

2013 Alabama A&M University and Auburn University Combined Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

The Alabama Cooperative Extension System (ACES) jointly delivers the Extension programs of Alabama A&M and Auburn Universities as a unified organization consisting of 1890 and 1862 land-grant universities respectively. ACES programming is delivered by personnel located at 67 county offices, 9 urban centers, 9 Research/Extension Centers, a 4-H Center, 2 plant diagnostic laboratories and 2 campuses. Programming priorities are established through a matrix of 5-year strategic planning efforts, grasstops discussions with state-level constituents, and annual grass-roots listening sessions held in all 67 Alabama counties. Statewide, 1,500 citizens participated in the grassroots stakeholder discussions of programs in 2013. Overall, the stakeholders were demographically representative of Alabama (68% white, 29% black, and 3% other Vs 2010 census: 68.5% white, 26.2% black and 5.3% other).

Extension agents and specialists work collaboratively in 14 program priority teams (PPT) to develop a plan of work that is relevant to stakeholder needs, is research-based and strengthens relationships with partner organizations and stakeholders. The ACES Strategic Plan developed in response to the grassroots and grasstops process consists of six systemwide initiatives that correspond well to the USDA-NIFA program themes.

ACES Strategic Initiatives

Health and Wellness across the Lifespan
Workforce Development
development; workforce development;
Safe and Secure Food Supply
Financial Literacy across the Lifespan
Sustainable Agriculture and Forestry Systems
agriculture, forestry and related industries;
Environmental Stewardship

USDA-NIFA Program Themes

childhood obesity
community, family, home and youth
food safety; human nutrition, diet and health
financial literacy
global food security; sustainable energy;
climate change; environmental stewardship

In each of the reported 12 USDA-NIFA program themes, it can be observed that ACES follows a systematic planning, community engagement, innovative delivery, and program assessment process. This process provides the residents of Alabama with relevant, research-based education that strengthens relationships within the community and impacts the local economy and the quality of life of individuals and their community. Program evaluations measure changes in behavior, financial impacts and variations in employment. These data are reflective of ACES's accountability to federal, state, and local funding partners. Impact data is shared widely with policy makers and stakeholders.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	228.4	32.4	0.0	0.0
Actual	371.1	36.2	0.0	0.0

II. Merit Review Process

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

- Combined External and Internal University External Non-University Panel

2. Brief Explanation

PROGRAM REVIEW PROCESS

The Plan of Work (POW) Review Process for the Alabama Cooperative Extension System's FY2013-2018 plan is a five phase process. It is an inclusive process allowing in put from all levels in the system. This process has proven to be effective in the system and will continue to be utilized for the duration of the Plan.

Phase I of the review process was conducted by the Priority Program Team (PPT) Co-Chairs with input from all team members. Each PPT Co-Chair is responsible for reviewing program data to ensure information provided for the POW is accurate and represents critical needs identified by Alabama residents.

Phase II of the POW process was conducted by the Assistant Directors. Assistant Directors representing all program areas reviewed POW data for: relevancy, competency of Extension to address identified issues, opportunities for inclusion of Multistate/Integrated Research and Extension Activities, and to ensure the existence of measurable impact and outcome indicators.

Phase III of the review process was conducted by the System Administrative Team. The Administrative team (Director/1890 Administrator/Associate Directors, Chief Financial Officer, Human Resources Officer) reviewed the POW for:

- Consistency with System/University missions
- The inclusion of approved PPAs (and related ETPs),
- The adequacy of fiscal/human resource allocations needed for successful implementation of included programs,
 - The capacity to offer educational services to a broad spectrum of Alabama residents, rural/urban, and across diverse demographic parameters,
 - The degree to which the Plan adequately reflected the consideration and inclusion of stakeholder and advisory inputs.

Phase IV of the POW review process included relevant University administrators such as Deans and Department Heads (Alabama A&M and Auburn University). Many system specialists are housed in Academic Departments. Therefore, it was appropriate to include them in the review and to allow comments on the FY2013 -2017 POW and expectations of the professionals in the irrespective departments.

Phase V, the final review process, solicited input from various state-wide Priority Program Team Advisory Councils. Advisory Councils assist Priority Program Teams with the identification of critical program issues and setting system priorities to address identified issues. Specific roles of the Priority Program Team Advisory Councils include: 1) assurance that programs included addressed needs of Alabama citizens; 2) Articulate System's programmatic efforts and accomplishments to key stakeholder/clientele groups/decision makers; 3) provide guidance and assistance in obtaining statewide support for included programs; 4) identify critical issues and problems which might be best addressed by System educational outreach; and 5) expand the collaboration and networking capabilities of the System in support of existing and proposed programs.

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
- Targeted invitation to selected individuals from general public
- Survey of traditional stakeholder individuals
- Survey specifically with non-traditional individuals

Brief explanation.

The Alabama Cooperative Extension System conducts grass-tops and grassroots needs assessment activities as part of our annual program planning cycle. Traditional and non-traditional state-level constituent or consensus building groups, non-governmental agencies, community-based organizations, and governmental agencies participate in informal grass-tops needs assessment conversations early in the year. Citizens representing diverse socio-economic and racial groups, new client audiences or communities, and community networks and partners are invited to participate in formal grassroots needs assessment conversations during July and August in each of Alabama's 67 counties. Program participants are routinely asked to participation end-of-meeting surveys that include a needs assessment component.

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 External Focus Groups
- Needs Assessments
- Use Surveys

Brief explanation.

The Assistant Directors for Programs(program leaders) provide leadership to 14 program teams consisting of State Extension Specialists and Regional Extension Agents. Each team conducts

grass-tops needs assessment conversations with state-level constituent or consensus building groups, non-governmental agencies, community-based organizations, and governmental agencies. Methods of identifying these groups included existing advisory committees, ongoing working relationships or partnerships, and interagency directories.

Grassroots stakeholders are identified by County Extension Coordinators who lead community conversations in the state's 67 counties during July and August. Methods of identification include existing advisory committees, contacts with other agency partners, and staff knowledge of individuals representing diverse socio-economic and racial groups, new client groups, networks, and potential community partners.

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

Brief explanation.

A comprehensive approach to needs identification is undertaken given the complexity and scope of issues facing the diverse citizens of Alabama. For the Alabama Cooperative Extension System (ACES), the annual needs assessment begins with the engagement of key external grass-tops stakeholders to determine priority needs affecting Alabamians. The Assistant Directors for Programs and their respective program teams conduct the grass-tops needs assessment by engaging groups through direct telephone contacts, focus groups, advisory committees, and networking. Each stakeholder group is asked 1) what priority initiatives are included in their strategic plan or plan-of-work, 2) what issues do they envision affecting the economic and physical well being of Alabamians across the state, 3) what priority needs of their clientele connect with ACES's educational programming capacity, and 4) what linkages do they envision that would strengthen the working relationship with ACES. Results gleaned from grass-tops needs assessment activities are incorporated into the planning process by State Extension Specialists when the 14 program teams meet in September and October.

The second major component of the annual needs assessment involves engagement of grassroots stakeholders. The Assistant Director for Program Operations and Innovations and 67 County Extension Coordinators organize and conduct grassroots community conversations to confirm, prioritize, or regionalize needs. Objectives are to engage a cross section of citizens to 1) discuss and understand the facts regarding significant issues facing the state and the opportunities for positive change and 2) dialogue about significant issues and the potential for programs that acknowledge and address the current changes in the way citizens think, live, and function in their daily lives, families, communities and businesses.

Nearly 1,500 citizens participated in these activities. Demographic data collected by County Extension Coordinators shows: 62% female, 38% male ;68% white, 29% black, and 3% belonging to

other racial groups.

3. A statement of how the input will be considered

- To Identify Emerging Issues
- Redirect Extension Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

Collectively, grass-tops and grassroots stakeholders defined six system-wide strategic program initiatives:

1. Health and Wellness across the Lifespan
2. Workforce Development
3. Safe and Secure Food Supply
4. Financial Literacy across the Lifespan
5. Sustainable Agricultural and Forestry Systems
6. Environmental Stewardship

The Assistant Directors for Programs collaborate to develop a logic model for each strategic program initiative focusing on specific objectives, outputs, and outcomes that allowed for application across various program areas. Each logic model includes an evaluation plan.

Fourteen program teams, consisting of State Extension Specialists and Regional Extension Agents, prepare an annual plan-of-work. Steps included 1) determining which strategic program initiatives fit with the team's capabilities and resources, 2) developing a programmatic response consistent with the objectives, outputs, and outcomes of the respective strategic program initiative logic model, and 3) completing the program team plan-of-work to include ongoing programs or special funded projects.

Program team plans-of-work are shared with County Extension Coordinators on November 1 in preparation for three multi-county regional meetings held across the state in early December. County Extension Coordinators and Regional Extension Agents meet to discuss program alternatives and to make mutual decisions regarding programs, staff involved, dates, locations. The ultimate outcome is an individual plan-of-work for County Extension Coordinators and Regional Extension Agents based on the grass-tops and grassroots needs assessment results.

Brief Explanation of what you learned from your Stakeholders

Stakeholders support two major program thrusts: base programming and issue-based programming. Base programming involves applying and sharing knowledge grounded in research-based science. These programs are fundamental to the land-grant mission and are discipline or subject-matter focused. Issue-based programming involves working directly with citizens to affect positive change through research-based science. These programs address current issues and opportunities affecting the quality of life and well-being of broad range of citizens. They are multi-disciplinary in scope and are issue focused.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
6445574	1937614	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	4381025	2189078	0	0
Actual Matching	6445574	2189078	0	0
Actual All Other	38894694	3217780	0	0
Total Actual Expended	49721293	7595936	0	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous				
Carryover	4381025	325031	0	0

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Childhood Obesity (Health and Wellness Across The Lifespan)
2	Climate Change
3	Food Safety (Safe and Secure Food Supply)
4	Global Food Security and Hunger (Sustainable Agricultural and Forestry Systems)
5	Sustainable Energy
6	Agriculture, Forestry, and Related Industries
7	Community, Family, Home and Youth Development
8	Economic and Community Development
9	Environmental Stewardship
10	Financial Literacy Across the Lifespan
11	Human Nutrition, Diet and Health
12	Workforce Development

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

Childhood Obesity (Health and Wellness Across The Lifespan)

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	20%	20%		
702	Requirements and Function of Nutrients and Other Food Components	20%	20%		
703	Nutrition Education and Behavior	20%	20%		
704	Nutrition and Hunger in the Population	10%	10%		
723	Hazards to Human Health and Safety	10%	10%		
724	Healthy Lifestyle	10%	10%		
805	Community Institutions, Health, and Social Services	10%	10%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	9.9	4.8	0.0	0.0
Actual Paid Professional	58.6	7.2	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
770960	438422	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1018755	438422	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
6027928	727724	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Expanded Food and Nutrition Education Program (EFNEP) assisted limited-resource audiences in acquiring knowledge, skills, and changed behavior necessary for nutritionally sound diets, and contribute to personal development and improvement of family diet and nutritional wellbeing. EFNEP provided audiences with opportunities for informed dietary choices, lifestyle changes, reduction in health care costs, and healthier lives. EFNEP was leveraged by Smith-Lever and 1890 Extension funds.

Urban Expanded Food and Nutrition Education Program (UEFNEP) Nutrition education classes are provided for Alabamians with limited resources to empower people to make better nutrition choices and health decisions. UEFNEP was leveraged by Smith-Lever and 1890 Extension funds.

SNAP-Ed - Body Quest: Food of the Warrior, childhood obesity prevention program. BQ empowers 3rd graders to increase fruit and vegetable (FV) consumption. Traditional instruction included educator-led teaching. Non-traditional reinforcement lesson taught via 1 of 7 iPad apps. Treatment group: vegetable tastings at alternating classes and families received weekly take-home activities. Control group: pre/post assessments. 4-H BQ program also teaches components of Body Quest: Food of the Warrior program. SNAP-Ed was leveraged by Smith-Lever and 1890 Extension funds.

Urban Supplemental Nutrition Assistance Program-Education (Urban SNAP-Ed): Goals of Urban SNAP-Ed are to provide nutrition education that enhances the capacity of limited resource individuals and their families to make healthy food choices, to use proper food handling and storage techniques, and to eat nutrient-dense foods. Snap-Ed was leveraged by Smith-Lever and 1890 Extension funds.

Just Move! Alabama 4-H program increases physical activity, healthy nutritional choices and acceptance of all body types. Youth engage in 1-5 hours of education using multiple delivery modes: after/in school, clubs, camps, festivals, county round-ups, YMCA, Housing Authorities, and youth detention facilities. Served public, private, secular/non-secular.

Community Health Aerobic Motivational Program Initiating Optimal Nutrition (CHAMPION) curriculum is a 6 lessons series; activities include nutrition, health and physical activity classes, and food demonstrations.

Relationship Education: For Adults taught Relationship and Marriage Education programs to raise awareness and provide skills training for individuals and couples who are married, dating, and/or considering marriage. Programs also targeted skills for building healthy couple and family relationships of

stepfamilies. Smart Steps addressed stepfamily myths/development, realistic expectations for adults/children, legal/financial issues, etc. Teens, Relationship Smarts+ addresses unrealistic relationship beliefs, dating violence awareness.

Quality Child Care workshops addressed multiple topics of quality caregiving concerns. Mentors worked as part of Family Child Care Partnerships program and assisted providers to implement quality child care knowledge by changing practices in areas identified as critical to quality and surpass state-identified quality standards to achieve national accreditation.

2. Brief description of the target audience

EFNEP: Our target audience is limited-resource children and youth.

UEFNEP: Our target audience is limited-resource Hispanic children ages 6- 14.

SNAP-Ed - Body Quest: Food of the Warrior participants were third grade students in Alabama schools eligible for Supplemental Nutrition Assistance Program-Education (SNAP-Ed). This requires a school to have 50% or more students receiving Free or Reduced-price Lunch. For the technology study, participants were 52 ACES educators comprised of county SNAP-Ed Agent Assistants and 4-H Regional Extension Agents.

4-H Body Quest: Targets 4th graders and is not limited to schools meetings free and reduced lunch percentages that NEP is held to.

