them in policy formulation and strategies to enhance and sustain the small and minority business sector.
7. Disseminated research-based educational information to citizens through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.
8. Collaborated with local, state and federal agencies to conduct a procurement conference for business owners and potential business owners.

2. Brief description of the target audience

Rural and urban dwellers, and those needing assistance with business start up and expansion were primary targets. Others targets include those who continued to experience high levels of poverty due to lack of economic opportunities. Also, individuals and communities with lack of skills for business start-ups, business expansions, housing, economic development and growth benefited. Under-represented, underserved, socially and economically disadvantaged groups in traditionally agricultural and urban communities in the state were also targeted.

3. How was eXtension used?

eXtension was used mainly by referring clients to the webpage and also referral of clients to "Ask an Expert" section.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	12752	160440	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2013	391

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2013	173192

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2013	2440

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	19

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	1. Percent of clients who gained new knowledge/skills or gained awareness
2	2. Percent of adoption rate for recommendations by clients
3	3. Percent of clients who changed behavior or utilized information to gain positive economic results

Outcome #1

1. Outcome Measures

1. Percent of clients who gained new knowledge/skills or gained awareness

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana suffered economically and socially as a result of hurricanes and oil spill; these factors had devastating impact on business expansion growth and investment. The state was ranked among the top five states for poverty and for the opportunities of mainstream America. Louisiana's poverty rate (17 percent) was higher than the national average (12 percent). Poverty rate in some rural Louisiana parishes (counties) was as high as 27 percent. Rural areas in Louisiana suffer greatly from a lack of access to education, access to broadband internet connectivity, adequate healthcare, and persistent poverty. Most rural residents who do not have internet connections in their homes are completely excluded from the world wide web.

What has been done

In FY 2013, SU Ag Center refurbished an existing mobile unit with internet-ready laptop computers and printers to launch the E-Learning Mobile Unit. In collaboration with faith-based organizations and other community groups in 38 parishes the unit conducted online and other sessions in Microsoft Office Excel, Quick Books, Access, Publisher, E-Business, etc. to rural residents who do not have access to the internet. Sixty-five E-business sessions were conducted with 1,365 participants who learned the techniques of doing business online. They (some, for the first time) also learned Microsoft Office Excel, Quick Books, Access, Publisher etc. applications and other forms of information technology brought to them in a close proximity.

Additional services provided through the E-Learning unit were: how to start and/or expand a business, how to market a business, proper accounting practices, how to develop a business plan, introduction to QuickBooks, how to gain access to capital, loan packaging assistance, how to manage cash flow, how to brand a business and other topics applicable to entrepreneurship. Parishes covered by the E-Learning Center include: Acadia, Ouachita, Allen, Pointe Coupee, Assumption, Rapides, Avoyelles, Red River, Bienville, Richland, Caddo, St. Helena, Caldwell, St. Landry, Catahoula, St. Mary, Claiborne, Tangipahoa, Concordia, Tensas, De Soto, Vermilion,

East Carroll, Washington, East Feliciana, Webster, Evangeline, West Carroll, Franklin, West Feliciana, Iberia, Winn, Iberville, Lincoln, Madison, Morehouse, Natchitoches and Orleans.

Results

Community leaders in three parishes (counties) gained knowledge on e-business and how it could impact the development and growth of businesses and ultimately economic development in their areas.

Participants at the E-Business seminars gained useful knowledge and skills needed to enhance their businesses practices, family and personal lives. Some of the participants were able to use the internet services provided to submit job applications, resumes, college applications, benefit applications, etc. A survey of the participants indicated that 100 percent of them said knowledge and skills gained will be useful to them and beneficial to enhancing their businesses and family lives. They also indicated that they will share information obtained at the seminars with their colleagues. Participants also stated that attendance at seminars conducted by the SU Ag Center saved them money in the form of fees that they could have paid to commercial seminars organizers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
608	Community Resource Planning and Development
610	Domestic Policy Analysis
903	Communication, Education, and Information Delivery

