

2014 Southern University and A&M College Combined Research and Extension Annual Report of Accomplishments and Results

Status: Accepted

Date Accepted: 06/01/2015

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 2014, the Southern University Agricultural Research and Extension Center (SUAREC) planned its programs to address NIFA Priority Science Areas, NIFA National Challenge Areas, and to address other pressing needs of Louisiana residents. The primary focus was to assist diverse audiences especially the underserved and those with limited social and economic resources improve their access to positive opportunities through research and outreach education. SUAREC tried to help small-scale and limited resource farmers and ranchers develop and/or maintain viable 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 well-being and quality of life for families and youth throughout the State. To ensure that clientele needs were addressed effectively, the research and extension programs targeted the same clients. Research projects were designed with inputs from stakeholders and the findings were specially packaged and disseminated by the extension agents and specialists.

The State's budget problems continued in 2014 as in previous years and is projected to be more severe in FY 2015 and forward. However, the SU Ag Center received one-time funding in state appropriations to facilitate infrastructure repairs and building. State funding to the Center has been reduced by about 39 percent between 2008 and 2014. Some of these budget reductions oftentimes occurred in the middle of the fiscal year. These resulted in under implementation of some projects. Loss of employees and the uncertainty of replacing them was one of the consequences of state budget reductions. 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 about \$2 million** to conduct research and provide research-based educational information and services to residents 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 state budget reductions continue.

Other highlights of 2014:

This year, 27 volunteers in the obesity prevention study lost between 5-45 in 20 weeks by participating in nutrition education intervention classes and physical activities. The project's quarterly publication "**Whey 2 Go Newsletter**" continued to circulate nationally. Research and training of new generation scientists in hibiscus utilization, development of biofuel and ultraviolet-B monitoring were also progressing with **10** graduate students developing their thesis/dissertation from the projects. The Agricultural Leadership Institute which has attracted participants from 16 states (Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia) continued to recruit and train agricultural leaders. These participants undergo intensive workshops where they gain new knowledge and skills to share, improve well-being of people and make a difference in their states. Twenty-four small producers graduated from the leadership

institute in 2014 bringing the number of graduates to 114 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. A 2014 survey of the Leadership graduates revealed as follows:

- 100 percent of the respondents said that with information from the Agriculture Leadership Institute, they found new business opportunities and networks for collaboration.
- 100 percent of the respondents said that with the help of the Ag Leadership Institute, they actually tried new ideas.

The other responses were as follows: Since I graduated from the Agriculture Leadership Institute, I have been able to:

1. Improve my business decisions , 100 percent
2. Mentor other farmers (or business owners), 100 percent
3. Help improve my community, 92.9 percent
4. Serve on a local, state or national committee, 57 percent
5. Increase business income, 78.6 percent

The procurement conference attracted **350 small business owners and potential owners**, and the **71st Annual Livestock Show had over 303 exhibits in addition to 2,100 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: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	40.0	0.0	39.0
Actual	0.0	39.0	0.0	42.6

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 routinely conducts internal review of all research projects and extension programs to ensure that they meet and address the needs of Louisiana residents. In addition, the USDA/NIFA conducted a civil rights review of our extension program and research projects April 2014. 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. Furthermore, 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 conferences to provide a forum for sharing knowledge and information between research and extension faculty, staff and stakeholders and for creating a model designed to integrate research and extension. 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 residents. The 2014 planning conference was held January 9-10 to review research & extension program and plan for the coming year.

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 employees 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 (County) 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 personnel conduct surveys of target clients and parish advisory councils. The Louisiana Cooperative Extension Service (LCES) annual parish review also indicated 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 used 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. Some publicity tools used in announcing meetings and other events were developed at the SUAREC technology services department.

Agents' plans of work, needs assessment, and information from the forums were submitted to the specialists at the state office. The state specialists met 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 were held periodically to identify

critical areas that warranted 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 were 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 conducted regular surveys of program activities. Participants/respondents at these program activities continued to provide positive feedback regarding the knowledge and skills they gained 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 were made available to the Research and Extension administrators who in turn utilized them to plan and prioritize their program/projects to address the 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 (county) advisory committees and conduct meetings to seek inputs necessary for planning their educational activities. These advisory committees involved 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 were conducted regularly, and important discussions were 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 and challenges. In addition, SUAREC research and extension personnel conducted various activities in FY 2013/2014 such as field days, workshops, classes, training, livestock show, etc. Surveys were employed to seek participants' views regarding knowledge and skills gained, what actions they planned to take 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
- Survey of selected individuals from the general public

Brief explanation.

Stakeholder input served as an important source of information for planning programs and activities at SUAREC. The parish (county) advisory committees were the primary sources of inputs for the extension agents and the extension personnel communicated these inputs to research personnel. 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 was 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 in different areas of the state.

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 meetings were conducted as stated to include extension specialists from the six planned programs and the directors of special projects involving outreach education. Research staff and other service personnel frequently attend these meetings to receive first-hand information about the challenges facing Louisiana residents. Decisions on dealing with issues/challenges 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/challenges, followed with plans of action. Critically important issues were normally brought to the attention of the Chancellor's Advisory Council which also met 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

Louisiana residents face the same challenges as outlined on NIFA's 6 national challenge areas, only at different magnitudes. Obesity appeared to be the number one challenge.