Urban Supplemental Nutrition Assistance Program-Education (Urban SNAP-Ed): Urban Supplemental Nutrition Assistance Program (Urban SNAP-Ed) target audience is limited resource individuals and families in Alabama's Metropolitan Statistical Area (MSAs).

SNAP-Ed Demographics: Youth 4,376

Just Move! Alabama: Targets all 4-Hers ages and numerous risk youth audience were reached.

CHAMPION: There were 600 youth, females (50%) and males (50%) between the ages of 5-18 years old. Majority of the participants were African American

Relationship Education: We target a diverse group of high school students.

Quality Child Care: Of the 895 participants, most were female (98%), white (55%), and rural (70%). Of the 258 participants, most were female (100%), middle-aged (88% over the age of 30), and African-American (54%). At the time of their enrollment in FCCP, 84%of providers had not completed a 2-year or 4-year degree; 39% reported having taken some post-baccalaureate classes without receiving a degree.

3. How was eXtension used?

CHAMPION curriculum contains research-based information from eXtension.

Information on links to additional healthy relationships resources through eXtension are provided to participants (e.g., Couples Communicating About Money; Couples, Talk about the Impact of Parenting on Your Life)

The use of eXtension was limited to referring participants in these programs to relevant CoP pages

(i.e, Alliance for Better Child Care, Just in Time Parenting).

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	31542	351985	33675	105401

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

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	3	5	8

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the SPIs and SPFs which are described/explained in the prior planned program; outcome activities and methods sections. The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the SPIs and SPFs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity. Publications
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- The Expanded Food and Nutrition Education Program (EFNEP) provides a series of six nutrition education classes to limited-resource youth. This audience is recruited and enrolled in places

where limited-resource families live, work, and frequent. Typical places include local housing authorities, county health departments, Department of Human Resource county offices, Head Start, food banks, family resource centers, laundromats, schools, work sites, and community action agencies.

Year	Actual
2013	1988

Output #3

Output Measure

- EFNEP classes

Year	Actual
2013	331

Output #4

Output Measure

- EFNEP: Number of participants

Year	Actual
2013	7154

Output #5

Output Measure

- UEFNEP number of participants

Year	Actual
2013	132

Output #6

Output Measure

- UEFNEP Presentations to Elementary Parent and Teacher Associations for Hispanic Parents

Year	Actual
2013	11

Output #7

Output Measure

- UEFNEP Number of classes

Year	Actual
2013	162

Output #8

Output Measure

- USNAP-Ed Number of Participants

Year	Actual
2013	4376

Output #9

Output Measure

- USNAP-Ed Number of Classes

Year	Actual
2013	1980

Output #10

Output Measure

- Just Move! Alabama Number of programs

Year	Actual
2013	33

Output #11

Output Measure

- Just Move! Alabama Number of Participants

Year	Actual
2013	1564

Output #12

Output Measure

- Number of youth who participated in the six CHAMPION lessons

Year	Actual
2013	600

Output #13

Output Measure

- CHAMPION: Number of youth partnerships initiated or strengthened

Year	Actual
2013	12

Output #14

Output Measure

- Number of CHAMPION youth nutrition and physical classes conducted

Year	Actual
2013	56

Output #15

Output Measure

- Number of Partnerships

Year	Actual
2013	8

Output #16

Output Measure

- Number of Grants submitted/awarded

Year	Actual
2013	1

Output #17

Output Measure

- Number of resource publications

Year	Actual
2013	1

Output #18

Output Measure

- Number of curriculum

Year	Actual
2013	1

Output #19

Output Measure

- Number of research papers accepted for publication

Year	Actual
2013	5

Output #20

Output Measure

- Number of 6-8 classes taught in series to youth

Year	Actual
2013	119

Output #21

Output Measure

- Number of 6-session series taught to adults

Year	Actual
2013	156

Output #22

Output Measure

- Number of one-on-one, face-to-face training hours provided to the targeted audience of family child care providers.

Year	Actual
2013	13977

Output #23

Output Measure

- Number of educational workshops conducted

Year	Actual
2013	58

Output #24

Output Measure

- Number of childcare workers attending the workshops

Year	Actual
2013	894

Output #25

Output Measure

- Number of Family Child Care Partnerships programs conducted

Year	Actual
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2013 5081

Output #26

Output Measure

- Number of in-home mentoring sessions with licensed family child care providers

Year	Actual
2013	258

Output #27

Output Measure

- A What's for Lunch (W4L) checklist was developed to assess FV consumption of Body Quest students eating a school lunch.

Year	Actual
2013	1

Output #28

Output Measure

- An iChallenge assessment was developed to assess FV knowledge of treatment and control group students.

Year	Actual
2013	1

Output #29

Output Measure

- An online technology survey was developed

Year	Actual
2013	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects.
2	Summary of the data base questions for Human Nutrition Diet and Health and 4-H Youth Development;pre and post tests results;24 hour food recall and behavior check-list summary.
3	CHAMPION Pre and Post Tests and Weight Management Observation
4	EFNEP: Improve Diet Quality, Food Safety, Physical Activity, and Food Preparation
5	CHAMPION Pre/Post Tests and Pre/Post Nutrition and Physical Activity Questionnaire
6	Increase the consumption of fruits and vegetables
7	Urban EFNEP Improve Diet Quality, Food Safety, Physical Activity
8	4-H BodyQuest
9	Urban SNAP-ED
10	Just Move Alabama
11	Relationship Education: Knowledge and Life Skills Gained; Improved Individual and Social Conditions
12	Number of family child care providers working toward national accreditation (as indicated by payment of fees associated with accreditation) and/or achieving national accreditation level of quality (as determined by independent observers from the National Association of Family Child Care).

13	Quality Child Care: Change in observed quality of child care practices (as assessed using the Family Child Care Environment Rating Scale, a well-documented standardized instrument, following an IRB-approved protocol for informed consent, data collection, and data protection.)
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Outcome #1

1. Outcome Measures

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Summary of the data base questions for Human Nutrition Diet and Health and 4-H Youth Development;pre and post tests results;24 hour food recall and behavior check-list summary.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

CHAMPION Pre and Post Tests and Weight Management Obeservation

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

EFNEP: Improve Diet Quality, Food Safety, Physical Activity, and Food Preparation

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	7154

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Childhood obesity is one of the greatest pressing child health issues in Alabama, and children of limited-resource families are at particular risk.

What has been done

Through six weeks of nutrition education, EFNEP reduces the risk of chronic diseases of Alabama's most vulnerable populations by promoting healthy eating, food safety, physical activity, and food preparation to individuals most disproportionately affected.

Results

At the conclusion, forty-one percent (41%) youth increased their abilities to choose foods according to Federal Dietary Recommendations or gained nutrition knowledge, forty-seven percent (47%) youth use safe food handling practices more often or gain knowledge, fifty percent (50%) youth improve their physical activity practices or gain knowledge, and fifty-three percent (53%) youth improve their abilities to prepare simple, nutritious, affordable food or gain knowledge. Nutrition education for youth plays an important role in the prevention of childhood obesity.

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

CHAMPION Pre/Post Tests and Pre/Post Nutrition and Physical Activity Questionnaire

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	600

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabamians' obesity rate is significantly high in adults (33%) and youth 2-17 years old (28%). This rate has an effect on the increased incidents of obesity-related diseases (Diabetes-14.1%, Hypertension-40.0%, High Cholesterol-34.1 %, Coronary Heart Disease-7.4%). Contributing key factors are unhealthy eating habits- consume under the recommended servings of fruits and vegetables combined (adults-52% and youth-165%) and physical inactivity (adults-31% and youth-22.4%).

What has been done

A series of six educational and instructional nutrition and physical activity classes were conducted by nine Urban Regional Extension Agents. Participants were administered nutrition and physical activity pre/post tests to assess knowledge and pre/post nutrition and physical activity questionnaire to assess changes in behavioral habits.

Results

A paired-samples t-test revealed that youth participants? (N= 600) scored significantly higher (p<0.05) on the posttest (M= 59.02) than on pretest (M=42.93), t= -12.719. Youth participants' consumption of vegetables increased from pre (31%) to post (48%) and participation in sports or physical education (drills, walking, or running) during school hours for 60 minutes/3-5 days per week increased from pre (58%) to post (70%).

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components

724 Healthy Lifestyle

Outcome #6

1. Outcome Measures

Increase the consumption of fruits and vegetables

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2477

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Childhood obesity has exponentially increased in the past decade. Alabama has one of the highest childhood obesity rates in the nation. Accompanying childhood obesity are increased chronic disease and stigmatism to children.

What has been done

Body Quest: Food of the Warrior is a 17-week childhood obesity prevention initiative. The main dietary goal of BQ is to increase fruit and vegetable intakes. BQ is taught by 24 Extension SNAP-Ed educators through blended learning using educator-led classroom and iPad app instruction.

Results

Students receiving BQ significantly ($P < .05$) increased fruit and vegetable consumption compared to the control group from pre to post. In addition, students receiving BQ had a significantly ($P < .05$) higher consumption of fruits and vegetables at post compared to control students. Both increases were a result of significantly ($P < .05$) increased vegetable consumptions.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #7

1. Outcome Measures

Urban EFNEP Improve Diet Quality, Food Safety, Physical Activity

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	132

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Childhood obesity is one of the greatest pressing child health issues in Alabama, and children of limited-resource families are at particular risk. This group was 100% Hispanic. Hispanics have greater risk of health issues related to obesity than Caucasians or African Americans.

What has been done

14 groups/ 162 classes taught to educate the Hispanic population.

Results

Youth showed significant improvement in: Nutrition Practices, Dietary quality, Food safety, Food Resource Management Practices, and physical activity. Improvement ranged from 60 to 93% for the 163 adults and youth showed an improvement range in 63 to 93% for the 132 youth.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #8

1. Outcome Measures

4-H BodyQuest

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1184

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity has important consequences on our nation's health and economy. Safeguarding health during childhood is more important than at any other time because poor health during early life is likely to impair them over their lifetime.

What has been done

A common curriculum used to teach school children the benefits of meals and snacks of fresh fruits and vegetables, the importance of sleep, and physical activity. Delivery has been in public school setting during classroom time. 43 activities were carried out by 12 4-H REAs and 2 CECs in 20 counties. 1,129 youth participated and 55 adults. Each participant received 6-10 hours of instruction. Children's health is an economic investment and the right thing to do. Research shows that investing in children's health results in better educated and more productive adults. Safeguarding health during childhood is more important than at any other time because poor health during early life is likely to impair them over their lifetime.

Results

More than 88% of participants in the program reported including fruits in their daily intake. (n=1184)

Because of their involvement in the BQ Program, more than 63% of participants indicate that they are more likely to try new foods. (n=1184)

After the program was completed, approximately 62% of participants indicated that they were eating vegetables on a daily basis. (n=1184)

More than 90% of program participants indicated that they have some type of physical activity, such as running or playing, on a daily basis. (n=1184)

4. Associated Knowledge Areas

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

Outcome #9

1. Outcome Measures

Urban SNAP-ED

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	4376

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Hispanics are of greater risk for obesity and other chronic illness than Caucasians or African Americans.

What has been done

60% of (n=3300 total classes) classes teaching a 10-lesson series to Hispanic youth in afterschool programs, community center, or trailer parks. Total of 1980 classes were taught.

Results

Youth (4,376) Assessment Data showed significant improvement in: Knowledge Gain, Dietary Quality, Food Resource Management/Shopping Behavior and shopping techniques and physical Activity. Core Elements analyzed for significance based on ANOVA- Results: significant difference, $p < .05$. (n=4,376)

4. Associated Knowledge Areas

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

Outcome #10

1. Outcome Measures

Just Move Alabama

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1564

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity has important consequences on our nation's health and economy. Safeguarding health during childhood is more important than at other times because poor health during early life is likely to impair them over their lifetime.

What has been done

Educational programming has been delivered to develop skills to self-select physical activities to be active 60 minutes a day most days, develop self-efficacy for making best nutritional choices for health, and develop appreciation of all body types to support to increase adolescent self-esteem and self image. 33 Just Move! Alabama 4-H programs in 23 counties delivered to 1,564 youth. Children's health is an economic investment and the right thing to do. Research shows that investing in children's health results in better educated and more productive adults. Safeguarding health during childhood is more important than at any other time because poor health during early life is likely to impair them over their lifetime.

Results

93% more active on a daily basis; 78% making healthier food choices for meals and snacks; 78% accepting of different body types and shapes; 87% choosing to engage in activities to increase level of physical activity (running, jumping, playing sports) and focused on improving over-all health (n=1564)

4. Associated Knowledge Areas

KA Code **Knowledge Area**
724 Healthy Lifestyle

Outcome #11

1. Outcome Measures

Relationship Education: Knowledge and Life Skills Gained; Improved Individual and Social Conditions

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	6362

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There are high incidences of divorce and unhealthy relationships, which lead to poor family environments.

What has been done

For Adults (n=2756), 156 series of 6-session Relationship and Marriage Education programs were conducted to raise awareness and provide skills training for individuals/couples who are married, dating, and/or considering marriage. 18 series of 6-module classes and 4 workshops offered to stepfamilies. Program targeted skills for building healthy couple/family relationships of stepfamilies. Smart Steps addressed stepfamily myths/development, realistic expectations for adults/children, legal/financial issues, etc. For teens (n=3606), 119 series of 6-8 classes offered. Relationship Smarts+ addresses unrealistic relationship beliefs, dating violence awareness, etc. Participants completed Pre/Post surveys

Results

Paired sample t-tests were conducted on composite scores of multi-item measures of various skills and behaviors. Youth participants in relationship education showed statistically significant ($p < .05$) improvement in the following outcome measures: self-care skills, conflict management skills, social support skills, conflict resolution skills, financial management skills, communication skills, prosocial skills with parents, and prosocial skills with peers. Adults participating in relationship education showed statistically significant ($p < .05$) improvement in self-care skills, financial management skills, conflict management skills, positive interactions with significant

other, and positive interactions with coparent.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #12

1. Outcome Measures

Number of family child care providers working toward national accreditation (as indicated by payment of fees associated with accreditation) and/or achieving national accreditation level of quality (as determined by independent observers from the National Association of Family Child Care).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	36

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research indicates that family child care providers who seek training and engage in activities intended to achieve accreditation provide higher quality care. Children who have experienced high quality care during early childhood are better prepared to succeed in the school environment

What has been done

58 workshops conducted for 894 child care providers. Workshops addressed multiple topics of quality caregiving concerns. 16 mentors worked as part of the externally-funded Family Child Care Partnerships program conducting 5,081 in-home mentoring sessions with 258 licensed family child care providers. Mentors assisted providers to implement quality child care knowledge by changing practices in areas identified as critical to quality and surpass state-identified quality standards to achieve national accreditation.