Outcome #2

1. Outcome Measures

2. Percent of adoption rate for recommendations by clients

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Data collected from community residents, business owners, faith-based leaders, community leaders and varying disciplines across the state of Louisiana revealed the need for leadership development and board training statewide. Louisiana citizens and communities suffered economically and socially as a result of hurricanes and oil spill; these factors had devastating impact on business expansion growth and investment. The state was ranked among the top five states for poverty and for the opportunities of mainstream America. Louisiana's poverty rate (17 percent) was higher than the national average (12 percent). Poverty rate in some rural Louisiana parishes (counties) was as high as 27 percent. Rural areas in Louisiana suffer greatly from the lack of access to education, access to broadband internet connectivity, adequate healthcare, and persistent poverty. Many parishes (counties) developed individual strategic plans in hopes of attracting business and industry to their areas. What was lacking was the ability of these parishes to collaborate their strengths by coming together as a region to attract new businesses and industries. This project was developed to assist with this effort and piloted across selected states throughout the southern region of the U.S.

What has been done

In FY 2013 SU Ag Center faculty & staff continued to implement the Building Opportunities through Leadership Development (BOLD) program by conducting sessions for selected community leaders across the state. A training manual was developed in FY 2012, educational training sessions were held for cooperative extension agents on how to implement the leadership development manual.

In FY 2013, 24 individuals within rural and poverty-stricken communities selected to become leaders of change within their own communities actively participated in the following:

- Participated in 10 sessions and two experiential learning field trips.
- Facilitated dialogue and built relationships among individuals in their parishes and state among persons in leadership positions.
- Received laptop computers and were trained on the use of technology, MS Office and the internet to gather, assemble, analyze, and utilize information as leaders to the benefit of their communities.
- They were also taught effective use of technology and social media in modern electronic communications.

Other activities for the year were:

Leadership Styles Inventory (pre-test); Leadership Practices Inventory Assessment (post-test); monthly training sessions; SkillPath Training on Leadership Development and Management; community leadership development tours to New Orleans, LA; Jackson, MS; and Atlanta, GA. Additionally, project personnel and volunteers implemented the following:

- Worked with community organizations to expose participants to local opportunities to be in leadership roles.
- Compiled 100 leadership development manual and workbook with culturally appropriate messages, guides, education and instructional tools to improve leadership skills.

Results

In FY 2013, the BOLD program recorded the following impacts:

- All 24 participants reported being more engaged citizens as leaders in the communities. One graduate of the BOLD program was appointed by the Office of the Governor as a board member for Department of Health Services for state of Louisiana as a result of her participation in BOLD.

- The project director obtained another external grant for \$250,000 to implement Building Opportunities through Leadership Development (BOLD) program.
- Participants gained knowledge and skills from experts during the training sessions and are utilizing some of the information they obtained. Increased leadership skills and confidence among 24 participants by 100% according to surveys conducted, in their abilities to be leaders in their communities and the positions they serve.
- Increased ability to identify opportunities and strategies to lead community.
- Sustain existing nonprofit and faith-based organizations currently addressing economic development issues.
- Use strategies during leadership project to change one issue in community.
- Address the need for individuals within rural and poverty-stricken communities to lead economic development issues. Develop new ideas that lead to successful community change.
- Knowledge of technology and its uses in communicating leadership, including the use of laptop, I-Pad, I-Phone, and other social media communication tools.
- One student, three project staff, and several volunteers gained new knowledge and skill about leadership training and development.
- One participant has become more involved in local and state politics, having run for office and lost by less than 1%. But, he has built relationships with state and national legislators and senators, addressing crime in rural communities.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
608	Community Resource Planning and Development
610	Domestic Policy Analysis
903	Communication, Education, and Information Delivery

Outcome #3

1. Outcome Measures

3. Percent of clients who changed behavior or utilized information to gain positive economic results

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
------	--------

2013

0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana suffered economically and socially as a result of hurricanes and oil spill; these factors had devastating impact on business expansion growth and investment. The state was ranked among the top five states for poverty and for the opportunities of mainstream America. Louisiana's poverty rate (17 percent) was higher than the national average (12 percent). Poverty rate in some rural Louisiana parishes (counties) was as high as 27 percent. Rural areas in Louisiana suffer greatly from a lack of access to education, access to broadband internet connectivity, adequate healthcare, and persistent poverty.