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	1693156	0	2036670

2. Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	0	1693156	0	2036670
Actual Matching	0	1693156	0	2036670
Actual All Other	0	0	0	33627
Total Actual Expended	0	3386312	0	4106967

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	Childhood Obesity
2	Climate Change
3	Economic and Community Development
4	Family and Human Development
5	Food Safety
6	Global Food Security and Hunger
7	Sustainable Energy
8	Youth Development

V(A). Planned Program (Summary)

Program # 1

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: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	5.0	0.0	5.0
Actual Paid	0.0	4.5	0.0	4.8
Actual Volunteer	0.0	0.7	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	250585	0	252552
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	230530	0	282727
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

For the period, we plan to implement the following activities/intervention measures:

1. Conduct obesity prevention research and disseminate research-based information to youth, parents, head start and elementary school teachers, schools administrators, and other citizens/organizations.
2. Research findings and other useful information will be communicated to youth through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.
3. Meetings/workshops; PSA'S, fact sheets, mentoring programs peer counseling will be developed or conducted.
4. Encourage physical activities, youth gardening, and collaborate, cooperate and partner with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to youth and other citizens.
5. Focus on the learning experience of children, youth, and families in communities with at risk environments to increase healthy eating habits.
6. Conduct research on obesity and obesity related diseases by developing new, safe, nutritious and economical food products/functional foods that would reflect a holistic approach while maintaining high quality and regulatory compliances and disseminate findings to families, communities, and other stakeholders.
7. Conduct research on tobacco and tobacco related diseases and disseminate findings and research-based information to youth, families, communities, and other stakeholders.

2. Brief description of the target audience

The program will target 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 will also be beneficiaries. Parents and/or guardians of these children are also targeted. Additionally, teachers, and other school officials who work with children and adolescents who may be at risk of overweight and obesity will be targeted also. It is also necessary to train program staff and volunteers to ensure effective and efficient delivery of educational information.

3. How was eXtension used?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	22170	90143

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

Patent Applications Submitted

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	0	7	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2014	501

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	110360

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	19010

Output #4

Output Measure

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

Year	Actual
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2014

42

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
2014	21210

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 in 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: "Acceptability of Value-added Goat Products by School-age Children- a Strategy to Combat Obesity"; "Childhood Obesity Risk Reduction Risk Initiative for Children in Louisiana"; and "Expanding Nutritional Knowledge and Food Label Use Among College Students in Louisiana". To assess nutrition-related knowledge and attitudes, and to educate school-age children and their caregivers on the nutritional and health benefits of eating goat meat and products, a survey

instrument to determine socio-demographic factors (age, sex, grade etc.), nutrition knowledge and attitudes, consumer perceptions about goat meat consumption, knowledge of the nutritive value of goat meat, chicken and beef, and the effects of fat and salt consumption on consumer's health was disseminated and completed by 59 school age children (10-18 years).

Nutritional knowledge of Choose MyPlate, Dietary Guidelines for Americans 2010, and healthy meal and snack choices and attitudes of middle and high-school students were determined by administering a pretest and posttest of questions using the multiple-choice format and a five-point Likert scale. Nutritional knowledge of elementary students was determined by conducting a pretest and posttest based on selected lessons offered to elementary-school students online by USDA (Choose My Plate).

Results

The results showed that participants in the nutritional knowledge and food label 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.

There was a significant increase in number of participants with increased knowledge of nutrients and their relationship to diseased states; an increase of 76 to 94% for calcium, 10 to 74% for sodium and 73 to 97% for sugars. Knowledge of dietary fiber increased from 47% (pretest) to 83% (post-test), and for the relationship of saturated, trans fat and cholesterol to heart disease 60% (pretest) to 77% (posttest). When asked to determine whether the different categories of fat were good or bad, post test revealed significant increase (83-93%) of youth with increased knowledge compared to 50-77% in pre-intervention.

Knowledge about MyPlate plan increased from 30 -65% among youth aged 10-23, and from 50-76% among youth aged 14-18 years. Knowledge about Dietary Guidelines for Americans increased from 40 -62% among youth aged 10-23 and from 55-70% among youth aged 14-18 years. Sixty percent of the participants considered themselves to be at the right weight while only 46% felt their health to be good. Fifty eight percent of students felt healthy eating helps to fight and prevent infections and diseases pre-nutrition intervention, compared to 81% post intervention. Sixty-five percent (65%) of the participants felt that what you eat affects your health for the next 30 years and beyond before nutrition intervention, compared to 77% post nutrition intervention. Some results of these studies have been shared with the scientific communities.

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
2014	855

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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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; Nutrition and Health Program; and Sustainable Agriculture 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 used three ongoing externally funded extension grants to address obesity and obesity-related 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". Altogether, 265 youth participated in these programs.

The Center also collaborated with the following to implement garden projects:

Zachary Men's Club; Northern Connection (Caddo, Bossier, DeSoto, Morehouse, Madison, and West Carroll parishes); Westside Homeschool; City of Opelousas; School Board, and the Town of Washington; Baton Rouge Mayor's Youth Employment Program; City of New Orleans; St. Helena Parish; and LSU Laboratory School.

Results

-Over 855 young people participated in the garden projects and gained knowledge of sowing seeds, caring for seedlings, planting and caring for crops in the garden.

-These boys and girls actually harvested, prepared and ate the produce from their fields. They were very excited and were ready to begin a new season of gardening.

-They also enjoyed the outdoors, working in the garden and the physical activities.

-The SU Ag Center initiated two collaborations, one with a large corporation - 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>

-95% 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.

-SU Ag Center - Preserving Produce via Canning, Freezing & Drying

<https://www.youtube.com/watch?v=gyQtNRMIp1U>

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 Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	53

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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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

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.

Results

- Participants in this 20-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 5-45 pounds. Some of these individuals have also seen a reduction in the prescription medication that they were taking.
- The participants (of the two sessions: 53) are helping to educate other individuals, families, especially children on healthy lifestyle through diet selections.
- The success of this trial was carried by a widely read newspaper in the state and also available online and print at:
<http://theadvocate.com/features/10765091-123/breaking-the-links-to-obesity> Advocate Online (Available, November 16, 2014) "Breaking the links to obesity: Parents get lesson in healthy eating for their kids' sake: Parents get lesson in healthy eating for their kids' sake"
- 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
- 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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

Pre and Post tests showed the following:

- Participants in the 20-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 5-45 pounds. Some of these individuals have also seen a reduction in the prescription medication that they were taking.
- The participants (for the two sessions - 53) are helping to educate other individuals, families, especially children on healthy lifestyle through diet selections.