Results

Fees were paid for 36 providers to work toward national accreditation; 17 others achieved it during 2013. Overall, a total of 21% (53) of currently-enrolled FCCP providers have become accredited and 16% (40) are in the final stages of the accreditation process. (n=36)

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
805	Community Institutions, Health, and Social Services

Outcome #13

1. Outcome Measures

Quality Child Care: Change in observed quality of child care practices (as assessed using the Family Child Care Environment Rating Scale, a well-documented standardized instrument, following an IRB-approved protocol for informed consent, data collection, and data protection.)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	182

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Working parents of children--from infancy through school-age--need safe, affordable, high quality child care. Programming that addresses the educational needs and skills-development of child care providers licensed to care for children in home-based businesses supports children's health, positive development, and learning (academic readiness). Access to high quality care offers parents the peace of mind that allows them to be healthier, more productive employees.

What has been done

Quality Child Care workshops were held to address multiple topics of quality caregiving concerns. Mentors worked as part of Family Child Care Partnerships program and assisted providers to implement quality child care knowledge by changing practices in areas identified as critical to quality and surpass state-identified quality standards to achieve national accreditation.

Results

Paired samples t-tests measuring change from 2012 to 2013 in overall practice quality and in 7 sub-categories of practice for (n=182) providers indicated statistically significant ($p < .05$) improvements in overall quality and the following 5 sub-categories: (a) space and furnishings; (b) learning activities; (c) provider-child interaction; (d) program structure; and (e) professionalism.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other (Classroom time, transportation, support from the funding agency)

Brief Explanation

Competition for classroom time, availability of technology, accessibility of fresh fruits and vegetables, classroom interruptions, children being sick or transferring schools and not receiving lessons.

Youth drop in and out of programs - youth are not in control of transportation.

Because of the continuing support of our funder (the Alabama Department of Human Resources), both in terms of dollars as well as promoting the visibility of our programming, we have been able to cultivate in family child care providers over the program's 14 years of operations an attitude of self-respect and professionalism. They are recognized and supported externally for their efforts to improve their quality. This has created an expectation among the majority of family child care providers that seeking training and making changes in one's practices are appropriate and valuable goals for any individual who works professionally with children.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

- 41.5% Children and youth improve their abilities to choose foods according to Federal Dietary Recommendations or gain knowledge.
- 47% Children and youth use safe food handling practices more often or gain knowledge.
- 50% Children and youth improve their physical activity practices or gain knowledge.
- 53% Children and youth improve their abilities to prepare simple, nutritious, affordable food or gain knowledge.

Significant gain in knowledge of CHAMPION youth from pre/post tests. CHAMPION youth increased fruit and vegetable consumption and physical activity.

Relationship Education Classes for teens and adults: Utilized pre/ post-program

surveys completed by participants. Responses to standard, multi-item social science measures entered into a central database and responses were matched by participant code prior to analyses. Utilized repeated measures analysis of covariance (ANCOVAs) tested for statistically significant changes from pre/ post-program, controlling for several demographic characteristics (gender, race, socio-economic status). Youth participants showed statistically significant ($p < .05$) improvement in the following skills/behaviors: self-care skills, conflict management skills, social support skills, conflict resolution skills, financial management skills, communication skills, prosocial skills with parents, and prosocial skills with peers. Youth participants showed statistically significant ($p < .05$) improvements in knowledge/attitudes: dating abuse awareness, commitment to healthy dating relationship, commitment to healthy relationship with parents, and commitment to healthy relationship with peers. Relationship Education Youth showed statistically significant ($p < .05$) improvement in depressive symptoms and overall stress levels. Relationship Education Adults showed statistically significant ($p < .05$) improvements in self-care skills, financial management skills, conflict management skills, positive interactions with significant other, and positive interactions with coparent. Adults showed knowledge improvements in domestic violence awareness, understanding of significant other's needs, child maltreatment awareness, and understanding of coparent's needs. Adults in stepfamily education program demonstrated significant improvement in realistic expectations for stepfamily adjustment. Adults participating in relationship education showed enhanced individual and social conditions through significant reductions in depressive symptoms, and improvements in connections to social support, and couple quality. Adults participating in the stepfamily education program demonstrated significant reductions in feelings of financial distress, step-parenting difficulties, and parenting difficulties.

88% reported fruits in their daily intake; 63% more than likely to try new foods; 62% eating vegetables on a daily basis; 90% engage in some type of physical activity on a daily basis($n=1184$)

Key Items of Evaluation

BQ: Analyzing combined FV consumption: Pre/Post - Treatment students showed significant ($P < .05$) increase in FV consumption [$F(1, 1162) = 5.107, 2 = 0.004$]. Control students, Pre/Post - FV consumption remained constant [$F(1,1164) = 0.451$]. Second, treatment students had significantly ($P < .05$) higher consumption of FV post compared to control [$F(1, 130.68) = 5.30, 2 = 0.039$]. Pre, FV consumption for treatment/control students not significantly different [$F(1, 158.22) = 0.686$]

Analyzing FV consumptions separately in BQ, only vegetable consumption showed significant changes. When compared to control students, treatment students had significantly ($P < .05$) higher vegetable consumptions from pre to post [$F(1, 1163) = 7.524, 2 = 0.006$]. Treatment students had significantly ($P < .05$) higher consumption of vegetables post compared to control [$F(1,130.68) = 8.64, 2 = 0.061$]. Pre, vegetable consumption for both groups not significantly different [$F(1, 158.22) = 3.387$]

BQ knowledge assessment, overall findings based on ANCOVA analysis where time, FV grant, and race were covariates found treatment condition resulted in higher knowledge score than control condition across 4 time points collectively ($F(1, 1655) = 570.68; p < 0.001; \eta^2 = 0.256$)

Technology, ACES educators moderately experienced in use of general technology. Mean tech scores ranged from 2.90-4.40 over all 3 phases of study. ACES educators more experienced with operating systems, word-processing software, Internet, confident with email. Results from pre-training phase, significantly less experience with technologies associated with m-learning: cell phones, wireless devices, touchscreen interfaces. Phase 3: Educators' experience with wireless devices/touch screens increased significantly (gained exposure during year). Similar increases in educators' perceptions of acceptability of m-learning based on perceived ease of use/usefulness/attitudes toward and intention to use technology. In perceived usefulness, educators' reported technology was good for teaching class (4.31). Rated highest, enabling educators to teach class materials faster (3.53) was rated significantly lower. Notable improvement in perceptions was attitudes toward use of m-learning technology, significantly different between pre-training/ post-implementation. Educators had very favorable attitude toward technology, strongly agreed it was a good idea for implementation and would make teaching more interesting/fun

Paired samples t-tests measuring change from 2012 to 2013 in overall practice quality and in 7 sub-categories of practice for 182 participants in mentoring program indicated statistically significant ($p < .05$) improvements in overall quality and 5 sub-categories: (a) space/furnishings; (b) learning activities; (c) provider-child interaction; (d) program structure; (e) professionalism

Family Child Care Environment Rating Scale, standardized instrument used by program mentors to assess practices of enrolled providers per year. 38 items, comprising 7 subscales ranked on 7-point continuum, with odd-numbered anchor point behaviorally defined. Mentors trained on FCCERS scale until meeting the 90% reliability standard

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
102	Soil, Plant, Water, Nutrient Relationships	15%	0%		
111	Conservation and Efficient Use of Water	10%	0%		
112	Watershed Protection and Management	5%	0%		
125	Agroforestry	5%	0%		
131	Alternative Uses of Land	5%	0%		
132	Weather and Climate	20%	0%		
205	Plant Management Systems	15%	0%		
211	Insects, Mites, and Other Arthropods Affecting Plants	15%	0%		
212	Pathogens and Nematodes Affecting Plants	10%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	1.1	0.0	0.0	0.0
Actual Paid Professional	1.0	0.0	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
5839	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
17371	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
120505	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

One irrigation workshop was organized with participation of 35 farmers, extension agents and crop consultants. Two multi-state meetings discussing "Extreme events and water management" in the Tri-state region of AL-FL-GA were organized. A seven hour multi-state meeting "Climate Adaptation Exchange: Farm management for improving efficiency and reducing risks" was organized for farmers, extension personnel and crop consultants (102 attendees). Climate education and information were transferred through the preparation of four mass media articles. Five extension publication were prepared and distributed to stakeholders through internet and during meeting (Extension publication titles were: Adapting Corn Production to climate in the Southeast, Adapting Wheat Production to climate in the Southeast, Use of soil moisture data for irrigation scheduling, Soils sensors for Irrigation Scheduling: Soil Water Tension Sensors-I, Soils Sensors for Irrigation Scheduling: Volumetric Water Content sensors-II). Twenty climate related presentations were delivered at state, regional and national meetings. A climate display was prepare and carried to the InfoAg meeting in Illinois and the Alabama Farmers Federation 92nd Annual meeting

2. Brief description of the target audience

The activities of the Climate Change Program Priority Team reached the following groups of stakeholders: 1) row crop and fruit-vegetable producers and their representatives groups that include, but are not limited to, the Alabama Cotton Commission, Alabama Peanut Commission, Alabama Soybean Producers, and Alabama Wheat and Feed Grains Committee; 2) row crop, forage, livestock, fruit-vegetable advisors including ACES agents and specialists, ACES county coordinators, ACES risk preparedness specialists, public and private crops advisors; 3) governmental agency personnel including USDA, NRCS, and State of Alabama Soil and Water Conservation Committee; and 4) private citizens impacted by policies and practices used for the production of food, fuel, and fiber. All educational programming efforts targeted audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

3. How was eXtension used?

We did not use eXtension directly

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1500	60000	200	12000

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

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	7	2	9

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- - Distribution of basic information about climate variability and climate change not only for Alabama but also for the Southeast. Most of the information will be related to differences between climate variability and change, maps of the average spatial variability of the most important climatic variables (e.g., rainfall and temperature), forecasts provided by US official weather service (NOAA). Several methods of notification (email-Timely Information Sheets, articles in popular press, climate variability/ climate change web site specifically designed for the program, etc) will be used to disseminate information. - Specific outputs include: 1) News and current information posted on the Climate web site as well as agronomic crops web site (www.alabamacrops.com).
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- - Meetings, in-service trainings, and workshops, will include information on the relationships between agriculture/natural resources and climate change as well as potential impacts, relationships between pest/diseases changes in relation to climate variability and climate change. - Specific outputs include: 1) Multi-state conferences on climate change and the implications for agriculture and natural resources, 2) In-service training meetings for target

audiences (e.g., row crops producers, fruit and vegetable producers, soils and water conservationists, etc).

Not reporting on this Output for this Annual Report

Output #3

Output Measure

- - Reports based on reviews of current knowledge about the relationships between agriculture and climate change and potential impacts.

Not reporting on this Output for this Annual Report

Output #4

Output Measure

- - Recommendations for adaptation strategies for row crops/fruit and vegetables will be development to reduce the risks of climate variability and climate change. - Specific outputs include: a) Guidelines for agronomic management under various climate variability and climate change scenarios and b) Hard copy publications for use in production meetings and trainings where deemed appropriated.

Not reporting on this Output for this Annual Report

Output #5

Output Measure

- Number of publications

Year	Actual
2013	12

Output #6

Output Measure

- Number of meetings, in-service trainings and workshops

Year	Actual
2013	25

Output #7

Output Measure

- Number of publications about the relationships between agriculture and climate change and potential impacts

Year	Actual
2013	5

Output #8

Output Measure

- Number of publications about adaptation strategies for row crops/fruit and vegetables

Year	Actual
2013	5

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Members of the ACES Climate Change team will be required to provide a success story on an annual basis describing the program activity which they felt best demonstrated the impacts of their work. These success stories contain the following elements: a) why the program was conducted or the situation/problem that was addressed; b) specifically what and how it was done; c) the time period involved; d) the specific locations involved; e) who was impacted; f) how many people were served; and g) the final impacts. Short-term outcome: The most immediate outcomes are: 1) Increased understanding of the potential impacts of climate variability and climate change on row crops, fruits and vegetables;
2	2) Increased information about the impact of ENSO phases on row crops, fruits and vegetables;
3	3) Alabama stakeholders trained/educated in climate variability and climate change topics;
4	4) Alabama growers, extension agents and extension specialists trained in using agroclimatic decision support tools
5	5) Capacities strengthened for integrating climate change risks and opportunities into state and regional development assistance
6	6) Capacities strengthened to access and use resources effectively to reduce risks associated with climate variability and climate change
7	7) Capacities strengthened to understand and manage water or natural resources in the context of climate vulnerability
8	8) Identification of the most profitable row crops management practices by ENSO phase
9	9) Identification of adaptation strategies to reduce climate change impacts.
10	10) increased awareness of the impacts of climate on agricultural Production.
11	Medium-term outcomes: The medium-term outcomes of the Climate Change Extension Program are: 1) implementation of a new system of management practices for row crops and vegetables according to ENSO phase
12	2) Improved agronomic management row crops and vegetables
13	Long-term outcomes: The long-term outcomes of the Climate Change Extension Program are: 1) increased profitability of Alabama growers
14	2) improved soil conditions
15	3) reduced environmental impacts

16	4) competitive Auburn and ACES Agronomic Research, Extension and Education system.
17	Irrigation scheduling workshop knowledge increase
18	Knowledge increase on the specific weather and climatic conditions associated with the risk of Hessian Fly infestation. Knowledge increase on the timing when specific weather conditions influence Hessian Fly infestation. Knowledge increase on the relation between ENSO and Hessian Fly infestation in Wheat
19	Knowledge increase on: - The impact of ENSO on the southeast Climate, - The web-based climate tools on Agroclimate, - The relations between Hessian Fly and ENSO - The impact of weather and climate on nitrogen use efficiency on dry land corn production. - The use of a drought index to predict the risk for Aflatoxin contamination.