What has been done

During FY 2013, the SU Ag Center did the following: worked with profit and non-profit organizations to strengthen links between businesses and community-based organizations; assisted small businesses with planning, market strategies/assessment, and management; assisted area local farmers to develop alternative enterprise initiatives. For FY 2013, 46 technology outreach workshops were conducted with 1,410 persons in attendance. Microsoft Office Excel, Quick Books, Access, Publisher and E-Business seminars are also continuing in seven Louisiana rural parishes. In collaboration with community organizations, 135 computers with access to the internet are available in 14 locations mainly in rural areas to serve 3,440 users. Additionally, the annual procurement conference was conducted with over 340 business owners and potential business owners in attendance.

Results

The 135 computers with internet access available in 14 locations and used by over 3,440 individuals saved those users about \$101,200 in annual bills payment. At the 2013 Procurement Conferences where 340 business owners and potential business owners participated, 96 percent respondents to a survey indicated that they gained knowledge and skills while 95 percent said knowledge and skills gained would be useful to their organizations in areas such as grant writing, evaluation, leadership, strategic planning, etc. Some 12 businesses were assisted in preparing loan application packages. Participants in the Microsoft Office Excel workshops, Quick Books, Access, Publisher and E-Business seminars are utilizing knowledge and skills gained to enhance their businesses, family and personal well being. With the assistance of our staff, 12 procurement contracts in construction and home renovation were awarded to several small contractors. In addition, 28 new businesses were started which created and retained 18 new jobs in the state. The Center for Rural and Small Business Development provided counseling, developed a business plan, financial statements and assisted in completing a loan package for a couple to start packaging their products. Their business developed creole seasoning called "Ha U Want it" which is selling in various local stores.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
608	Community Resource Planning and Development
610	Domestic Policy Analysis

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)**Evaluation Results**

- 96 percent gained knowledge and skills on how to procure contracts
- 95 percent said knowledge and skills gained will be useful to their organizations in areas such as grant writing, business assessment, leadership, strategic planning, etc
- The Center for Rural and Small Business Development provided counseling, developed a business plan, financial statements and assisted in completing a loan package for a couple to start packaging their products. Their business developed a new creole seasoning called '**Ha U Want it**' which is selling in various local stores.

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 7****1. Name of the Planned Program**

Family and Human Development

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle		10%		10%
801	Individual and Family Resource Management		40%		40%
802	Human Development and Family Well-Being		40%		40%
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures		5%		5%
805	Community Institutions, Health, and Social Services		5%		5%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	5.0	0.0	3.0
Actual Paid Professional	0.0	4.5	0.0	2.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	159601	0	113762
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	258039	0	128588
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	2000

V(D). Planned Program (Activity)**1. Brief description of the Activity**

The following activities were conducted:

- Extension and Research faculty worked cooperatively to develop and disseminate educational materials devoted to helping the family set goals and manage limited resources.
- Community Volunteers (advisory committee, Community organizations, etc.) were organized to help disseminate information, increase awareness and implement programs.
- Partnerships with financial agencies were solicited and their expertise utilized to educate clients.
- Research results and other information were communicated to customers through extension personnel in the form of publications, conferences, workshops, home/office visits, demonstrations and other educational resources.
- Collaborated with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
- Others include: Nutrition Classes, Emergency Preparedness Training, Child Care Classes, Second Chance 2 Recover workshops, etc. And also,
Training sessions for adults and children
Parenting Workshops
Parish and home visits
Demonstrations

2. Brief description of the target audience

There are large numbers of low income and limited resource families in Louisiana who reside in the target areas that the SU Ag Center serves. Most of these families lived below the poverty level. They lacked knowledge, information, and/or skills to utilize existing resources to improve their parenting and child care skills, family nurturing, learning, resource management, and quality of life. Children and adolescent who are placed at risk and those that are potentially at risk als benefited from the services provided by this planned program.