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		50%		45%
132	Weather and Climate		10%		10%
133	Pollution Prevention and Mitigation		10%		10%
134	Outdoor Recreation		5%		5%
205	Plant Management Systems		10%		5%
403	Waste Disposal, Recycling, and Reuse		5%		15%
	Total		100%		100%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	3.0	0.0	5.0
Actual Paid	0.0	1.1	0.0	4.4
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	55000	0	243992
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	74040	0	204305
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	3980

V(D). Planned Program (Activity)

1. Brief description of the Activity

During the plan period, we will conduct the following activities/interventions:

1. Research and quantify the environmental benefits of urban forests, carbon sequestration and the urban forest effects on air quality.
2. Research and quantify urban forest effects on UV exposure in relation to proper vegetation design.
3. Communicate research results and other information with citizens through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.
4. Prepare publications such as research reports and highlights based on gulf coast climate/weather studies, plant biosecurity and disseminate information to citizens through extension personnel in the form conferences, workshops, field days, home/office visits, demonstrations and other educational venues.
5. Areas affected by past hurricanes and other natural disasters will receive specific attention to enable them rebuild their tree population.
6. Collaborate, cooperate and partner with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
7. Assist 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 in areas that the SU Ag Center did not have experts onboard were often referred to eXtension for answers to such questions.

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	2670	54381	0	0

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

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	0	5	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2014	83

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	57051

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
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2014 5061

Output #4

Output Measure

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

Year	Actual
2014	5

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
2014	2670

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

Externally funded grant with Evans-Allen research funds were used 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.

A mobile UV monitoring and research station was established at Southern University, this facility was used to train faculty, staff and students through collaboration with USDA UV-B Monitoring and Research Program (UVMRP) at Colorado State University.

Project staff attended and made presentations at the International Union of Forest Research Organizations (IUFRO) XXIV World Congress and the International Union of Photobiology (IUPB) 16th International Congress on Photobiology. Two WebPages were created one through Southern University Ag Center (<http://www.suagcenter.com/tree-ecology>) and the other through Research Gate (https://www.researchgate.net/profile/Yadong_Qi2/publications) to disseminate information pertaining to research findings.

Results

One journal article was published (<http://www.international-innovation-northamerica.com>) and two international presentations were made "UV Radiation and Its Impact on Skin Cancer in the United States" and "UV-B Tolerance Properties Exhibited in Diverse Broadleaf Trees" at the 16th International Congress of Photobiology 2014 IUPB Conference. The results of the UV-B research were 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 M.S. thesis was generated relative to the expanded effort on tree canopy UV transfer model. The project provided experiential learning and research opportunities for two undergraduate student interns from Rice University and two graduate student thesis from Southern University. It also supported a PhD student from Beijing Forestry University, a postdoc research scientist and two international visiting scholars (in collaboration with Chinese Academy of Forestry).

Many urban forestry students have benefited from the project and gained general knowledge on how plants interact with UV radiation. Also, 18 students in the urban forestry program gained knowledge about climate change and UV-B research.

Two WebPages were created (<http://www.suagcenter.com/tree-ecology>) and (https://www.researchgate.net/profile/Yadong_Qi2/publications) to disseminate information pertaining to research findings.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
132	Weather and Climate
133	Pollution Prevention and Mitigation
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
2014	85

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 residents of Louisiana through extension agents.

Other 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.

An invited paper was presented at the 2014 International Society of Arboriculture (ISA) Annual International Conference and Trade Show before over 350 participants.

Results

Eight scientific presentations, three national and two international articles were published. One PhD dissertation is being developed and three M.S. students are developing thesis and capstone projects. An invited paper was presented at the 2014 International Society of Arboriculture (ISA) Annual International Conference and Trade Show August 2-6 before over 350 participants.

This project has increased the capacity of Southern University Ag Center in biomass utilization research. 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.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
132	Weather and Climate
133	Pollution Prevention and Mitigation

134 Outdoor Recreation
403 Waste Disposal, Recycling, and Reuse

Outcome #3

1. Outcome Measures

National Outcome #1: Development of new knowledge and technologies

Not Reporting on this Outcome Measure

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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

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		35%		15%
607	Consumer Economics		10%		30%
608	Community Resource Planning and Development		30%		30%
610	Domestic Policy Analysis		5%		5%
903	Communication, Education, and Information Delivery		10%		10%
	Total		100%		100%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	5.0	0.0	1.0
Actual Paid	0.0	7.6	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	241584	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	229763	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 will conduct the following activities:

1. Conduct research and provide 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.
2. Communicate and disseminate 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.
3. Provide assistance to existing organizations to strengthen links between businesses, community based organizations and outreach education.
4. Assist established businesses with planning, market assessment, management, and marketing strategies.
5. Assist local farmers and other producers to develop alternative enterprise initiatives for rural businesses. Encourage the development of agribusinesses to include utilization of niche markets (vegetables, organic products pasture-raised poultry and beef, etc.) for agricultural producers.
6. Empower 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).
7. Organize grant writing workshops to empower individuals, businesses and communities to enhance their skills on how to write for and obtain successful grants.
8. Collaborate with local, state and federal agencies to conduct a procurement conference for business owners and potential business owners.
9. Utilize surveys/phone bank to receive, store, analyze and utilize data for planning and implementation of programs and activities.
10. Conduct research-based market assessment (including focus groups).
11. Building/enhancing coalitions for business development and expansion.
12. Provide education and training for low skilled individuals to prepare them for the job market. :

2. Brief description of the target audience

Rural and urban dwellers, and those needing assistance with business start up and expansion are primary targets. Others targets include those who continue 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 will benefit. Under-represented, underserved, socially and economically disadvantaged groups in traditionally agricultural and urban

communities in the state will also targeted.

3. How was eXtension used?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	13862	137160	0	0

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

Patent Applications Submitted

Year: 2014

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	0	1	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2014	285

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	151022

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	11100

Output #4

Output Measure

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

Year	Actual
2014	42

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
2014	5775

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 2014, 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. In FY 2014, 30 technology outreach workshops were conducted with 2,775 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 over 3,000 users. Additionally, the annual procurement conference was conducted with about 350 business owners and potential business owners in attendance.