Outcome #1

1. Outcome Measures

Members of the ACES Climate Change team will be required to provide a success story on an annual basis describing the program activity which they felt best demonstrated the impacts of their work. These success stories contain the following elements: a) why the program was conducted or the situation/problem that was addressed; b) specifically what and how it was done; c) the time period involved; d) the specific locations involved; e) who was impacted; f) how many people were served; and g) the final impacts. Short-term outcome: The most immediate outcomes are: 1) Increased understanding of the potential impacts of climate variability and climate change on row crops, fruits and vegetables;

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

2) Increased information about the impact of ENSO phases on row crops, fruits and vegetables;

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

3) Alabama stakeholders trained/educated in climate variability and climate change topics;

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

4) Alabama growers, extension agents and extension specialists trained in using agroclimatic decision support tools

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

5) Capacities strengthened for integrating climate change risks and opportunities into state and regional development assistance

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extension personnel and crop consultants will be better prepared if they have supporting teaching materials, and they have also received training.

What has been done

Presentations, in-service trainings, short courses, preparation of extension bulletins

Results

Brandon Dillard, extension agent in South Alabama, and William Birdsong, Cotton Extension agronomist in Southeast Alabama, are now conducting climate-related presentations during farmers meetings. They are also conducting demonstrations on the use of the tools on Agroclimate-org. Extension specialists have included topics related to ENSO and its relation with pest, diseases, and yield during their meetings with farmers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
132	Weather and Climate
205	Plant Management Systems

Outcome #6

1. Outcome Measures

6)Capacities strengthened to access and use resources effectively to reduce risks associated with climate variability and climate change

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	500

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The increased participation of extension agents, farmers, and crop consultants on climate information trainings (how to interpret a forecast, how to use the new ACES climate extension web site, how to use the climate-base decision support tools in Agroclimate) ensure they will have the basic knowledge to reach out our stakeholders

What has been done

Participation during meetings, workshops and short courses

Results

Increase on the number of agents, extension specialists and agents using Agroclimate.org and using the climate related extension material available

4. Associated Knowledge Areas

KA Code	Knowledge Area
132	Weather and Climate
205	Plant Management Systems

Outcome #7

1. Outcome Measures

7) Capacities strengthened to understand and manage water or natural resources in the context of climate vulnerability

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

8) Identification of the most profitable row crops management practices by ENSO phase

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The identification of the most profitable management practices by ENSO phase is a work in progress but progress was made for wheat and corn.

What has been done

The participation of AL extension agents, extension specialists, and farmers during the Tri-state Climate workshop group meetings as well as the Climate Adaptation Exchange meeting guarantee they will have resources (information) about potential management practices that could be implemented or are currently implemented by farmers to reduce climate-related risks.

Results

Results of this work has been included on the two extension publications: "Adapting Corn Production to climate in the Southeast" and "Adapting Wheat Production to Climate in the Southeast"

4. Associated Knowledge Areas

KA Code Knowledge Area

102	Soil, Plant, Water, Nutrient Relationships
132	Weather and Climate
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #9

1. Outcome Measures

9) Identification of adaptation strategies to reduce climate change impacts.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The identification of the most profitable management practices by ENSO phase is a work in progress but progress was made for wheat and corn.

What has been done

Two extension publications has been prepared: "Adapting Corn Production to climate in the Southeast" and "Adapting Wheat Production to Climate in the Southeast"

Results

Farmers, extension agents, extension specialists and crop consultants have started to using these documents as guidelines of the possible expected outcomes (pest, diseases, yield) of possible climate scenarios and the some of the climate-related risk management strategies

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
132	Weather and Climate
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #10

1. Outcome Measures

10) increased awareness of the impacts of climate on agricultural Production.

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

Medium-term outcomes: The medium-term outcomes of the Climate Change Extension Program are: 1) implementation of a new system of management practices for row crops and vegetables according to ENSO phase

Not Reporting on this Outcome Measure

Outcome #12

1. Outcome Measures

2) Improved agronomic management row crops and vegetables

Not Reporting on this Outcome Measure

Outcome #13

1. Outcome Measures

Long-term outcomes: The long-term outcomes of the Climate Change Extension Program are: 1) increased profitability of Alabama growers

Not Reporting on this Outcome Measure

Outcome #14

1. Outcome Measures

2) improved soil conditions

Not Reporting on this Outcome Measure

Outcome #15

1. Outcome Measures

3) reduced environmental impacts

Not Reporting on this Outcome Measure

Outcome #16

1. Outcome Measures

4) competitive Auburn and ACES Agronomic Research, Extension and Education system.

Not Reporting on this Outcome Measure

Outcome #17

1. Outcome Measures

Irrigation scheduling workshop knowledge increase

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Before the workshop, the knowledge on irrigation-scheduling tools ranged from low (28%) to medium (43%) and after the workshop increased to high (57%) to very high (29%). Understanding of the use of soil moisture sensors for irrigation scheduling increased to 77% and knowledge on the differences in water demand between growth stages increased by 30%.

What has been done

Six speakers from different Universities and USDA-ARS discussed the economic and agronomic benefits of irrigation and the different methods for irrigation scheduling.

Results

Knowledge Gained:

- The yield losses a corn/cotton farmer can perceive if irrigation does not provide plant demand at specific growth stages.
- Different methods of irrigation scheduling.
- Software available for irrigation scheduling.
- Use of soil moisture sensors for irrigation scheduling.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
132	Weather and Climate

Outcome #18

1. Outcome Measures

Knowledge increase on the specific weather and climatic conditions associated with the risk of Hessian Fly infestation. Knowledge increase on the timing when specific weather conditions influence Hessian Fly infestation. Knowledge increase on the relation between ENSO and Hessian Fly infestation in Wheat

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Hessian Fly is the most important economic pest on Wheat causing high yield losses. If there is a relationship between climate variability and Hessian Fly population, then farmers can use the ENSO forecast to reduce potential agronomic and economic risks related to Hessian Fly infestation.

What has been done

Climate scientists and Entomologist present educational programs on the relationship between Hessian Fly population and climate variability at various farmers and professional meetings.

Results

Knowledge was increased on the specific climatic conditions and the timing of those related with an increase of Hessian Fly infestation risk. Producers gained knowledge on how the ENSO forecast can be used to support changes on agronomic management strategies conducive to a reduction of the Hessian Fly infestation risk.

4. Associated Knowledge Areas

KA Code	Knowledge Area
132	Weather and Climate
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants

Outcome #19

1. Outcome Measures

Knowledge increase on: - The impact of ENSO on the southeast Climate, - The web-based climate tools on Agroclimate, - The relations between Hessian Fly and ENSO - The impact of weather and climate on nitrogen use efficiency on dry land corn production. - The use of a drought index to predict the risk for Aflatoxin contamination.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An increase in climate literacy and the climate-based related resources made available for stakeholders in Alabama and the Southeast can help them increasing resilience and adapting strategies to cope with climate variability and climate change.

What has been done

Presentations on climate information and results from research studies, as well as demonstrations on the use of climate-related decision support tools.

Results

The increase on awareness and willingness of using the climate forecast and the research findings have been measured through an increase on the number of emails received requesting the current ENSO forecast, increase on the number of invited climate-related presentations. Important is also the fact that some of our extension agents are now conducting climate-related presentations during farmers meetings. Some of the agents from the Agronomic Crops Team of ACES are giving presentation on the different ENSO phases and the use of some of the Climate-related tools. The development of the Climate Extension and Education ACES website along with the different county and regional meetings allowed the dissemination climate information in the 2013.

4. Associated Knowledge Areas

KA Code	Knowledge Area
132	Weather and Climate
205	Plant Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations

Brief Explanation

Nothing to be reported

V(I). Planned Program (Evaluation Studies)

Evaluation Results

- Most of the activities conducted in 2013 were focused on presentations with few formal training. Data from a pre- and post- workshop survey conducted during the Irrigation scheduling workshops showed that, before the workshop, the knowledge on irrigation-scheduling tools ranged from low (28%) to medium (43%) and after the workshop increased to high (57%) to very high (29%). Understanding of the use of soil moisture sensors for irrigation scheduling increased to 77% and knowledge on the differences in water demand between growth stages increased by 30%.

- During the short Corn and Wheat, crop consultants expressed a lot of interest on the use of the climate forecast as a decision support tool.

- The number of phone call with climate -related questions as well as the request for presentations with climate -related topics has increased a 30%. Requests for information about current and expected climate forecast, interpretation of the forecast and potential implications on row crops have increased considerably.

The number of visits to the Climate Extension website increased from 2736 in 2012 to 5936 in 2013.

Key Items of Evaluation

The number of hits on the ACEs climate extension website increase 116% from 2012 to 2013. Farmers, crop consultants and extension personnel attending an irrigation workshop gained knowledge (50% increase) on irrigation scheduling strategies to increase water use efficiency and cope with drought. The interest on climate information and climate education among farmers and extension personnel has increased considerably about 30%. This is reflected on the number of phone calls, invitation to meetings, and request for climate information. The interest for agronomic management strategies linked to climate forecast has increased a 20% among farmers and extension personnel.

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Food Safety (Safe and Secure Food Supply)

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	13%	0%		
205	Plant Management Systems	20%	0%		
216	Integrated Pest Management Systems	12%	0%		
501	New and Improved Food Processing Technologies	5%	10%		
503	Quality Maintenance in Storing and Marketing Food Products	5%	10%		
504	Home and Commercial Food Service	20%	10%		
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	10%	35%		
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	15%	35%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	12.8	1.3	0.0	0.0
Actual Paid Professional	17.0	0.9	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
611917	54727	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
295343	54727	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1705497	58333	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Food Safety Training for Food Service Workers: Food Service Workers learned food safety principles for all aspects of the food service industry. Food Safety Classes were taught in 60 of the 67 counties throughout the state of Alabama.

Home Grown: Home Grown Projects highlighted water conservation, building raised garden beds, growing fruits and vegetables, using pesticides safely, composting, beneficial insects, and pruning fruit producing plants.

Good Agriculture Practices: Farmers learned how to write Standards of Operation (SOP's) for a Good Agriculture Practices (GAP) for Certification. Also GAP principles were taught to Farmers selling their produce at Farmers Markets. Programs for GAP were taught in 6 regionally located places with individual trained in writing their SOP's. There were 53 workshops taught for farmers selling their produce at Farmers Markets.

Food Safety Training for Food Processors: Processing safety standards were taught to 149 individuals for processing acidified food and seafood under Food and Drug Association (FDA) guidelines.

Master Food Preserver: Home food preservation principles were taught for water bath canning, pressure canning, freezing, drying and fermentation in 51 of the 67 counties throughout the state of Alabama. A team of Food Safety Regional Agents taught 120 classes in a one to four day sessions of classes.

2. Brief description of the target audience

The target audience was any consumer in the state of Alabama. No individual was excluded or singled out for this training.

Food Safety Training for Food Service Workers: The audience that attended the Food Service certification training course consisted of 1,323 individuals. Of the participants, 886 were (Caucasian) White, 344 were (African-American) Black, 40 were Asian, 26 were Hispanic, 26 were of other races and 1 did not report. Of the participants the majority were female (1084) with the remaining being 239 males. The majority of the individuals were 18 and older.

Home Grown: Residential gardeners growing for their families or as small producers at local farmers' markets.

Good Agriculture Practices: Training Farmers in Good Agricultural Practices: Fruit and Vegetable Producers learned food safety principles from the fields to the selling of their produce either at a Farmers Market or at a large retail outlet. The Farmers Market workshops were held in 44 of the 67 counties throughout the state of Alabama. Good Agricultural Practices Workshops were taught in 6 counties (Madison, Blount, Covington, Marengo, Chilton and Baldwin) throughout the state in each geographical location giving the farmers a meeting place that was within a reasonable driving distance. 1,245 individuals participated in training workshops related to Good Agricultural Practices and Food Safety for Farmers Markets. Of the total participants, 877 were (Caucasian) White, 348 were (African-American) Black, 13 were Asian, 2 Hispanic, 2 were more than one race and 3 were American Indian. Of the participants, 764 were male and 481 were females. The majority of the individuals were adults, with only 14 youth in attendance.

Food Safety Training for Food Processors: Two Better Process Control Schools were taught to a total of 14 individuals, with each passing a total of 7 exams covering all aspects of food processing. A seafood HACCP class was taught to 29 individuals, with each individual completing a HACCP plan for their facility. Food products were tested for 30 individuals to certify that the products were acidified food products. Nutrition Facts Labels were completed for 76 different food products.

Master Food Preserver: Home food preservation principles were taught for water bath canning, pressure canning, freezing, drying and fermentation in 51 of the 67 counties throughout the state of Alabama. 2,434 individuals participated in various food preservation classes. Of the participants, 1805 were (Caucasian) White, 525 were (African-American) Black, 6 were Asian, 79 were Hispanic, 3 were of other races and 10 were more than one race. Of the group, the majority were female (1611) with the remaining 781 being males. 1845 of the participants were adults and 589 were youth.