3. How was eXtension used?

eXtension was used in this program mainly for the purpose of referring community organizations to the "Ask an Expert" forum.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	17962	30434	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	1	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2013	432

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2013	48396

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2013	7765

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	36

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	1. Percent of clients who gained new knowledge/skills or gained awareness about Family and Human development issues
2	2. Percent of adoption rate for recommendations by clients
3	3. Percent of clients who changed behavior, attitude or lifestyle

Outcome #1

1. Outcome Measures

1. Percent of clients who gained new knowledge/skills or gained awareness about Family and Human development issues

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana, like many coastal states has endured the devastating impacts of hurricanes Katrina (2005), Rita (2005), Gustav (2008), Isaac (2012). The most intense storm to affect the state in terms of barometric pressure is Hurricane Katrina of 2005, which also caused the most fatalities and damage with 1,577 total deaths and \$81 billion in total damages. Most of these fatalities caught the residents unprepared and without adequate family emergency plan. In 2010, the Gulf Oil Spill caused untold sufferings in the lives of residents especially fishermen and costs several billions in clean up. Four years later, residents are still trying to recover. Not only did these hurricanes and oil spill affect local residents, it also impacted negatively on local, state, national and international economy. Better preparations could have saved lives from direct impacts and also from food and water poisoning.

What has been done

SU Ag Center faculty and staff obtained grants to offer educational information to residents, families, organizations and businesses on how to prepare for disaster. Pamphlets, fact sheet, flyers, bulletin were developed and distributed statewide. Thirty one (31) workshops and seminars were conducted by faculty and staff. These sessions were attended by 1,340 during FY 2013 where educational information was provided to residents, families, organizations and businesses on how to prepare for (before, during, and after) disaster. Homeland Security experts and law enforcement officers also presented materials to participants. Participants were exposed to emergency evacuation drills and emergency telephone numbers for the local areas were also provided at each workshop. Those who had experienced disaster first hand provided information based on their experiences. Emergency preparedness information was also posted on the SU Ag Center webpage which is easily accessible to residents.

Results

The 1,340 residents who attended the workshops and seminars received useful information from presenters. One hundred (100) percent of the participants indicated that they gained new knowledge and skills on how to prepare for disaster. They also said that they will be better prepared for the next disaster. Another 95 percent indicated that had they been exposed to these types of workshop, they could have prevented some of the fatalities, property lose, business lose, and sufferings. On the survey, 100 percent of the participants indicated that they will definitely share information obtained at the workshop with others. We estimate that our workshops and educational information have prepared residents for emergency situations. We also estimate that over 100,000 people have gained some knowledge indirectly as a result of educational information provided by the SU Ag Center especially through faith-based organizations and schools.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #2

1. Outcome Measures

2. Percent of adoption rate for recommendations by clients

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana is home to many prisons and correctional institutions. Louisiana has the highest rate of imprisonment in the United States. As of January 2008, one out of every 55 adults in Louisiana was behind bars, either in prison or in jail (http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=327561). Although,

skyrocketed from \$106 to \$548 million, the state is maintaining the status of having the highest incarceration rate in the world and one of the highest violent crime rates in the country. A great majority of those who are incarcerated are young males of African-American descent. Once incarcerated, most of these prisoners do not have enough rehabilitation to deal with the stress associated with being away from their families and the larger free society once they are released. Also, despite the fact that they acquired technical and other useful job enhancing skills while in prison, the prisoners do not have the skills to write and submit good resumes for jobs. Upon release from prison, most of these individuals will re-offend as a result of not having access to adequate post-prison rehabilitative services, which lead to their being imprisoned again. Nationally, in 2002 the recidivism rate was reported in 41 states to be about 45 percent. There was an overwhelming need for these individuals to receive broad trainings in resume writing and for parents, training in stress and anger management before being released from prison. These individuals, their families, society in general could benefit from the skills acquired before the prisoners are released.