Results

The 135 computers with internet access available in 14 locations and used by over 3,000 individuals saved those users over \$100,000 in annual bills payment. At the 2014 Procurement Conferences where 350 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, 29 procurement contracts in construction and home renovation were awarded to several small contractors. In addition, The Center assisted 41 new businesses with startup which created and retained 33 jobs in the state.

The Center for Rural and Small Business Development provided counseling, assisted in developing business plans, financial statements and also assisted in completing loan packages for five business owners.

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
2014	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 2014 SU Ag Center faculty & staff continued the Building Opportunities through Leadership Development (BOLD) program by conducting sessions for selected community leaders across the state. A training manual developed in 2012 was used for educational training sessions held during the 2014 activities.

The program graduated seven members of Class I of this granting cycle in September 2014. These participants were carefully selected and include faith-based, grassroots and aspiring leaders. In addition to the 22 participants who graduated from the previous grant cycle, this brought to 29 the total number of leaders graduated from this program. These graduates were well equipped with new knowledge and skills that are of great benefit to improve the well-being of their communities.

Participants took part in local level leadership trainings along with in-state and out-of-state training during development tours. Also, the project director was selected to participate in LEAD21, the USDA leadership program. The extension assistant hired to assist with this project participated in local and national leadership training which increased her ability to conduct statewide leadership trainings.

A website has been developed; YouTube videos published; flyers and brochures designed and disseminated, and word of mouth/testimonies from graduates are helping to publicize and give credence to the project and its benefits.

In FY 2014 the following were carried out:

- 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.
- Effective use of technology and social media in modern electronic communications were also taught.

- 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.

Results

FY 2014, the program graduated seven members of Class I of this granting cycle in September 2014. These participants were carefully selected and include faith-based, grassroots and aspiring leaders. In addition to the 22 participants who graduated from the previous grant cycle, this

brought to 29 the total number of leaders graduated from this program. These graduates were well equipped with new knowledge and skills that are of great benefit to improve the well-being of their communities.

-A website has been developed; YouTube videos published.

- 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 the 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.

- Project participants were assisting to sustain existing nonprofit and faith-based organizations in addressing economic development issues.

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 participant has become more involved in local and state politics and has built relationships with state and national legislators in 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

Not Reporting on this Outcome Measure

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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

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%		30%
801	Individual and Family Resource Management		40%		20%
802	Human Development and Family Well-Being		40%		30%
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures		5%		10%
805	Community Institutions and Social Services		5%		10%
	Total		100%		100%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	5.0	0.0	3.0
Actual Paid	0.0	4.6	0.0	2.0
Actual Volunteer	0.0	0.2	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	222601	0	113762
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	258039	0	139588
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/intervention will be conducted:

1. Extension and Research faculty will work cooperatively to develop and disseminate educational materials devoted to helping the family set goals and manage limited resources.
2. Community Volunteers (advisory committee, Community organizations, etc.) will be organized to help disseminate information, increase awareness and implement programs.
3. Consumer curriculum will be designed to support objectives on financial planning and management.
4. Partnerships with banks and other financial agencies will be solicited and their expertise utilized.
5. Research results and other information will be communicated to customers through extension personnel in the form of publications, conferences, workshops, home/office visits, demonstrations and other educational resources.
6. Collaborate, cooperate and partner with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
7. Others include: Nutrition Classes, Child Care Classes, Second Chance 2-Recover workshops, Parenting Workshops, Parish and home visits, Demonstrations, Training sessions for adults and children, etc.
8. Implement consumer curriculum
 8. Conduct workshops/training to promote positive home environments and encourage community involvement
 10. Promote physical fitness & healthy eating
 11. Conduct health fairs (in collaboration with Nutrition and Health Program staff, communities, health organizations, schools, etc)
 12. Compile and disseminate resource directory (pamphlet)
 13. Create additional educational links on the SU Ag Center Homepage
 14. Conduct educational trainings on emergency preparedness

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 live below the poverty level. They lack 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 will benefit from the services provided by the planned program.

3. How was eXtension used?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	19831	78807	0	0

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

Patent Applications Submitted

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	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
2014	801

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
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2014 98638

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	12387

Output #4

Output Measure

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

Year	Actual
2014	48

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
2014	1410

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 1,410 during FY 2014 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 1,410 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 Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	1321

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. To ensure that childcare/Head Start providers deliver quality care, 840 providers in two parishes (counties) - East Baton Rouge & St. Landry received at least six hours of professional training. To accommodate the needs of the underserved & socially disadvantaged, the training sessions were offered at convenient & flexible times, and held in accessible locations for providers in rural and urban areas of the state. Classes taught were based on the competency levels of the Child Development Associate (CDA) Credential. In FY 2014, we 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.

The Parents Preparing for Success Program (PPSP) was conducted in 14 parishes (Avoyelles, East Baton Rouge, East Carroll, East Feliciana, Evangeline, Livingston, Morehouse, Orleans, Rapides, St. James, St. Tammany, Tangipahoa, Washington, and West Carroll).

Results

- The 840 Child Care/Head Start providers who attended classes conducted by the SU Ag Center saved over \$193,200 in fees and charges.
- Survey of the participants showed knowledge gained and some behavior changes as a result of attendance at the training.
- In addition, 481 parents participated in the Parents Preparing for Success Program (PPSP) which provided basic parenting training and financial/time management training to new mothers.
- A total of 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

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
2014	1872

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, over the past 25 years, Louisiana's prison budget has 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. Pew and its partners have worked with many of these states as part of the Justice Reinvestment Initiative, a collaboration between Pew and the Department of Justice's Bureau of Justice Assistance. States selected for participation have demonstrated a bipartisan commitment to using data and research to produce a better public safety return on their corrections spending (<http://www.pewtrusts.org/en/projects/public-safety-performance-project/where-we-work/state-policy-work>). Ironically, Louisiana, the state with the highest incarceration rate in the world, is not part of this research opportunity to assist with lowering both incarceration and recidivism rates.