3. How was eXtension used?

The Alabama Cooperative Extension has been the lead state for the Food Safety Community of Practice (CoP). A core group from ACES started the Food Safety CoP program in 2009. Many publications and information has been posted to eXtension since the start of the CoP in Food Safety. Also, the ACES team has answered many question from "Ask the Expert" concerning all aspects of Food Safety but the majority of the questions answered were concerning Home Food Preservation.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	18433	2323375	14872	0

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

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	11	6	17

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the evaluation which are described/explained in the prior activities and methods sections. The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity. Not reporting on this Output for this Annual Report

Output #2

Output Measure

- The number of individual activities within this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity. The number of Home Grown workshops/demonstrations offered)

Year	Actual
2013	88

Output #3

Output Measure

- Home Grown media stories: print, radio, Facebook, television

Year	Actual
2013	323

Output #4

Output Measure

- Cook4Safety Food Safety Curricula Developed

Year	Actual
2013	1

Output #5

Output Measure

- GAP Workshops Offered

Year	Actual
2013	6

Output #6

Output Measure

- Number of Participants in workshops

Year	Actual
2013	101

Output #7

Output Measure

- GAP Manual Developed

Year	Actual
2013	1

Output #8

Output Measure

- Enhancing the Safety of Locally Grown Foods Workshops Presented

Year	Actual
2013	53

Output #9

Output Measure

- Enhancing the safety of locally grown foods

Year	Actual
2013	1212

Output #10

Output Measure

- ServSafe Classes Taught

Year	Actual
2013	129

Output #11

Output Measure

- ServSafe Classes

Year	Actual
2013	1323

Output #12

Output Measure

- Verify Acid in Foods to qualify then as Acidified Foods

Year	Actual
2013	30

Output #13

Output Measure

- Prepared Nutrition Facts Labels for Alabama Food Entrepreneurs

Year	Actual
2013	76

Output #14

Output Measure

- Food Safety Training for Food Processors: Better Process Control Schools

Year	Actual
2013	2

Output #15

Output Measure

- Food Safety Training for Food Processors: Better Process Control Schools Participants

Year	Actual
2013	14

Output #16

Output Measure

- Food Safety Training for Food Processors: Seafood HACCP Workshop

Year	Actual
2013	1

Output #17

Output Measure

- Food Safety Training for Food Processors: Seafood HACCP Participants

Year	Actual
2013	29

Output #18

Output Measure

- Master Food Preserver Workshops

Year	Actual
2013	120

Output #19

Output Measure

- Master Food Preserver Workshop Participants

Year	Actual
2013	2434

Output #20

Output Measure

- Master Food Preserver Workshops: Publications Prepared

Year	Actual
2013	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	A major outcome will be the number of food service workers who participate in Extension sponsored Food Safety Training.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcome measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.
3	Increase knowledge of alternate pest management strategies in home food gardens
4	Increase adoption of principles taught: IPM in home vegetable and fruit crops, #people who start/enhance their own food garden at home
5	# vol's who assist teaching workshops and demonstrations
6	Increase knowledge and adoption of Good Agricultural Practices (GAP)and Good Handling Practices (GHP) for commercial food producers.
7	Increase knowledge and adoption of Better Processing of acidified foods by completing the Better Process Control School.
8	Home Grown for the % of participants who gained knowledge of pollinating insects and their importance in food gardens.
9	Increase the knowledge and practice of safe home food processing

Outcome #1

1. Outcome Measures

A major outcome will be the number of food service workers who participate in Extension sponsored Food Safety Training.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1323

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In the State of Alabama the certified food safety training course is required for one individual employed in every food service establishment. Therefore, this course is necessary to keep the establishment open to the public. This means revenue for the individual as well as the state. Also, by teaching the food safety principles in this course the individuals leave with a gain in knowledge of safe food preparation.

What has been done

1,323 individuals completed the certification course. Only 206 individuals did not successfully pass the certification exam.

Results

Food Service establishments remain open generating revenue and safer food is sold to consumers. The cost of foodborne illness in the US as estimated by Scharff was \$152 billion dollars in 2010 but in 2012 the estimate was reduced to \$77.7 billion. By following even one newly learned food safety practice from the ServSafe program a food borne illness could be prevented therefore reducing the cost of this illness on society.

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
503	Quality Maintenance in Storing and Marketing Food Products
504	Home and Commercial Food Service
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from

712 Agricultural and Other Sources
Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #2

1. Outcome Measures

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcome measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Increase knowledge of alternate pest management strategies in home food gardens

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	91

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Garden Writers Association Foundation 2013 Winter Gardening Trends Research report indicated: 81.5% (~55.5 million households) have grown edible plants (fruits/vegetables/herbs) since 2009 and 91.4% of those grew edibles in 2012. If planning to grown edible plants in 2013, their top 5 challenges were: Time (35.7%); Insect & Disease control (30.8%); Wildlife Control (20.6%); Irrigation (23.6%) and Cost (13.0%). Family well-being (National Gardening Assoc., 2009, Impact of Home & Community Gardening in America). Respondents have a food garden for: Better tasting food, perception of saving money on food bills, better quality of food, and to grow food they know is safe. Average yields in these gardens =1/2 lb/ft² and the majority of gardens were sized 100ft² or less.

What has been done

78 Workshops and demonstrations hosted (23 groups were surveyed)

Results

91% of participants gained knowledge about installing drip irrigation; 86% gained knowledge in choosing resistant varieties for better pest management; 77% gained knowledge about soil amendments to grow healthier plants; 67% gained knowledge in alternative pest management tactics; 69% said they would use the pruning techniques we demonstrated to them on fruit-crop plants. (N=580)

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #4

1. Outcome Measures

Increase adoption of principles taught: IPM in home vegetable and fruit crops, #people who start/enhance their own food garden at home

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

vol's who assist teaching workshops and demonstrations

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

Increase knowledge and adoption of Good Agricultural Practices (GAP) and Good Handling Practices (GHP) for commercial food producers.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In order for farmers to sell their produce to large retail establishments their farms must be certified in Good Agricultural Practices. The buyer of the produce from the retailers to the consumer, all are looking for safer food. Safer produce sold at Farmers Markets is required for the discerning consumer. These trainings help the farmers sell more produce as well as safer produce.

What has been done

A total of 6 workshops were taught to over 100 participants in the GAP/GHP training workshops. Each participant received a notebook with all the forms needed to complete the Standards of Operation to meet the requirements in the GAP program. Some one-on-one trainings were done with many farmers. A team of Food Safety Regional Agents taught 53 workshops titled "Enhancing the Safety of Locally Grown Produce." A total of 1,212 individuals attended these workshops.

Results

For the "Enhancing the Safety of Locally Grown Produce" an evaluation instrument was used and of the 1,212 participants of this program, 342 completed the form. The participants intended to: Conduct a self-inspection of your produce farm and facilities (n=236); Make changes with the land they use for growing produce (n=141); Would make changes in the timing of irrigation (n=100); Make changes in the water they use to wash their produce (n=140); Make improvements in their hand washing facilities (181); Make improvements in their toilet facilities for their workers (116); Switch to containers that can be cleaned and sanitized for use with produce (n=184); Provide more training for their workers (n=151); Make improvements in the way they clean their facilities and equipment (218); Make improvements in the way they sanitize their facilities and equipment (228); Monitor storage temperatures of their produce (186); Make improvements in the cleanliness of the vehicles they use to transport their produce to market (202); Make a plan to better trace their produce once it leaves the farm (184); Keep better records (n=222).

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
216	Integrated Pest Management Systems
503	Quality Maintenance in Storing and Marketing 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 #7

1. Outcome Measures

Increase knowledge and adoption of Better Processing of acidified foods by completing the Better Process Control School.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	149

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Better Process Control is a Nationally recognized training workshop that is required by the Food and Drug Association (FDA) for a food processor that wishes to start selling products commercially. Also, the Seafood HACCP certification and a HACCP plan must be in place to sell seafood commercially. Therefore, these courses not only teach safe food processing principles but also keep the food companies in business and increase their revenues by the selling food products that have been produced in a certified facility by a certified food processor. Nutrition Facts Labels that are prepared for the Food Entrepreneur assists that food processor to move to the larger retail food establishments that require this labeling on the food products.

What has been done

Two BPCS were taught last year, one in the spring and one in the fall, with a total of 14 attendees. Each participant must complete 7 exams to become an Food and Drug Administration

(FDA) certified acidified food processor. One Seafood HACCP class was taught to 29 individuals in Mobile, AL where the majority of the seafood processors are found. Some participants to the BPCS and the Seafood HACCP classes were from other states. As a part of the class each participant must complete a HACCP plan. Then a certificate is issued to them from the Association of Food and Drug Officials. Also, the ACES food testing lab tested 30 products to certify that they were acidified foods to allow for the correct processing procedures for the various products. Also, 76 individuals obtained a Nutrition Facts Label for their food products.

Results

A total of 149 individuals and companies were assisted in getting their foods businesses up and running or assisted them in keeping them in business with the proper food safety training courses.

4. Associated Knowledge Areas

KA Code	Knowledge Area
503	Quality Maintenance in Storing and Marketing 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 #8

1. Outcome Measures

Home Grown for the % of participants who gained knowledge of pollinating insects and their importance in food gardens.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	88

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Many food crops depend on pollinators (insects primarily) for production. Cucurbits, blueberries, and others produce lower quality and/or quantity when beneficial insects activities decrease. Misuse of pesticides can affect the presence of beneficial insects (James, Tew, Protecting Honey Bees From Pesticides. ANR-1088). And while "What do I spray on it?" is a common question

presented to Extension Agents, pesticides aren't always necessary to address the perceived problem. We teach our clients how to identify the problem, determine the severity of the problem, and then multiple options to address the problem. When suggesting pesticides, we teach them to "READ the label," proper use, and to notice and protect pollinators.

What has been done

18 Workshops and demonstrations hosted and surveyed

Results

88% of participants gained knowledge of the environmental risks to pollinators; 69% gained knowledge of ID characteristics of pollinator insects; 71% agreed to educate others about the importance of pollinators; 75% agreed to protect pollinators by limiting pesticide use to later afternoon (N=196)

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #9

1. Outcome Measures

Increase the knowledge and practice of safe home food processing

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2434

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Home food processing is on the increase with the new generation of looking to eat less processed foods and to grow their own foods. This generation has never done this type of food processing. Therefore, the Alabama Cooperative Extension System has taught for generations safe food processing guidelines for home canning. As a result of the Home Food Preservation classes the deaths from botulism has decreased to almost nonexistent. However, with this new generation of home food processors we need to continue this program to keep our citizens safe.

What has been done

A team of 9 Regional Extension agents taught 120, one to four day classes on the various food preservation topics. Classes on Pressure Canning, Water Bath Canning, Freezing and Drying were taught in these classes. These programs reached a total of 2,434 individuals. These classes were taught in 51 of the 67 counties in the state of Alabama.

Results

Of the 2,434 individuals taught, 446 completed a pre & post-test survey. The individual demographics for the survey was: 354 White, 57 Black, 3 Hispanic, 7 Asian; 20 other races and 7 not answering. 370 females; 72 males; 4 not answering. The ages attending: 23 individuals were 10 to 19, 75 were 20 to 45, 144 were 46 to 59, and 184 were 60 to 75, with 16 reporting over 76 years of age. Four individuals gave no answer. Prior to the program 141 of the participants had never canned and 123 of the participants canned only 10 to 20 jars of food last year. 1: ?How much water do you use in a water bath canner,? 241 participants answered correctly on the pre-test; 397 answering correctly on the post test. 2: ?Is it ok to water bath can Green Beans?, 167 said yes on the pre-test, post-test 364 gave the correct answer of it is not safe. 3: ?If they use USDA approved recipes for water bath canning prior to the program in the pre-test, 113 of the participants said, No. Many reported using non-research based recipes from the internet. Botulism is one of the most deadly toxins known to man. Therefore, if foods are not processed to the proper time and temperature deaths from botulism could result.

4. Associated Knowledge Areas

KA Code	Knowledge Area
504	Home and Commercial Food Service

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

N/A

V(I). Planned Program (Evaluation Studies)

Evaluation Results

In the Home Grounds programs, Home Grown workshops/demos', significant learning occurred for the survey respondents. Participants improved their knowledge from 67% to 91% (n=580). Many also responded they intend to apply the principles taught or shown to them during the programs (change their plant management tactics to those recommended, ID insects before using pesticides, protect pollinators by changing their pesticide usage).

Key Items of Evaluation

Prior to attending classes on various food preservation topics 141 of the participants had never canned and 123 of the participants canned only 10 to 20 jars of food last year. When asked 1: "When you make Jams or Jelly do you," only 167 participants out of 446 answered the question correct in the pre-test; post-test 363 answered the question correctly. 2: "How much water do you use in a water bath canner," 241 participants answered correctly on the pre-test; 397 answering correctly on the post test. 3: "Is it ok to water bath can Green Beans", 167 said yes on the pre-test, post-test 364 gave the correct answer of it is not safe. 4: "If they use USDA approved recipes for water bath canning prior to the program in the pre-test, 113 of the participants said, No. Many reported using non-research based recipes from the internet. The practice of not processing the food to the proper time and temperature could also be deadly to the consumer.

Participants in the Home Grown project will have successful gardens by implementing the recommended techniques. Following these recommendations can also reduce unnecessary or wasteful pesticide usage and exposure; increased soil organic matter can increase soil water-holding capacity and soil structure, enhance fertility management, and enhance irrigation efficiency. Presuming an average garden size of 100ft², a single season garden can minimally add \$75 to a family's resources (Gail Langellotto, How Much Does a Vegetable Garden Cost/Save, 4/14/12). This value increases with garden size and additional crop seasons.

Add to this a national need to increase consumption of fruits/vegetables, the home garden is a prime opportunity for improving a family's diet. People who grow/tend a garden are more likely to eat greater quantities of fruits/vegetables.

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Global Food Security and Hunger (Sustainable Agricultural and Forestry Systems)

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
111	Conservation and Efficient Use of Water	5%	0%		
112	Watershed Protection and Management	5%	0%		
123	Management and Sustainability of Forest Resources	10%	0%		
124	Urban Forestry	5%	0%		
134	Outdoor Recreation	5%	0%		
135	Aquatic and Terrestrial Wildlife	5%	0%		
205	Plant Management Systems	13%	10%		
216	Integrated Pest Management Systems	10%	0%		
301	Reproductive Performance of Animals	5%	10%		
302	Nutrient Utilization in Animals	5%	20%		
303	Genetic Improvement of Animals	5%	10%		
307	Animal Management Systems	10%	20%		
311	Animal Diseases	5%	20%		
315	Animal Welfare/Well-Being and Protection	5%	10%		
601	Economics of Agricultural Production and Farm Management	5%	0%		
806	Youth Development	2%	0%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	25.0	2.4	0.0	0.0
Actual Paid Professional	26.1	1.8	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
1304335	109454	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
453091	109454	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
3143088	116666	0	0

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

Poultry: Practical research and field Studies on management techniques to improve litter quality in broiler houses. **(Home Grown)** Projects highlighted water conservation, building raised garden beds, growing fruits and vegetables, using pesticides safely, composting, beneficial insects, and pruning fruit producing plants.