What has been done

SU Ag Center faculty obtained two external grants to conduct prison pre-release/re-entry "Second Chance 2 Recover" and living interactive family education 4-H LIFE programs to inmates. Second Chance 2 Recover classes were conducted at Elayn Hunt Correctional Center (EHCC), Iberville Parish; Louisiana Correctional Institution for Women (LCIW), Caddo Parish; and East Baton Rouge Parish Prison; while 4-H LIFE classes were conducted at Opelousas City Jail and East Baton Rouge Parish prison. The staff and volunteers provided classes to inmates who were within 3-6 months of being released. One class is a replication from the University of Missouri's 4-H LIFE program which provided parenting classed to inmates and affords inmates an opportunity to have intimate family visits, using a 4-H meeting model. The other, "Second Chance 2 Recover" includes a mentoring and caregiver component to provide additional support the the family and child. Program staff received instructions on how to deal with incarcerated individuals and how to conduct workshops in prison and correctional establishments. Workshops were conducted for prisoners who are parents, resume writing sessions were conducted with the following topics: Budgeting, Money Management, Addictive Behaviors, Anger Management, Communication Skills, Developing Job Skills and Plan of Action (This class includes inmates developing a plan of action to implement once they are released), Resiliency and Optimism, and Self-Esteem: Who Am I? For the program year, there were 36 classes provided at the aforementioned sites to 1,367 inmates (665 male and 702 female). Participants for each location were: 529 males -EHCC, 405 females -EBR Parish Prison, 297 females -LCIW, and 136 males-Northwest Reentry Program, Caddo Parish.

Results

Approximately 1,367 inmates who attended the workshops/training sessions gained knowledge and learned how to handle anger and stress and how to write resumes. More than 95 percent of the participants actually developed their resumes which they said will assist them with finding gainful employment once they are released from prison. Approximately 91 percent indicated that they will avoid stress and anger because the lessons they learned had actually given them facts to consider and be thankful for.

The Second Chance 2 Recover (SC2R) Program has continued to provide prison-based services to inmates without federal or state funds. In 2011, the SC2R Program expanded prison-based services to Caddo Parish and surrounding parishes. The SC2R staff was featured in Eylan Hunt Correctional Center Louisiana's Progressive Prison News Magazine "The Walk Talk" July-September 2012; (Volume 32, Issue 3. Page 12). In that issue of the "The Walk Talk", SU Ag Center conducted mock interviews with inmates who were preparing to return to their communities within 3-6 months.

Another program, 4-H LIFE has been awarded funding for the 3rd consecutive year. The Louisiana 4-H LIFE program was featured in the 4-H National Mentoring Program Newsletter September 2012. (Volume 1, Issue 5. Page 1.)

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #3

1. Outcome Measures

3. Percent of clients who changed behavior, attitude or lifestyle

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana has about 15,000 child care providers and over 215,900 children are enrolled in or in need of child care. About 12,000 of the workers are in licensed child care facilities or registered family child care homes. Children living in low income families are usually less likely to be enrolled in child care center. There was an overwhelming need for early child care along with continuous and comprehensive training for parents with limited or no resources and a lack of self-sufficiency. There is a strong connection between high quality early childhood programs and later success in school. Parenting programs help parents develop skills that will provide positive and effective parenting. The culturally sensitive program provides educational information basis norms and family values.

What has been done

The state of Louisiana requires that child care providers have 12 hours of continuing education hours annually, especially if they are to receive monetary benefits from the state for services rendered to limited income families. In order to ensure that childcare/Head Start providers deliver quality care, 1669 providers in three Louisiana parishes (counties) - Acadia, East Baton Rouge, & St. Landry have received at least six hours of professional training. To accommodate the needs of the underserved and socially disadvantaged, these training sessions were offered at convenient and flexible times, and held in accessible locations for providers in rural and urban areas of the state. Classes taught to the providers were based on the competency levels of the Child Development Associate (CDA) Credential. In FY 2013, Southern University Ag Center continued the sessions in partnership/collaboration with faith based-organizations ministries, families, etc. Additionally, workshops were organized for parents, head start and child care centers. Childhood obesity prevention was part of the course offered during the training for child care providers.

Results

The 1669 Child care/ Head Start providers who attended classes conducted by the SU Ag Center saved over \$367,180 in fees and charges. Survey of the participants reflects knowledge gained and some behavior changes as a result of attendance at the training.