What has been done

SU Ag Center utilized 1890 Extension Funds along with two external grants obtained by faculty 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 to 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, and 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. For FY 2014, 1872 inmates were served at the aforementioned sites, 930 male and 942 female. Participants by location were: 477 males -EHCC, 471 females -EBR Parish Prison, 471 females -LCIW, and 453 males-Northwest Reentry Program, Caddo Parish.

Results

- Approximately 1,872 inmates who attended the workshops/training sessions gained knowledge and learned how to handle anger and stress and how to write resumes.
- More than 90 percent of the participants actually developed their resumes which they said will assist them with finding gainful employment once they are released from prison.
- About 90 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. The SC2R Program expanded prison-based services to Caddo Parish and surrounding parishes. SU Ag Center conducted mock interviews with inmates who were preparing to return to their communities within 3-6 months.
- Impact report of the project was published in May 2014 Newsletter, Volume 3, Issue 1 of the 4-H National Mentoring Program site (<http://4-h.org>).
- Another report on the project was televised and broadcast on local television (WGMB TV Channel 44) and on the website <http://www.fox44.com/news/female-inmates-enjoy-special-day-their-kids>, June 2014 under the caption ?Female inmates enjoy special day with their kids.

The SU Ag Center's 4-H LIFE National Mentoring Project, in collaboration with the University of Missouri, National 4-H Council, and OJJDP, was awarded the 5th consecutive year funding.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

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		5%		10%
702	Requirements and Function of Nutrients and Other Food Components		5%		10%
703	Nutrition Education and Behavior		30%		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: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	6.0	0.0	6.0
Actual Paid	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	284681
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	221019	0	389847
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

The SU Ag Center research and extension program plans to implement the following activities/intervention methods during the period:

1. Collaborate and conduct research on food safety other prevalent foodborne diseases.
2. Promote 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. Use focus groups, advisory committees, mentor program, etc. to provide awareness to citizens about the impacts of tobacco and tobacco products.
4. Disseminate publications such as fact sheets, newsletters, technical bulletins, research reports, etc. dealing with proper food safety practices.
5. Communicate 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. Collaborate, cooperate and partner with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
7. When funds are available, hire additional experienced personnel and build capacity to respond to clientele needs.
8. Conduct training and workshops in the following areas: Food Preservation/Canning; Standard Operating Producers (S.O.P); Hazard Analysis and Critical Control Point (HACCP) (7 principles); ServSafe Food safety (Farmers, Staff, school and Community Gardens, etc.)
9. Research and disseminate research-based information on Pre and Post Harvesting (Animal and Plant) best practice techniques.

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 live below the poverty level. They lack 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 will also be beneficiaries. Additionally, citizens with sedentary jobs who need information on the benefits of regular physical activity and healthy lifestyles will also be targeted. The SU Ag Center will continue to utilize data to identify and target other audiences.

3. How was eXtension used?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	17984	59852	0	0

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

Patent Applications Submitted

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	0	3	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Number of educational program activities

Year	Actual
2014	450

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	78089

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	15660

Output #4

Output Measure

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

Year	Actual
2014	51

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
2014	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
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
2014	80

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.

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 would 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.

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
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
- 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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

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%		5%
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%		10%
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: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	6.0	0.0	18.0
Actual Paid	0.0	7.1	0.0	15.7
Actual Volunteer	0.0	0.2	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	297669	0	880947
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	298995	0	739336
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. Designed programs using animal and plant enterprises with emphasis on alternative commodities.
2. Maintained, modernized facilities and acquired additional land for research and extension programs.
3. Conducted workshops, farm visits, agricultural shows, demonstration plots, training sessions, for farmers especially small and limited resource urban and rural producers.
4. Delivered program services to producers and potential producers.
5. Worked with internal and external communication channels as well as traditional and social media to disseminate important information to clients and stakeholders.
6. Collaborated, cooperated and partnered with local, state and federal agencies, institutions, groups, private organizations/associations to deliver services to residents.
7. Provided enhanced 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 included (but is not limited to) , small producers, limited resource producers, socially and economically disadvantaged individuals, the underrepresented, the underserved, women, and minorities. Others were 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 did not have experts onboard 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

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	26458	210742	0	0

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

Patent Applications Submitted

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	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
2014	354

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	237200

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	88060

Output #4

Output Measure

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

Year	Actual
2014	55

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
2014	410

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 continued to implement two research grants funded 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 2014, twelve sustainable agriculture field days were conducted with over 410 producers in attendance. Two goat field days were conducted in collaboration with LSU Veterinary School with 145 producers and potential producers in attendance.

The WISTERIA Alliance has been providing 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-five percent of participants in the sustainable agriculture goat field days stated that they gained new knowledge and skills;
- Ninety 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-two farmers are actively growing hibiscus, making hibiscus-related products such as, tea, jelly, jam, and cookies and selling them in the local farmers' market.
- WISTERIA Alliance provided practical hands on training for women to enhance their farming and gardening skills.
- Faculty and staff continued the studies on the \$1 million extramural grants in sustainable agriculture projects funded in FY 2012 & 2013.

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

Not Reporting on this Outcome Measure

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 Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	114

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 2014 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

Four leadership sessions were conducted between 2011 and 2014 using seven 4-day intensive training workshops (lasting over 8 hours each day). To further expand hands-on knowledge of participants, field trips were held 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, Talking 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 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 several states, research scientists, extension specialists, and legal scholars from six universities and agricultural professionals from the USDA. In 2014, we conducted a survey of all 114 graduates of the leadership program. The survey was sent via e-mail and asked questions about how knowledge and skills gained were utilized, actions taken and successes achieved.

Results

The survey of participants showed the following results:

- 100 percent of the respondents said that with information from the Agriculture Leadership Institute, they found new business opportunities and networks for collaboration.
- 100 percent of the respondents said that with the help of the Ag Leadership Institute, they actually tried new ideas.