Forage Focus Program: A total of 63 forage related activities were developed and conducted. The Fall Armyworm on-farm surveillance program continued to assist farmers in monitoring for this forage destroying pest. **Beef Cattle Performance and Marketing Programs:** A state-wide conference was held focusing on tools and information needed to remain viable in the cattle business. Three breeding bull, 5 replacement heifer sales and 5 feeder calf sales held. In total, 19 activities of educational trainings, planning meetings and marketing events were conducted. Continued emphasis is placed on beef cattle farmers to collect and utilize financial and performance data. Thirty-three herds have submitted weaning weight records for analysis.

Commercial Horticulture Program: The specialty crop industry is on the rise in Alabama with a significant number of new and beginning farmers. This training program provided hands-on training to producers, crop consultants, and input retailers about crop production, crop protection/IPM, food storage/food safety, and marketing. The Annual Fruit and Vegetable Conference grew in participation by 35% over the past two years and is now the premier networking event for this industry in Alabama. **Agronomic Crops Program:** Extension specialists, regional agents, and county coordinators participated in over 144 activities. On-farm demonstrations included: corn seeding rate; corn hybrid evaluation; cotton variety evaluation; and wheat cultivar evaluation. Activities also included development of IPM Guides, disease diagnosis, entomology webinar, and stored grain workshops. **Alabama Ethnic Food Security Network:** ACES specialists and agents conducted workshops, forums, farm tours, field days and a multistate conference. These activities placed emphasis on meat goat and hair sheep production systems and focused on reproductive and genetic evaluations, feeding and nutrition, forage management, use of FAMACHA® chart, fecal-egg counts, and integrated gastrointestinal parasite management. Other topics included small-scale meat rabbit production, pasture-raised chickens, grass-fed beef cattle and ethnic vegetable production. The programs included presentations and demonstrations. Additionally, specialist and faculty associated with the AEFSN provided practical and easy to understand publications about goats, sheep, rabbits and, poultry and specialty vegetables. **Catfish Culture Industry Analysis Workshops;** Catfish producer information workshops, catfish yield verification studies and a best management practices booklet and DVD were produced; Recreational pond management workshops, youth angler events, and a 5-day

teacher workshop for aquaculture were held. Specialists participated and helped facilitate coastal community activity in the National Working Waterfront Network.

2. Brief description of the target audience

Poultry Industry: Poultry industry personnel and broiler farmers.

Home Grown: Residential gardeners growing for their families or as small producers at local farmers' markets

Forage Focus Program: The primary target audience was cattle, equine and hay producers interested in developing improved production of their forages to decrease dependence on stored feed.

Beef Cattle Performance and Marketing Programs

The primary target audience was beef cattle producers interested in sustainable and profitable operations.

Commercial Horticulture Program(AU): New beginning farmers, experienced established producers, crop advisors, industry representatives, nonprofit agencies, food banks, and gardeners, retailers, and educators

Agronomic Crops Program: The activities of the Agronomic Crops Program Priority Team reached the following groups of stakeholders: 1) row crop and fruit-vegetable producers and their representatives groups that include, but are not limited to, the Alabama Cotton Commission, Alabama Peanut Commission, Alabama Soybean Producers, and Alabama Wheat and Feed Grains Committee; 2) row crop, timber, forage, fruit-vegetable advisors including ACES agents and specialists, ACES county coordinators, ACES risk preparedness specialists, public and private crops advisors; 3) agriculture and forestry equipment dealers and input supplier organizations; 4) governmental agency personnel including USDA, NRCS, and State of Alabama Soil and Water Conservation Committee; and 5) private citizens impacted by policies and practices used for the production of food, fuel, and fiber. All educational programming efforts targeted audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

Alabama Ethnic Food Security Network: The primary target audience was meat goat and sheep producers developing profitable, sustainable animal production systems. Secondary target audience was small-scale and limited-resource producers of meat rabbits, all natural chickens, and specialty vegetables interested in supplying quality food products. Tertiary target audience was consumers of meat and vegetable products concerned with dietary cholesterol and other health issues.

Aquaculture industry; recreational pond owners and managers; coastal community developers, leaders, and waterfront workers; Middle and high school educators and students; Youth and adult anglers.

3. How was eXtension used?

eXtension was not used in this project. Poultry

eXtension was not used in this project. Home Grounds

eXtension was used as a resource for forage information as well as targeted webinars on relevant topics for beef and forage producers.

The Fire Ant Program, to which all REAs belong, is an eXtension project that has raised awareness about and adoption of management tactics for reducing fire ants. REAs also participate in webinars organized by eXtension Urban Program for professional development.

Current news topics along with ask the expert responses were provided for posting to various eXtension sites related to crop production and technology.

Alabama Ethnic Food Security Network: eXtension was not used in this program.

Specialist contributed a presentation to aquaculture webinar.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	44894	20144831	1896	86398

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

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	39	14	53

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Strategic Program Initiatives (SPIs) and Special Funded Projects (SFPs) which are mentioned/listed in the prior "outcome activities and methods sections." The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity. The success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the SPIs and SFPs for this program area that will be

formally evaluated using an evaluation instrument designed specifically for that activity.
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of Book Copies Sold in Alabama Ethnic Food Security Network Program

Year	Actual
2013	150

Output #3

Output Measure

- Number of Workshops to Increase farmers knowledge in efficient and profitable methods of goat, sheep, and specialty vegetable production
Not reporting on this Output for this Annual Report

Output #4

Output Measure

- Number of programs about improving bird health and productivity through improved litter management.

Year	Actual
2013	5

Output #5

Output Measure

- Number of Regional Field Days and Workshops to Increase Knowledge of Horticulture Production

Year	Actual
2013	6

Output #6

Output Measure

- Number of Workshops and Field Days to Encourage Adoption of Row Crop Practices that are Sustainable and Profitable

Year	Actual
2013	144

Output #7

Output Measure

- Number of Publications for Integrated Pest Management Adoption

Year	Actual
2013	34

Output #8

Output Measure

- Increase in Viable Forestry and Wildlife Committees
Not reporting on this Output for this Annual Report

Output #9

Output Measure

- Number of Industry Wide Workshops to Increase Knowledge of Catfish Producers

Year	Actual
2013	2

Output #10

Output Measure

- Number of Workshops to Increase Understanding of Pond Function and Management by Owners

Year	Actual
2013	12

Output #11

Output Measure

- Number of Youth Education Events to Increase Public Understanding of Water Conservation

Year	Actual
2013	6

Output #12

Output Measure

- Number of 5 Day Teacher Workshops to Increase Appreciation of Aquaculture and Aquatic Natural Resources by Students and Teachers

Year	Actual
2013	1

Output #13

Output Measure

- Public Awareness Campaign to Encourage Understanding of Coastal Environmental Issues

Year	Actual
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2013 1

Output #14

Output Measure

- Number of Regional Meetings to Increase Knowledge and Awareness of Methodologies and Practices used in Establishing and Sustaining a Viable Forage Base on Alabama Livestock and Equine Farms

Year	Actual
2013	49

Output #15

Output Measure

- Number of Value Added Marketing Events to Increase Producer Knowledge Through Comprehensive Programming for Livestock and Equine Owners on Sustainability of Production, Proper Care and Appropriate Marketing Options

Year	Actual
2013	9

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Strategic Program Initiatives and Special Funded Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.
2	Increase farmers' knowledge in efficient and profitable methods of goat, sheep, and specialty vegetable production
3	Increase broiler producer awareness of methods to reduce waste management issues on farms; Increase poultry producer confidence in litter management techniques; and Train poultry industry personnel in poultry house technology and management
4	Increase knowledge of horticultural production methods and marketing
5	Adoption of row crop production practices that are sustainable and profitable
6	Integrated pest management adoption
7	Increase in active, viable forestry and wildlife county committees
8	Increase the knowledge of catfish producers in more efficient practices; Expand the use of hybrid catfish in production; and Incorporate management that optimizes quality and profitability at all stages of production to marketing
9	Increase understanding of pond function and management by owners; Reduce improper management by consultants; and Increase satisfaction and enjoyment of ponds by owners
10	Increase public understanding of water conservation; Improve angler education to increase understanding of fisheries management; and Increase enjoyment of angling
11	Increase appreciation of aquaculture and aquatic natural resources by students and teachers

12	Increase public awareness of costal environmental issues; Increase public awareness of loss of working waterfront; and Increase community resilience to natural and manmade disasters
13	Increase knowledge and awareness of methodologies and practices used in establishing and sustaining a viable forage base on Alabama livestock and equine farms
14	Increase producer knowledge through comprehensive programming for livestock and equine owners on sustainability of production, proper care and appropriate marketing options
15	Alabama Ethnic Food Security Network
16	Broiler Litter Management - Effort in 2013 involved speaking to broiler grower groups through Alabama Poultry and Egg Association regional and state-wide programs about improving bird health and productivity through improved litter management. In addition, articles in popular press magazines (including the Alabama Poultry and Egg Magazine) advanced knowledge in this area.
17	Integrated pest management adoption: IPM in home vegetable and fruit crops, #people who start/enhance their own food garden at home

Outcome #1

1. Outcome Measures

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Strategic Program Initiatives and Special Funded Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Increase farmers' knowledge in efficient and profitable methods of goat, sheep, and specialty vegetable production

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Increase broiler producer awareness of methods to reduce waste management issues on farms; Increase poultry producer confidence in litter management techniques; and Train poultry industry personnel in poultry house technology and management

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Increase knowledge of horticultural production methods and marketing

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	3000000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabama has a rising number of new/beginning farmers with 2 to 4 acres land. These new specialty crop producers need training and continuous information about production methods, pest management, food safety, and marketing of crops. Experienced producers (typically with 10 to 25 acres) are also given information via newsletters, phone calls, and direct site visits which is critical service to the industry. Without pest management training, crop losses in specialty crops averages about 40 to 90% (results from demonstration plots) which will be disastrous to the farming industry. In 2012, ACES developed the statewide organic farming campaign which is ongoing due to heavy demand from producers and involves all steps leading to more a sustainable agriculture system.

What has been done

ACES Commercial Horticulture Program consisting of many Extension Specialists (ES) and 7 regional Extension agents (REAs) conducted over 219 workshops, 39 demonstrations and over 500 on-site visits across Alabama that resulted in directly training 6,605 attendees. Rural

audiences include fruit, vegetable and turf producers comprised 80% of the total. Cucurbit sentinel plots and insect pheromone traps were used to monitor critical disease and insect pest species. Information about production issues, disease and insect outbreaks was continuously provided to producers via newspaper/magazine articles (39+), radio/TV announcements (39), Extension news releases (15), IPM newsletter (1300 subscribers, 17 issues) posted on websites, blogs and social media channels (4).

Results

Specialty crop producers in Alabama are in great need of research-based information based on the increasing number of participants at meetings. Compared to 2011, grower participation in the Extension events has gone up 40% in 2013. Other impacts include small berry producers directly benefited from the training about invasive insects that saved \$10,000 to \$72,000 on certain farms by developing IPM plan for farmers. Information from cucurbit sentinel plots was used by producers with nearly \$10,000 in cost saving per adoptive farm. Vegetable producers can lose about 40 to 70% crop without using IPM practices (overall impact is about \$3 to 4 million). An impact video for Alabama Vegetable IPM program was produced.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #5

1. Outcome Measures

Adoption of row crop production practices that are sustainable and profitable

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	30500000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Row crop producers are constantly challenged with in-season issues but also managing their profit margins from year-to-year. The agronomic crops team focused on these challenges to help

farmers remain profitable but also sustainable.

What has been done

Workshops, field days and training sessions are conducted throughout the year focused on helping farmers obtain timely information related to crop production. Social media, websites, e-mail, phone and farm press are also used to disseminate timely news to farmers and crop consultants.

Results

Extension programming increased soybean profitability by \$45/acre in North Alabama. Proper selection of a top yielding cotton variety based on farm trials increased cooperating producer's income in Central Alabama by \$145/acre. Proper identification, product selection, and timely treatment of stinkbug in cotton, peanut and soybean increased gross cotton receipts \$18,000,000. Recommendations by an REA on 25,000 acres of cotton resulted in improving gross income by \$500/acre totaling \$12,500,000. Irrigation programming has led to improved scheduling protocol by Alabama farmer with estimated water savings of 5% to their operations. Farmers which attended the Sprayer Clinic indicated they purchased new nozzle packages for specific pesticide applications, providing a value of \$22/ac. Subscribers indicated that Profit Profiles had a value of \$10 per month.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #6

1. Outcome Measures

Integrated pest management adoption

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

Increase in active, viable forestry and wildlife county committees

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

Increase the knowledge of catfish producers in more efficient practices; Expand the use of hybrid catfish in production; and Incorporate management that optimizes quality and profitability at all stages of production to marketing

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	27

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The aquaculture industry and specifically commercial catfish production has experienced significant declines in profitability over the past several years. Competition from seafood produced from outside the United States, other proteins, and increased cost of production have contributed to this downturn in the industry here in the Southeast. Our Pond-to-Plate extension project is leading the industry through a process of evaluating the entire production, processing, and marketing system to determine what aspects can be optimized to increase efficiency and ultimately profitability of the catfish production industry and eventually aquaculture in the southeast as a whole. The project's target audience are primarily catfish producers, processors, and marketers centered mostly in west central Alabama.

What has been done

The project conducted a review of the US catfish industry. Two industry wide workshops with over 250 participants were held to address industry needs and issues. ACES Specialists and researchers introduced new technology and research in a series of informational meetings. Conducted Yield verification and product quality studies were conducted with catfish producers in West Alabama.

The project produced the booklet "Best Management Practices for the Commercial Production of Catfish in Alabama" prepared from results of several studies completed during 2013. A DVD entitled "Advances in Aquaculture" including catfish fillet color standards, harvesting fish with a fish pump, hybrid catfish grading seine, and advanced aquaculture systems was completed and distributed.