In addition, 514 parents participated in the Parents Preparing for Success (PPS) Program which provided basic parenting training and financial/time management training to new mothers. Over 57 participants graduated after completing all six classes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal

Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)**Program # 8****1. Name of the Planned Program**

Youth Development

☒ Reporting on this Program**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle		20%		20%
806	Youth Development		80%		80%
	Total		100%		100%

V(C). Planned Program (Inputs)**1. Actual amount of FTE/SYs expended this Program**

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	9.0	0.0	2.0
Actual Paid Professional	0.0	8.4	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	308354	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	300591	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

The following activities were continued: Livestock Show, Rabbit Show; Youth Educational Support (YES) and After School Program; Parish Achievement Days; Science Fairs; Field Trips; Family and Youth

Exposition.

- Meetings/workshops, PSA'S, fact sheets, media literacy were conducted; and mentoring programs (with community leaders); and peer counseling were developed.
- Research-based educational information were obtained and communicated to youth through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.
- Collaborated with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
- -Focused on the learning experience of children, youth, and families in communities with at risk environments to increase self-reliance, self-esteem, and confidence.
- -Organized youth Back-to-School Summit to address risky behaviors and encourage healthy lifestyles.
- -Taught business techniques, ethics and etiquette as prerequisite to business start-up.
- -Showed aspiring entrepreneurs how to identify potential business opportunities.

2. Brief description of the target audience

A large number of children under 18 years of age are placed at risk because their families survived on low income and limited resources. They lacked knowledge, information, and/or skills to utilize existing resources to improve their quality of life. Eighteen percent of Louisiana families with children and 23 percent of adults without children live in poverty. Poverty rates were higher among African-Americans (44 percent) and children 18 and under (31 percent). Louisiana ranks 13th in the US for Food Stamp Program participation, 74 percent of those eligible. The program targeted such children ages 5 -18 years who were vulnerable to these situations. Parents and/or guardians of these children were also targeted. Additionally, children and adolescents who were placed at risk, those who were potentially at risk and children who needed forms of mentoring also benefited. Program staff and volunteers were trained to ensure effective and efficient delivery of information.

3. How was eXtension used?

eXtension was used mainly for the purpose of referring community organizations and youth groups to the "Ask an Expert" forum.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	87229	0	76116

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2013	1721

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2013	163395

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2013	11410

Output #4

Output Measure

- 4. Number of research & extension outreach publications developed (in-house)

Year	Actual
2013	15

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	1. Percent of youth who gained new knowledge/skills or awareness
2	2. Number of volunteer leaders (trained to lead youth participants)
3	3. Number of youth participants involved in community activities
4	4. Percent of youth who changed behavior, attitude or lifestyle

Outcome #1

1. Outcome Measures

1. Percent of youth who gained new knowledge/skills or awareness

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana youth, like their counterparts in other American states face series of problems including: lack of access to health and mental health care; child abuse and neglect; failing schools; "zero tolerance" school discipline policies; tougher sentencing guidelines on drugs and violence, racial and economic disparities; a lack of positive role models and a culture that glorifies excessive consumption violence and triviality. Louisiana's urban and rural youth lacked enrichment programs which focused on life skills, agricultural skills, social skills, and academic enhancement. Youth are still learning about the benefits of being involved in agricultural projects. 18 percent of Louisiana's families with children and 23 percent of adults without children live in poverty. Poverty rates are higher among African-Americans (44 percent) and children 18 and under (31 percent).

What has been done

SUAREC's Livestock Program designed activities that brought together the extension agents, agriculture teachers, students, parents and community supporters. These activities provided opportunity for the youth of Louisiana to develop high self esteem, leadership skills, and entrepreneurship skills. Livestock training programs were conducted that taught proper handling techniques, health management, production management, and proper showmanship techniques. These livestock programs carry a strong legacy of providing youth of Louisiana the possibility of learning valuable life skills and developing character by participation in a livestock or horse project. SUAREC conducted 12 meetings with 467 youth participants, parents, agriculture teachers and community supporters; contacted 589 individuals, made media appearances (including video post on Youtube) at: <http://www.youtube.com/watch?v=q36HcSDTTtM> in preparation for the year's shows and activities.