The other responses were as follows: Since I graduated from the Agriculture Leadership Institute, I have been able to:

- a) Improve my business decisions , 100 percent
- b) Mentor other farmers (or business owners), 100 percent
- c) Help improve my community, 92.9 percent
- d) Serve on a local, state or national committee, 57 percent
- e) Increase business income, 78.6 percent

Some quotes from respondents:

"The opportunity given by The Agricultural Leadership Institute allowed me to learn a plethora of valuable skills that have helped me as a New and Beginning Farmer. I received indispensable personal and professional leadership growth with negotiation skills, management skills, problem-solving skills, communication skills, organization, networking, setting goals, and discovered new talents." (Louisiana)

"It (the leadership class) has caused me to be more pro-active in my approach of being a producer, attending more conference to share information we use on our farm with other farmers, continuing to do outreach and education in local communities in the state of South Carolina teaching socially disadvantage farmers, ranchers, forest landowners how to be successful in what they do on their farms and to incorporate new methods for risk management and safety." (South Carolina)

"I have been able to communicate with other individuals as well as farmers. I have been able to obtain more information about the 2014 Farm Bill. I am now an approved high tunnel installer by NRCS." (North Carolina)

"I have learned the importance of developing a business plan and now have the tools to do so. As a community food advocate I feel empowered to call upon the resources of farmers, and Land-Grant Universities throughout my region of the country for technical and research support for farm and food projects of various types." (Georgia)

"The Agricultural Leadership Institute impacted our family farm operation and organizations in a huge awesome way. After graduation there were many opportunities that has presented in my path... This organization has been ineffective over 30 years, but now effective for the past 2 years. FSA has selected me this year as a nominee to serve on the Advisory Council Board started this November." (Mississippi)

"It has helped me to help other farmers to put their land back into production." (Alabama)

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 #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 Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	142

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Addressing global food security and hunger is closely linked to sustainable animal and plant productivity and profitability which are of paramount importance to the agricultural sector of Louisiana. Small-scale producers faced the greatest challenges on 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. Addressing these close knit and perennial problems could benefit the farmers, consumers, and governments worldwide.

What has been done

NIFA capacity grants were used to fund sustainable agriculture research projects. In FY 2014, three sustainable agriculture field days were conducted with over 185 producers in attendance. In collaboration with the Louisiana State University Veterinary School two goat field days were conducted (one at SU Ag Center Experiment Station and the other at LSU Vet School) with 142 producers and potential producers in attendance. The field days provided lectures, producer testimonies, and hands-on experience to participants. Research-based educational information was packaged and disseminated to participants and also through extension agents to the clients. During the period, farm visits were conducted by research and extension personnel to advise clients and sometimes provide "on the spot" solutions to problems they may have. Scientists at the LSU Vet School, collaborated with SU Ag Center counterparts in a research grant "Profitability for Small Beef Producers through Sustainable Forage Systems and Value Added Forage". Another collaboration was between the LSU and SU Ag Centers to study "Enhanced Economic Benefits for Meat Goat Producers through Production, Yield and Palatability, and Consumer Information". These two projects are helping to educate farmers in Louisiana about sustainable production

Results

- Ninety-two percent of participants in the sustainable agriculture field days stated that they gained new knowledge and skills;
- Ninety-five percent said they will certainly utilize knowledge and skills gained.
- Participants at the goat field days gained knowledge/skills about the benefits of the FAMACHA chart. Some previous participants testified that they used the chart and it saved money in goat health care costs.
- Ninety-eight percent of the participants said that the testimonies given by some participants at the field days inspired them to try new ideas.

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 2013/14, state appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

A survey of 114 graduates of the Ag Leadership Institute conducted during the year had the following results:

The responses were as follows:

Since I graduated from the Agriculture Leadership Institute, I have been able to:

1. Improve my business decisions , 100 percent
2. Mentor other farmers (or business owners), 100 percent
3. Help improve my community, 92.9 percent
4. Serve on a local, state or national committee, 57 percent
5. Increase business income, 78.6 percent

Few quotes from respondents:

"The opportunity given by The Agricultural Leadership Institute allowed me to learn a plethora of valuable skills that have helped me as a New and Beginning Farmer. I received indispensable personal and professional leadership growth with negotiation skills, management skills, problem-solving skills, communication skills, organization, networking, setting goals, and discovered new talents." Louisiana

"It (the leadership class) has caused me to be more pro-active in my approach of being a producer, attending more conference to share information we use on our farm with other farmers, continuing to do outreach and education in local communities in state of South Carolina teaching socially disadvantage farmers, ranchers, forest landowners how to be successful in what they do on their farms and to incorporate new methods for risk management and safety." **South Carolina**

"I have been able to communicate with other individuals as well as farmer. I have been able to attain more information about the 2014 Farm Bill. I am now an approved high tunnel installer by NRCS." **North Carolina**

"I have learned the importance of developing a business plan and now have the tools to do so. As a community food advocate I feel empowered to call upon the resources of farmers, and Land-Grant Universities throughout my region of the country for technical and research support for farm and food projects of various types." **Georgia**

"The Agricultural Leadership Institute impacted our family farm operation and organizations in a huge awesome way. After graduation there were many opportunities that has presented in my path. This organization has been ineffective over 30 years, but now effective for the past 2years. FSA has selected me this year as a nominee to serve on the Advisory Council Board started this November." **Mississippi**

"It has helped me to help other farmers to put their land back into production." **Alabama**

Key Items of Evaluation

The Agricultural Leadership Institute has a broad regional impact, participants who have graduated from the institute have come from 16 states.