Results

Pond to Plate program increased catfish industry participants understanding of the industry and established four potential solutions that would help increase production and profitability of producers and processors. Findings included: 1) industry improvement will require increased production efficiency, raising quality standards (workmanship, flavor, consistency) and improved product marketing; 2) despite declines in the industry, workshop attendees expressed strong belief that they would still be involved in catfish production five years from now, and that the market for U.S. farm-raised catfish could be increased by 65% in the next 20 years; 3) renewed farmer/processor dialogue showed that value-chain linkages need to be improved. 4) Participants agreed that U.S. farm-raised catfish should be marketed as an environmentally-friendly, locally grown, nutritious and sustainable protein. Workshop attendees gained specific knowledge on current practices technologies they can adopt to improve industry sales and competitiveness. The Pond-to-Plate project helped develop new catfish products to be used by west Alabama school lunch programs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
302	Nutrient Utilization in Animals
303	Genetic Improvement of Animals
307	Animal Management Systems
311	Animal Diseases
601	Economics of Agricultural Production and Farm Management

Outcome #9

1. Outcome Measures

Increase understanding of pond function and management by owners; Reduce improper management by consultants; and Increase satisfaction and enjoyment of ponds by owners

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

With approximately 250,000 ponds in Alabama, management of these aquatic systems is an important activity that impacts quality of life through recreation and aesthetics. Fishing is the most common use of ponds in Alabama but they are also used for stock watering, irrigation, drinking water supplies, aquatic gardening, aquaculture and other uses. While the basic principles of pond management are well established, it is valuable to educate pond owners and managers in proper strategies to meet their management goals and to provide reactive services to help them address problems as they arise.

What has been done

Our efforts included workshops, digital information and tools, routine services, and mass media delivery. We conducted about 12 workshops ranging from a simple presentation to demonstrations and services provided.

Maintained the recreational fishing portion of our website, where all our Extension literature, video, supplier lists, and slide presentations for pond management and fisheries is available to the public. Specialists completed an online calculator designed to determine the fatness of fish collected. We maintained the Alabama Extension Fisheries and Pond Management Facebook Page by creating more than 200 posts of original and shared material. Specialists completed a TV episode for a local outdoor show on pond management. Extension personnel provided routine services and consultation to solve pond problems.

Results

Evaluation of the program was limited to change in knowledge associated with individual workshops and satisfaction with the information presented. In the workshops where pre-post testing occurred participants on average more than doubled the percentage of correct answers after attending the workshop.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
134	Outdoor Recreation
135	Aquatic and Terrestrial Wildlife
205	Plant Management Systems
216	Integrated Pest Management Systems
307	Animal Management Systems
311	Animal Diseases

Outcome #10

1. Outcome Measures

Increase public understanding of water conservation; Improve angler education to increase understanding of fisheries management; and Increase enjoyment of angling

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2013

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Angling is an activity with millions of participants across the United States. In Alabama direct expenditures on angling exceed \$600,000,000 annually. Interest in aquatic environments stimulated from an interest in fishing can be used to educate and inculcate an appreciation in aquatic stewardship

What has been done

Six youth angler education events were held in 2013 including a 4H Family Fun Fishing Day, participation in the Ag Discovery Day at EV Smith Experiment Station and Ag Roundup providing a casting activity and fish prints, and other fishing events.

One educational event was held in cooperation with a Boy Scout group to provide the necessary activities needed for the scouts to earn their fishing merit badge.

Results

Ten boy scouts completed their training needed to obtain their merit badges in fishing

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
134	Outdoor Recreation
135	Aquatic and Terrestrial Wildlife
806	Youth Development

Outcome #11

1. Outcome Measures

Increase appreciation of aquaculture and aquatic natural resources by students and teachers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	20

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Aquaculture programs have been established in several high schools and middle schools in Alabama. Aquaculture provides applications of science, mathematics, and even social science such as economics and marketing that support the middle school and high school teaching objectives. Training and curricula developed by Specialists in this project are used by teachers, extension personnel, and students in several states.

What has been done

This project included a 5 day teacher workshop in with another state specialist and outside cooperators for 23 participants from multiple states and a multicounty aquaponics workshop for 25 people. Three state specialists conducted 33 school visits to provide technical support and instruction. Two thousand tilapia fingerlings were supplied to schools for aquaculture projects. Six aquaculture videos were produced and placed on youtube where they received 2,456 views. An additional 5 videos were produced and distributed on DVD. Specialists provided input and updates for the education section of our web site which received 470,054 page views

Results

Teacher workshop pre/post testing indicated that teachers increased their aquaculture knowledge by 20%. Teacher remarks in the workshop evaluation indicated universal satisfaction with the training and excitement in implementing the programs in their classrooms. Providing aquaculture education information online provides access to teacher, students, and the public worldwide. This enhances their understanding and appreciation for aquaculture. Teachers report that aquaculture

material increase student engagement in learning math and science. The Introduction to aquaculture video on you tube was viewed by people in 91 countries providing broad reach of our expertise.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
135	Aquatic and Terrestrial Wildlife
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection
806	Youth Development

Outcome #12

1. Outcome Measures

Increase public awareness of costal environmental issues; Increase public awareness of loss of working waterfront; and Increase community resilience to natural and manmade disasters

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Working waterfronts are critical to the economic vitality of coastal communities. Working waterfronts provide the infrastructure needed by fishing (both commercial and recreational) and other water-based industries. The gentrification of docks has led to less and greatly more expensive service areas pushing the working boats further away from traditional areas or placing businesses in peril.

What has been done

Participated in the founding steering committee of the National Working Waterfront Network
Presented the Alabama Working Waterfront project at the National Working Waterfront conference.

Assisted in Fourth National Working Waterfront Conference planning

Specialists facilitated the efforts of the Alabama Working Waterfront Coalition.

Ensured the Gulf Shores Working Waterway District is a case study on the National Working Waterfront Network Toolkit. The project produced the Working Waterfront display at the Bayou La Batre Blessing of the Fleet.

Results

The Alabama Working Waterfront Coalition has formed a board and elected chairmen, and is becoming an independent organization apart from Extension. This will allow greater ability for the group to lobby for the working waterfront issues. By hosting the National Working Waterfront conference, the northern Gulf will showcase its working waterfront, calling state and national attention to the assets and needs there.

Inclusion of the Gulf Shores project case study enhances the knowledge of communities who use the case studies, and can serve as a model.

4. Associated Knowledge Areas

KA Code	Knowledge Area
134	Outdoor Recreation
601	Economics of Agricultural Production and Farm Management

Outcome #13

1. Outcome Measures

Increase knowledge and awareness of methodologies and practices used in establishing and sustaining a viable forage base on Alabama livestock and equine farms

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	969255

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

For livestock enterprises in Alabama, quality forage production is key to profitability and sustainability. Research shows over 70% of any livestock budget is spent on feedstuffs to maintain the individual animal throughout the year. Minimizing grain use for ruminant livestock species and equine and maximizing the use of high quality forages not only meets nutritional requirements, but also decreases feedstuff costs. The goal for Alabama livestock farmers is to have 300 days of quality forage available each year.

What has been done

A comprehensive set of programs for livestock, equine and forage producers have been developed and implemented. These programs were all designed to increase farmers' abilities in establishing and sustaining a viable forage base for their operation. Programs are varied in terms of delivery, length and depth of subject matter. In 2013, the statewide forage conference was held. Several one-day hands-on workshops were conducted on grazing, haylage/baleage, forage pests and hay production. Six demonstration/research forage plots were established as well as 49 regional/county meetings conducted. Additionally, a webinar series (n=6) was established concentrating on current forage topics and forage pests as well as publications (n=4), you-tube videos (n=1) and timely information sheets (n=2).

Results

From surveys conducted at beef forages and weed identification meetings, 84% of participants planned to change beef operation practices due to knowledge gained from the meetings. Additionally, participants suggested they were going to incorporate improved varieties of forages when re-planting pastures and hayfields. Given the emphasis on forages production the past three years, participants who had previously attending forage programs indicated they are utilizing soil and hay test results to reduce the impact on the environment by not overlapping fertilizer or pesticides. Results from the two (2) one-day livestock grazing clinics showed 140 acres per participant would be impacted by improved grazing management. Attendees (n=50, 63%) indicated they would definitely adopt new practices learned at the clinics with 40% suggesting rotational grazing techniques would be their first implemented practice. Statewide forage conference attendees (n=181, 7 states) determined the overall value of the information presented was \$969,255. Through forage demonstrations, it was determined by implementing control procedures for bermudagrass stem maggot, producers can save \$11,200/40 acres.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
216	Integrated Pest Management Systems
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management

Outcome #14

1. Outcome Measures

Increase producer knowledge through comprehensive programming for livestock and equine owners on sustainability of production, proper care and appropriate marketing options

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	8300000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Cattle farmers who have implemented science-based management techniques generally are not economically rewarded through weekly livestock sales. This program allows producers to learn about, participate in and take leadership in alternative marketing opportunities. These marketing opportunities allow producers the opportunity to see increased market prices over weekly livestock auction prices. These marketing opportunities also allow producers to pool cattle together which, because of volume and quality, attract a large number of potential buyers from across the United States. Additional dollars to cattle farmers benefit local communities since research indicates 75 to 85% of income is spent locally.

What has been done

Education and guidance were provided to beef cattle farmers to assist in adding value and options to market feeder calves in economic units and breeding animals, such as bulls and replacement heifers, by Regional Extension Agents and Specialists in 2013. Five value-added feeder calf marketing events were held with educational assistance by ACES personnel. Four marketing events within Beef Cattle Improvement Association (BCIA) were also held to market bulls, bred and open heifers. For each marketing event, producers provided verifiable production and health information that was transformed into catalog form to help guide buyers in purchase selection.

Results

Value-added feeder calf marketing opportunities (n=5) represented 6,000 head of Alabama bred and raised feeder calves weighing over 4.3 million pounds worth over \$6.1 million. Producers utilizing proper management and health protocols realized on average \$99.51/head more in marketing in these sales over weekly auction sales. This amounts to \$597,000 additional revenue in producers' pockets. Bulls marketed via BCIA marketing events had an overall gross of \$680,950 with an average price per bull of \$3,290. Bred heifers (n=237) were marketed for an

overall gross of \$425,325 with an average price per bred heifer of \$1,795. Open heifers (n=60) were marketed for an overall gross of \$67,305 with an average price per open heifer of \$1,122.. Overall economic impact of \$1,173,580 from 504 head of breeding animals marketed. Producers marketing bred replacement females through these marketing opportunities have indicated an estimated \$400 per head net gain over expenses and opportunity costs. Buyers of breeding animals are likely purchasing genetically superior individuals to those already on the farm. This should translate into increased potential farm income as long as proper management practices are followed.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
303	Genetic Improvement of Animals
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection
601	Economics of Agricultural Production and Farm Management

Outcome #15

1. Outcome Measures

Alabama Ethnic Food Security Network

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	749

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabama Ethnic Food Security Network

The dynamic population change that has taken place in Alabama represents new opportunities for food producers and marketers. Because consumer demand for ethnic foods is rising, farmers in Alabama have tremendous opportunities to diversify, expand, and supply the growing demand for a number of multicultural foods. In order to remain competitive in today's market, Alabama farmers and marketers must keep pace with increasingly market segment needs. Meats such as

goat and lamb are not only popular among Hispanics, but also among Caribbean Islanders and Middle Easterners. Vegetables such as peppers and eggplants are very popular among Hispanics as well as Asians. Furthermore, research data indicates that more and more Americans are changing their tastes in favor of new multicultural flavors and foods. Despite this increasing interest in multicultural dining, the public is unable to experience more of a variety of ethnic meals at home because of limited availability of high quality, authentic multicultural foods. However, to ensure that farmers increase availability of a number of safe ethnic food ingredients, educational resources in alternative animal and vegetable production and technological advances were needed.

What has been done

Alabama Ethnic Food Security Network

In an effort to help Alabama farmers increase the availability of a number of multicultural food ingredients in an efficient and profitable way, ACES provided broadly-based and objective information about sheep and goats and, to some extent, specialty vegetables and their impact on Alabama's economy and natural resources. Besides carrying out an array of outreach activities (See Planned Program (Activity)), Animal Science specialists and agents from the Urban Affairs and New Nontraditional Program Unit of ACES sold over 150 copies of their book titled "Meat Goats: Reproduction, Nutrition, and Health" to help farmers who are raising meat goats to become more knowledgeable and successful in this particular enterprise. During 2013, copies of this book, which is only available in print, were sold to farmers in the North Alabama area and the Black Belt region. Extension Animal Science specialists also distributed many copies of their manual titled "Small-Scale Commercial Rabbit Production", which enjoyed a great popularity among growers in the Southeast and overseas.

Additionally, to help farmers in Alabama increase production of safe lamb and goat meat, Animal Science specialists and agents from the Urban Affairs and New Nontraditional Program Unit of ACES provided broadly-based and objective information about biosecurity measures and food safety schemes.

Results

Alabama Ethnic Food Security Network

Alabama goat and sheep producers have become more knowledgeable and stayed open to new and different management practices that allowed their operations to be more productive and profitable. Sign-in sheets showed that a total of 689 goat and sheep producers attended educational activities carried out and/or sponsored by ACES agents and specialists associated with the Alabama Ethnic Food Security Network (AEFSN). Post surveys indicated that 98% of respondents gained knowledge as a result of the educational activities. Moreover, 78.2% of respondents reported increases in production efficiency, 69.5% reported improvements in herd health, and 58.5% reported increases in profitability ranging from 1 to 20%.

Additionally, youth from the Academy for Science and Foreign Language (ASFL) in Huntsville, Alabama have become more knowledgeable about vegetable production. Sign-in sheets showed that a total of 60 elementary school students attended educational activities carried out and/or sponsored by ACES agents and specialists associated with the AEFSN. Quantitative outcomes showed ASFL students grew and harvested about 15 lbs. of collard and turnip greens, which were cooked by lunch room staff and consumed by students themselves.

The AEFSN at Alabama A&M University (AAMU) plans to continue to provide leadership in this particular program area and to be the premier lifelong education network that helps Alabama farmers improve the efficiency of sheep, meat goat, rabbit, and ethnic vegetable production.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
303	Genetic Improvement of Animals
307	Animal Management Systems
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection

Outcome #16

1. Outcome Measures

Broiler Litter Management - Effort in 2013 involved speaking to broiler grower groups through Alabama Poultry and Egg Association regional and state-wide programs about improving bird health and productivity through improved litter management. In addition, articles in popular press magazines (including the Alabama Poultry and Egg Magazine) advanced knowledge in this area.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	10000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Poultry Industry Personnel and broiler farmers are keenly interested in improving litter quality to maintain and improve broiler health and welfare.