Results

Through the auction process, SUAREC assisted youth participants in selling over \$66,325 worth of products that received premium values totaling \$9,100 above fair market prices. On average, the champion market lamb received \$4,240; the champion market steer received \$3,600; champion market swine received \$1,650; and the champion market goat received \$2,000. These animals were purchased from Louisiana's youth with money donated by livestock contributors. A survey conducted during the previous (2012) Livestock show indicated that preparing for the Show helped them as follows: 94 percent learn how to manage their time; 98 percent developed self confidence; 96 percent developed critical thinking skills; 96 percent developed leadership skills, and 87 percent learned business management skills. Youth participants and exhibitors also acquired knowledge about planning and running a livestock business, being peer mentors and volunteer leaders. About 90 percent of 2013 participants had attended/exhibited at the SU Ag Center Annual Livestock Show in the past. A great testament to the value of the SU Ag Center's Annual Livestock Show is that parents and grandparents who had exhibited at the Show have continued to accompany their children/grandchildren to this 3-day event year after year. Faculty and staff expanded outreach via social media to reach youth using Youtube. In addition, volunteers worked for three days donating about 328 hours of their time (approximately \$3,280) to assist during the shows.

One other outstanding impact of the Livestock Show is that it garners a lot of community support which translates into contributions to buy the champions at premium price which also helps to sustain the program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

Outcome #2

1. Outcome Measures

2. Number of volunteer leaders (trained to lead youth participants)

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
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2013

0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Louisiana youth, like their counterparts in other American states face series of problems including: lack of access to health and mental health care; child abuse and neglect; failing schools; "zero tolerance" school discipline policies; tougher sentencing guidelines drugs and violence, racial and economic disparities; a lack of positive role models and a culture that glorifies excessive consumption violence and triviality. Louisiana's urban and rural youth lacked enrichment programs which focused on life skills, agricultural skills, social skills, and academic enhancement. Youth are still learning about the benefits of being involved in agricultural projects. 18 percent of Louisiana's families with children and 23 percent of adults without children live in poverty. Poverty rates are higher among African-Americans (44 percent) and children 18 and under (31 percent).

What has been done

To combat the devastating effects of severe state budget reductions on research and extension activities, SUAREC's Youth Program recruited volunteers to assist in programs. Four hundred and thirty individuals volunteered during scheduled activities in FY 2013, and 305 of these volunteers were trained to assist in activities such as the livestock show, youth and family exposition, back-to-school summit and other large events that normally attract large crowd of participants and visitors. Volunteers comprised youth, retired extension agents, agriculture teachers, parents and community supporters. These activities provided opportunity for the youth of Louisiana to develop high self esteem, leadership skills, and entrepreneurship skills.

Results

In the past five years, the state general funds for the SU Ag Center had been reduced by about 45 percent amidst increasing needs for extension and outreach activities. The recruitment and participation of 305 volunteers with an average of 20 volunteer hours greatly enhanced the ability of the center to deliver service to youth. Their volunteer assistance saved the tax payers over 13,500 hours of work or an equivalent of 2.93 FTE (about \$73,200 in real time wages). Additionally, volunteers gained new knowledge and skills which were greatly beneficial to them, their families and communities.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

Outcome #3

1. Outcome Measures

3. Number of youth participants involved in community activities

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

Outcome #4

1. Outcome Measures

4. Percent of youth who changed behavior, attitude or lifestyle

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Food and Agricultural systems have called for graduates with strong backgrounds in science, technology and humanities. As in the previous decades, projections indicate that there will not be sufficient numbers of graduates to fill crucial scientific and professional positions (Goecker et.al, 2005). Due to the negative connotations, unless exemplary initiatives are designed, supported and implemented, the agricultural industry in the USA may not have sufficient scientists and staff to fill vacant positions. Additionally, African-Americans and other minorities have had negative experiences with agricultural endeavors, these audiences still do not fully participate in this industry, primarily beyond service level positions. Bitter memories of poverty, slavery, and low socioeconomic status continues to cloud many minority people's perceptions of agriculture as a profession (Larke and Barr, 1987, p 6). Financial assistance is a major concern for poor and underserved students and parents when choosing academic majors and career paths. In Louisiana, financial assistance is available to high school students who score high in both the ACT/SAT and the cumulative grade point average.