V(A). Planned Program (Summary)

Program # 7

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		20%		20%
124	Urban Forestry		40%		40%
125	Agroforestry		30%		30%
403	Waste Disposal, Recycling, and Reuse		10%		10%
	Total		100%		100%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	3.0	0.0	6.0
Actual Paid	0.0	1.3	0.0	6.3
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	55261	0	260736
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	77179	0	280867
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. Work with existing organizations to strengthen links between businesses, community based organizations and outreach education.
2. Assist local farmers and land owners/users to develop alternative enterprise initiatives for rural businesses.
3. Empower community leaders and residents in the targeted areas to develop strategic plans for optimum utilization of natural resources.
4. Communicate and disseminate 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. Organize grant writing workshops to empower individuals, businesses and communities enhance their skills on how to write for successful grants.
6. Collaborate, cooperate and partner with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
7. Encourage community organizations and resident involvement in developing plans for sustainable energy. Provide 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?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1780	39379	0	0

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

Patent Applications Submitted

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	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
2014	51

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	41159

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	3824

Output #4

Output Measure

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

Year	Actual
2014	2

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
2014	1780

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 continued to study plant-based mulch products for biophysical management of Oak trees in urban areas of Louisiana. Faculty and staff worked to obtain an externally funded grant to develop biofuels from sustainable alternative non-food feedstocks. Some of the goals were to quantify urban forest wood waste biomass; secondly, to process sugar 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.

SU Ag Center scientists continued their collaboration with their counterparts at 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 one workshop were conducted on bioenergy and biofuel production in collaboration with the LSU Ag Center 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. One project director presented his research finding at the 2014 Biomass Conference, July 29-30 in Washington, D.C. Two national presentations have been conducted through the Society of American Foresters (SAF) and the International Society of Arboriculture (ISA) conventions.

Results

1. Number of new technologies developed: 5
2. Number of new varieties or other new feedstock sources (residues/urban wood waste) developed; 0
3. Of the 1,780 number of stakeholders participating in programs on production/harvesting/storage systems
 - a. 94 percent Increased knowledge;
 - b. 40 percent Actually adopted BMPs for production/harvesting/storage systems.

New innovative laboratory and field techniques are been developed to process agricultural and urban vegetative waste into 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. Farmers in St. Landry Parish (County), Louisiana are actually using this technology to produce and use biofuel as a source of energy.

Graduate and undergraduate students from both Southern University and LSU gained useful research knowledge and skills through their involvement in these and other projects.

Of the 1,780 persons participating in programs on production/harvesting/storage systems, 94 percent increased knowledge; and about 40 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
2014	19

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 continued to study plant-based mulch products for biophysical management of Oak trees in urban areas of Louisiana. Faculty and staff worked to obtain an externally funded grant to develop biofuels from sustainable alternative non-food feedstocks. 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.

SU Ag Center scientists continued their collaboration with their counterparts at 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 & two workshops were conducted on bioenergy and biofuel production in collaboration with the LSU Ag Center and E-Fuel Corporation. A web-based educational bioenergy and biofuel video (Biofuel Research in Louisiana: Southern University Ag Center) which was produced in the previous year is still available on Youtube at:

<https://www.youtube.com/watch?v=fdw4pA22mkc>. Two national presentations have been conducted through the Society of American Foresters (SAF) and the International Society of

conventions.

Graduate and undergraduate students from both Southern University and A & M College and Louisiana State University and A & M College gained useful research knowledge and skills in bioenergy and sustainable energy through their involvement in these projects.

Two Ph.D. students from SU are 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 5

Graduate and undergraduate students from both Southern University and A & M College and Louisiana State University and A & M College gained useful research knowledge and skills in bioenergy and sustainable energy through their involvement in these projects.

Two Ph.D. students from SU are working on the utilization of urban wood waste and agricultural wastes for ethanol production in collaboration with LSU. Extension agents from six parishes (counties) gained new knowledge and skills about sustainable energy and how to disseminate research-based information to residents of their parishes. The extension agents, research and academic communities, practitioners, land owners, etc. will continue to benefit from findings of these research projects.

A PhD level course on Bioenergy and Urban Forestry was developed and offered in 2014 to educate new generation of scientists on sustainable energy. This course is ongoing.

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
- 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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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%		40%
806	Youth Development		80%		60%
	Total		100%		100%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	8.0	0.0	1.0
Actual Paid	0.0	8.5	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	328354	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	303591	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 will be continued: Livestock, Poultry and Rabbit Show; Youth Educational Support (YES) and After School Program; Parish Achievement Days; Science Fairs; Field Trips; Family

- Meetings/workshops; PSA'S, fact sheets, youth website, media literacy, mentoring programs (with community leaders); and commercial peer counseling will be developed or conducted.
- Research-based educational information will be communicated to youth through extension personnel in the form of publications, conferences, workshops, field days, home/office visits, demonstrations and other educational resources.
- Collaborate, cooperate and partner with local, state and federal agencies, institutions, groups, private organizations/associations in seeking and delivering services to citizens.
- -Focus on the learning experience of children, youth, and families in communities with at risk environments to increase self-reliance, self-esteem, and confidence.
- -Organize youth back-to-school summit to address risky behaviors and encourage healthy lifestyles.
- -Teach business techniques, ethics and etiquette as prerequisite to business start-up.
- -Show 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 survive on low income and limited resources. They lack 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 are 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 targets such children ages 5 -18 years who are vulnerable to these situations. Parents and/or guardians of these children are also targeted. Additionally, children and adolescents who are placed at risk, those who are potentially at risk and children who need various forms of mentoring will also benefit. Program staff and volunteers will be trained to ensure effective and efficient delivery of information.

3. How was eXtension used?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	96305	318420

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

Patent Applications Submitted

Year: 2014
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	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
2014	922

Output #2

Output Measure

- 2. Number of educational contacts

Year	Actual
2014	414725

Output #3

Output Measure

- 3. Number of published materials distributed

Year	Actual
2014	5269

Output #4

Output Measure

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

Year	Actual
2014	60

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
2014	36

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. Projections indicate that there will not be sufficient numbers of graduates to fill crucial scientific and professional positions. Due to the negative connotations, 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. Financial assistance is a major concern for poor and underserved students and parents when choosing academic majors and career paths. Also, to be successful, futures agricultural scientists need strong mentoring. 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 grants 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 2014 with 21 students entering the second phase. Seventeen (17) high school juniors from across the state of Louisiana participated in an intensive 5-week summer preparatory program. Also, 15 agriculture-related college students participated in the FY 2014 Ag STARS project. The 21 prepared to meet the minimum requirements necessary to take advantage of the Louisiana Tuition Opportunity Program for Students (TOPS) and gain pre-collegiate experiences via working with USDA field offices with and agricultural establishments. While 15 Ag STARS participated in research mentoring in scientific research, writing skills, oral communication skills analytical skills, critical-thinking skills, and to prepare and present scholarly papers.