What has been done

The ongoing grant to enhance student's knowledge and application of standardized test taking skills through instruction in English, mathematics, science reasoning, communication skills, the humanities and computer literacy continued in FY 2012 and FY 2013. Seventeen (17) high school juniors from across the state of Louisiana participated in an intensive 5-week summer preparatory program in FY 2011 and 2012, while 21 students were in the program in FY 2013 to meet the minimum requirements necessary to take advantage of the Louisiana Tuition Opportunity Program for Students (TOPS).

Phase I: For the participants, their experiences consisted of: 1) an orientation session; 2)

multimedia classroom and laboratory teaching of mathematics, science reasoning, the humanities, computer literacy, English and communication skills; and 3) experiential short courses in the food and agricultural sciences highlighting horticulture, urban forestry, animal science, agricultural economics, food science, human nutrition, clothing and textiles and leadership development. Additionally, a representative from the Princeton Review Test Prep Center, Baton Rouge, provided instruction to the participants twice a week. This course lasted four and one-half weeks (totaling 18 hours of instruction) and included three practice ACT tests.

Phase II - provided pre-collegiate experiences and opportunities for students via working with USDA field offices. Fifteen of the 17 students who completed Phase I of the project returned for Phase II. A one-week orientation session was held on the Southern University campus to reinforce the professionalism and other key concepts that the students would need before going out to work in a business setting. Each of these students completed 7 week internships with USDA and other public sector agencies in their home parishes. The project director along with the co-project director visited each student on their worksite and interviewed the direct supervisor.

Another externally funded grant focused on creating a systemic mentoring to attract, retain, and train minority students for career opportunities in the global economy. The program, called the Ag STARS (Shaping Tomorrow's Agricultural Research Scientists) recruited 15 students and mentored them in the following skills - scientific research, writing skills, oral communication skills analytical skills, and critical-thinking skills.

Results

- One external grant was received by a co-project director for \$249,979 to continue funding the program for another three years.
- 100 percent of the participants improved their ACT scores, 41% qualified for TOPS, and 41% scored close to qualifying for TOPS.
- Each participant (and their parent) saved \$2,400 (a total of \$41,000 for 17 participants. Besides, the participants gained useful knowledge of college life and how to adjust away from home.
- With a very rigorous schedule, each participant also performed 20 hours of community service with several organizations including entities that cater for at-risk youth.
- 100 percent of the participants have indicated interest in enrolling in college and pursuing courses in agriculture and food discipline.

Phase II:

- Nine (60%) of the 15 students who completed Phase II of the project are enrolled as freshmen at Southern University and of that number eight (53.33%) have declared a major in the College of Agricultural, Family and Consumer Sciences.
- Seven (46.67%) of the students received the TOPS scholarship (savings of about \$112,000 in four years @ \$16,000 per student).
- All 17 (100%) of the Phase I participants are enrolled in College.
- As a result of their participation, these 17 students may save over \$450,000 in college related costs for four years.

The final evaluation of the experiences indicated that 100% of the student and 100% of the USDA staff supervisors felt that the arrangement worked for them. All (100%) of the supervisors felt that this was a wonderful opportunity for the students and the students indicated that they learned a lot of things and would participate in this type of experience if offered again.

The Ag Stars participants made three oral presentations at 27th annual Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) Conference held in Jacksonville, Florida

from April 7-10, 2013; and received two first prize awards in the Undergraduate Oral Research Contest.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Ongoing economic struggle caused serious setback on the availability of funds. In FY 2013, state appropriations were increased for the first time in almost six years. Federal Sequestration caused reduction in appropriations thus resulting in budget problems. Government priority changes caused the relocation of some program participants resulting in decline in number of citizens impacted. Additionally, Louisiana rural population continued to lag behind other 1890 states which resulted in the SU Ag Center receiving less federal formula funds. Furthermore, the continuing recovery from previous hurricanes (2005 and 2008) and the 2010 oil spill caused problems in the state and impacted outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}