Results

-One Ag STARS participant earned 4.0 GPA in spring 2014; she and also has a cumulative grade point average of 4.0.

Four of the five Ag STARS graduates in the 2013-14 academic year had grade point averages in excess of 3.0.

-Two of the graduates are currently working with the U.S. Department of Agriculture.

-Ag STARS participants received second and third place awards in oral and poster competitions at the 2014 Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) annual conference held in Birmingham, Alabama in March 2014.

-Four papers and two posters were presented in on-campus seminars.

-One participant also wrote, presented, and submitted a senior thesis to the Honors College.

-Two Ag STARS interned with various USDA agencies in summer 2014.

-One participated in the Summer Research Opportunities Program at an 1862 Land Grant institution.

-21 participants in the academy project gained pre-collegiate experiences via working with USDA field offices

Ag STARS participants' Response to project survey questionnaire: Strongly Agree (SA); Agree (A) or Neutral (N):

1. Awareness of global agricultural and economic problems has increased: SA (70%) A (30%)

2. Greater appreciation for scientific research: SA (60%) A (40%)

3. Improvement in writing skills: SA (20%) A (70%) N (10%)

4. Improvement in oral communication skills: SA (60%) A (40%)

5. Improvement in analytical skills: SA (30%) A (70%)

6. Improvement in critical-thinking skills: SA (50%)

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
2014	500

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. Five hundred individuals volunteered during scheduled program activities in FY 2014. They were trained to assist in program 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 six 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 500 volunteers with an average of 20 volunteer hours greatly enhanced the ability of the center to deliver services to youth. Their volunteer assistance saved the tax payers 10,000 hours of work or an equivalent of 4.81 FTEs (about \$120,000 in real time wages). Additionally, volunteers gained new knowledge and skills about youth program and activities 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

Not Reporting on this Outcome Measure

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
2014	303

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

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 10 meetings with 303 youth exhibitors, their parents, agriculture teachers and community supporters; contacted 665 individuals. Media blitz before and after the 71st Annual Livestock Show included:

-Jaguar Nation Radio Inside the SU System which has 60,500 listeners.

- Around Town TV with over 250,000)

-Also: <http://www.aroundtownshow.com/ats/>

-The Advocate - Online information -

http://calendar.theadvocate.com/baton_rouge_la/venues/show/2008845-m-a-edmond-livestock-show-arena

-The Sunday Advocate with over 126,470 readers had full page article/pictures from the Livestock Show: Page 1B

Two local weekly newspapers, the Weekly Press with over 7,500 readers, and the Drum with about 7,500 readers also published article/pictures of the Show.

Youtube video was also placed on the web.

Results

Through the auction process, SUAREC assisted youth participants in selling over \$60,000 worth of products and the Grand Champion steer received a premium price of \$7,500, about above fair market prices. On average, the champion market lamb received \$1,800; the champion market steer received \$5,600; champion market swine received \$1,850; and the champion market goat received \$1,000. These animals were purchased from Louisiana's youth with money donated by livestock contributors. A survey conducted during the 2014 Livestock show indicated that preparing for the Show helped them as follows:

- 99 percent learn how to manage their time;

- 95 percent developed self confidence;

- 100 percent developed critical thinking skills;

- 100 percent developed leadership skills; and

- 98 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 80 percent of 2014 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 and other electronic messaging techniques. In addition, 20 volunteers worked for three days donating a total of 600 hours of their time (approximately \$10,800) to assist during the shows. Another outstanding impact of the Livestock Show is that it garners 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

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 2013/14, State Appropriations were increased for the first time in almost six years. However, budget cuts were being proposed at year's end. Delays in Federal budget approvals continued to be of concern because the actual budget data were not readily available for effective planning. Government priority changes caused the relocation of some program participants resulting in decline in number of residents 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 by those who were relocated due to 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

500 volunteers worked an average of 20 volunteer hours or equivalent of 4.81 FTEs and saved the program about \$120,000 in real time wages. Additionally, volunteers gained new knowledge and skills about youth program and activities which were greatly beneficial to them, their families and communities.

Student mentoring is still very relevant to producing future scientists and extension personnel:

-One Ag STARS participant **earned 4.0 GPA in spring 2014**; she and also has a cumulative grade point average of 4.0.

-Two of the Ag STARS graduates are currently working with the U.S. Department of Agriculture.

-Ag STARS participants **received second and third place awards** in oral and poster competitions at the 2014 Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) annual conference held in Birmingham, Alabama in March 2014.

Key Items of Evaluation

Student mentoring is still very relevant to producing future scientists and extension personnel

VI. National Outcomes and Indicators

1. NIFA Selected Outcomes and Indicators

Childhood Obesity (Outcome 1, Indicator 1.c)	
21210	Number of children and youth who reported eating more of healthy foods.
Climate Change (Outcome 1, Indicator 4)	
0	Number of new crop varieties, animal breeds, and genotypes with climate adaptive traits.
Global Food Security and Hunger (Outcome 1, Indicator 4.a)	
114	Number of participants adopting best practices and technologies resulting in increased yield, reduced inputs, increased efficiency, increased economic return, and/or conservation of resources.
Global Food Security and Hunger (Outcome 2, Indicator 1)	
0	Number of new or improved innovations developed for food enterprises.
Food Safety (Outcome 1, Indicator 1)	
0	Number of viable technologies developed or modified for the detection and
Sustainable Energy (Outcome 3, Indicator 2)	
7	Number of farmers who adopted a dedicated bioenergy crop
Sustainable Energy (Outcome 3, Indicator 4)	
0	Tons of feedstocks delivered.