What has been done

Effort in 2013 involved speaking to broiler grower groups through Alabama Poultry and Egg Association regional and state-wide programs about improving bird health and productivity through improved litter management. In addition, articles in popular press magazines (including the Alabama Poultry and Egg Magazine) advanced knowledge in this area.

Results

Extension efforts supporting windrow composting usage in the state were adopted by the industry as one tool to reduce the incidence of Laryngotracheitis. The incidence of this important respiratory disease dropped from 300 cases per year to 3 cases in the state last year. Technical support for the use of litter treatments to reduce ammonia in broiler houses has been implemented by well over half of all growers in the cooler months. These efforts reduce respiratory disease and lower energy costs for growers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #17

1. Outcome Measures

Integrated pest management adoption: IPM in home vegetable and fruit crops, #people who start/enhance their own food garden at home

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1194

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

General audience for the Vegetable IPM information includes new and experienced producers, crop consultants, retailers, and gardeners. Experienced producers have 10 to 25 acres under production whereas new small farms are about 2 to 5 acres. 80% of experienced producers and crop consultants use Extension publications like the vegetable handbook. Participation in the IPM program has increased four times since 2010.

What has been done

Vegetable IPM program outputs (publications) include revision of IPM Handbook, 30 Extension bulletins and news releases, 3 promotional items (bookmarks/magnets), 5 training videos and 2 training modules for producers. The vegetable IPM website gets 107 hits per day during peak season. Facebook and Twitter accounts are utilized to disseminate IPM information (300+ subscribers). In 2013, the vegetable IPM program directly trained about 1194 participants which is a 40% increase compared to 2011. The IPM program trains producers via presentations (18), hands-on workshops (9), and field days (6). IPM exhibitions at major regional conferences (5) results in outreach to 4,175 participants

Results

Vegetable IPM program: Survey return rate was 61% (n=198) for conventional/large farm IPM and 48% (n=417) for new/small farm IPM campaign. Overall, the audience includes 80% producers, 14% gardeners, 4% state agencies, and 2% crop consultants. IPM training results in 50% increase in IPM knowledge and 55% increase in confidence with 36% adoption rate on average. Nearly 80% of experienced producers use IPM recommendations and depend on telephonic or on-site consultation with Specialist and REAs. IPM newsletter is used by 47% of respondents. 60% of trained producers use website for IPM decision-making. Satisfaction rating from IPM training was 97%. The IPM program has received two awards each from the Southern Region IPM Center and the National Association of County Agric. Agents for impactful programming.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
216	Integrated Pest Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Although the majority of American farmers are still at the mercy of both economic factors and the weather, farmers may be reluctant toward adopting new animal husbandry practices or making changes in cropping decisions. Furthermore, to have a statewide comprehensive program, additional training activities focusing on small ruminant, meat rabbit, pasture-raised chickens, and specialty vegetable production must be made available to all interested individuals across Alabama. Therefore, it is imperative to increase participation of other Extension professionals and increase the number of integrated outreach educational activities, especially in South Alabama.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Alabama Ethnic Food Security Network

- * Increased knowledge of key production management practices.
- * Improved efficiency of production.

- * Improved animal health and well-being.
- * Increased marketing and profitability.
- * Increased food safety and hygiene.

Key Items of Evaluation

Comm Hort: Vegetable IPM Program (Auburn University): The IPM program separately evaluates the conventional/large farm and new/small farm IPM campaigns separately. Survey methods include paper-based instruments, online (delayed) surveys, telephonic interviews and on-farm observations, and pre/post-tests. Survey return rate is 61% (n=198) for conventional/large farm IPM and 48% (n=417) for new/small farm IPM campaign. In addition, the IPM program evaluated program effectiveness at third-party events that provides consistent evaluation of technology adoption rates.

Alabama Ethnic Food Security Network: As a result of the educational activities, the following quantitative outcomes (based on post surveys) were achieved:

335 goat and sheep producers gained knowledge of key production management practices. 96 goat and sheep producers observed improved production efficiency. 79 goat and sheep producers observed improved animal health and well-being. 67 goat and sheep producers reported increased profitability rates ranging from 1 to 20 percent. 51 goat and sheep producers reported sale prices ranging from \$1.00 to \$1.90 per pound and sale revenues ranging from \$1,000 to \$20,140. 29 small-scale and part-time farmers reported cattle prices ranging from \$0.90 to \$1.25 per pound and cattle sale revenues ranging from \$1,350 to \$4,000. 60 elementary school students grew, harvested and consumed about 15 lbs. of collard and turnip greens.

Aquaculture: Teacher workshop pre/post testing indicated that teachers increased their aquaculture knowledge by 20% with remarks indicating universal satisfaction with the training and plans to implement programs in their classrooms. In the recreational fish pond workshops where pre-post testing occurred participants on average more than doubled the percentage of correct answers after attending the workshop.

Animal Science: Value-added feeder calf marketing opportunities (n=5) represented 6,000 head of Alabama feeder calves weighing over 4.3 million pounds worth over \$6.1 million. Producers realized on average \$99.51/head more in marketing in these sales over weekly auction sales. This amounts to \$597,000 additional revenue for producers. Overall economic impact of \$1,173,580 from 504 head of breeding animals marketed. Producers marketing bred replacement females through these marketing opportunities have indicated an estimated \$400 per head net gain over expenses and opportunity costs.

Crops: Extension programming increased soybean profitability by \$45/acre in North Alabama. Proper selection of a top yielding cotton variety based on farm trials increased cooperating producer's income in Central Alabama by \$145/acre. Proper identification, product selection, and timely treatment of stinkbug in cotton, peanut and soybean increased gross cotton receipts \$18,000,000. Recommendations by an REA on 25,000 acres of cotton resulted in improving gross income by \$500/acre totaling \$12,500,000.

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Sustainable Energy

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	10%	0%		
102	Soil, Plant, Water, Nutrient Relationships	20%	0%		
216	Integrated Pest Management Systems	20%	0%		
402	Engineering Systems and Equipment	20%	0%		
403	Waste Disposal, Recycling, and Reuse	20%	0%		
603	Market Economics	10%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual Paid Professional	1.0	0.0	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
5839	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
17371	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
120505	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The project consisted of programs and demonstrations that 1) increased production of energy feedstocks (corn, soybeans, rapeseed, cottonseed, wheat and biomass); 2) worked with municipalities to produce biodiesel from used cooking oil; 3) worked with entrepreneurs to develop renewable energy manufacturing plants; 4) worked with petroleum distributors, farmers and the general public to increase usage of renewable fuels; 5) worked on renewable energy opportunities and 6) increased crop production fuel efficiency

2. Brief description of the target audience

The activities of the sustainable Energy Program target the following groups of stakeholders 1) feedstock producers and their representative groups that include, but are not limited to, the Alabama Soybean Producers, the Alabama Wheat and Feed Grains Producers, the Alabama Soybean and Corn Association and the Alabama Forestry Association; 2) fleet managers; 3) energy entrepreneurs; 4) municipalities, county governments and other public organizations; 5) feedstock production advisors including ACES agents and specialist, public and private agronomy advisors; 6) public policy makers requesting energy information; 7) governmental agency personnel including ADECA, DOE, USDA and NRCS; and 8) homeowners and others interested in energy conservation.

All educational programming efforts target audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

3. How was eXtension used?

Certified Biomass Procurement Specialist/Switchgrass

This free eXtension online course is funded by a grant from the United States Department of Agriculture's National Institute of Food and Agriculture. The course is a part of the Southeastern Partnership for integrated Biomass Supply Systems.

This course is designed to train students to work with farmers and landowners to produce switchgrass that will be used as the feedstock for a biorefinery.

The idea for this program came from observing the poultry industry. In the poultry industry, poultry companies contract with growers to grow the chickens they need. Farmers cannot show up at the processing plant any time they want with whatever kind and size of chicken they happen to have. The poultry companies hire specialists that work with the growers. These specialists make sure that they have the exact type and the exact size of chicken the processor needs at the time they need it.

As a certified biomass procurement specialist, graduates will work for a biorefinery that's making fuel or other bio-products. Like the poultry field specialist, graduates insure that their employer has the inputs it needs to keep the plant running.

Graduates will work with the farmers and landowners to produce switchgrass in an environmental and socially accountable way that meets the specifications of the biorefinery. These specifications are sure to include size, amount and delivery time.

The course consists of four separate two hour units with the objective of giving students a working understanding of the fundamentals of sustainable feedstock production practices. There is a test on each unit and students that make 80 or above on the test receive a certificate.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1191	414928	0	0

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

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	3	0	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Participants reached
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- video produced
Not reporting on this Output for this Annual Report

Output #3

Output Measure

- web pages developed

Year	Actual
2013	2

Output #4

Output Measure

- Energy Tree Production

Year	Actual
2013	3

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Knowledge gained
2	recomendations addopted
3	Energy saved and produced

Outcome #1

1. Outcome Measures

Knowledge gained

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The high cost of seed, fertilizer and crop protection chemicals has increased the need for farmers to know all the agronomic and economic benefits associated with each input decision they make. Soybeans are the dominate feedstock for biodiesel production. The more soybeans that are produced the more soybean oil will be available for biodiesel.

What has been done

An educational program was conducted to inform soybean producers of what was discovered with the soybean production test on fertilization.

Results

\$20 per acre added profit due to using the data from these test .

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
403	Waste Disposal, Recycling, and Reuse
603	Market Economics

Outcome #2

1. Outcome Measures

recomendations addopted

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Soybean seeding rates. Producers want to cut production cost and maximize yield by adopting correct seeding rate.

What has been done

An educational program was conducted to inform soybean producers of what was discovered with the seeding rate and row spacing field test.

Results

Almost a two bushel per acre increase in yield equaling \$25 extra profit. That is an additional three gallons of biodiesel capacity.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
603	Market Economics

Outcome #3

1. Outcome Measures

Energy saved and produced

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Increased soybean yield could result in increased biodiesel production

What has been done

2013 soybean demonstrations showed how to increase yield 19.3 bushels per acre.

Results

27 gallons of biodiesel per acre increase. (19.3 bushels per acre X 1.4 gallons of biodiesel per bushel.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
603	Market Economics

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

Discovery of abundant natural gas decreased demand for renewable fuels.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Certified Biomass Procurement eXtension Course - Five test students took the course and found several glitches mainly with how the test are given and graded. These glitches were corrected

Key Items of Evaluation

eXtension course test students.

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Agriculture, Forestry, and Related Industries

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
111	Conservation and Efficient Use of Water	5%	10%		
112	Watershed Protection and Management	5%	10%		
123	Management and Sustainability of Forest Resources	5%	0%		
124	Urban Forestry	5%	5%		
125	Agroforestry	5%	0%		
133	Pollution Prevention and Mitigation	0%	5%		
134	Outdoor Recreation	5%	5%		
135	Aquatic and Terrestrial Wildlife	5%	5%		
136	Conservation of Biological Diversity	5%	5%		
205	Plant Management Systems	13%	10%		
216	Integrated Pest Management Systems	5%	5%		
301	Reproductive Performance of Animals	5%	5%		
302	Nutrient Utilization in Animals	5%	5%		
303	Genetic Improvement of Animals	5%	5%		
307	Animal Management Systems	10%	10%		
311	Animal Diseases	5%	5%		
315	Animal Welfare/Well-Being and Protection	5%	5%		
601	Economics of Agricultural Production and Farm Management	3%	0%		
605	Natural Resource and Environmental Economics	2%	0%		
806	Youth Development	2%	5%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Extension	Research
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Year: 2013	1862	1890	1862	1890
	57.9	1.3	0.0	0.0
Plan	57.9	1.3	0.0	0.0
Actual Paid Professional	66.4	3.5	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
508777	211003	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1153049	211003	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
7998702	224907	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Ag Crops Extension specialists, regional agents, and county coordinators participated in activities 40 related to this project which included but not all inclusive; peanut pod blasting (5); field crops tours (6); cotton production meetings (5); entomology in--field training (6); wheat meetings (6); stink bug in-- field monitoring (3); sprayer clinic (4); Activities also included development of IPM Guides, disease diagnosis, entomology webinar, and stored grain workshops (5).
 - Master Gardener training series (10-14 classes each) were offered in 22 locations and trained 435 interested participants from 31 counties. Classes include soils and plant nutrition, plant physiology, pest ID and management, water conservation, fruits and vegetables, composting, beneficial insects, and others. Classes were coordinated by 11 REAs partnering with 9 CECs, and 17 Specialists/Outreach Coord's/non-HG REAs/non-ACES staff.
 - Poultry knowledge was transferred through short courses, training sessions, newsletters and the Poultryhouse.com website. Field studies were conducted on poultry house design.
 - Organic/small farm IPM campaign (Auburn Univ.) is one of the most recent campaigns in ACES. Participation of producers in 2013 Alabama IPM meetings (869) has increased by about 40% since 2011. Overall satisfaction rating from training is 97% and the average crop loss prevented range from 40 to 60% among adoptive farmers. The Alabama Vegetable IPM program overall has received many major regional and national awards for a high quality program (details provided later).
 - In 2013, ten extension presentations were given by Dr. Enloe that included information on cogongrass ecology and control. These presentations occurred across Alabama at Extension meetings. Two peer reviewed journal articles on cogongrass ecology and control were submitted and accepted for publication in the journal Invasive Plant Science and Management.
- The USGL 2013 FY reached 5,121 (face to face) individuals through 65 scheduled activities. Some of these activities also have the potential to reach other (non-face to face) individuals through distributed

educational resource materials, internet, radio and T.V. interviews, social media, and newspapers. The non-traceable clientele are estimated to be 246,628. Total number reached by the USGL FY2013 is 251,749. The face to face clientele (5,121) were 59% adults, 39% youth, 37% black, 61% white, 28% male, and 71% female.

2. Brief description of the target audience

- The activities of the Agronomic Crops Program Priority Team reached the following groups of stakeholders: 1) row crop and fruit-vegetable producers and their representatives groups that include, but are not limited to, the Alabama Cotton Commission, Alabama Peanut Commission, Alabama Soybean Producers, and Alabama Wheat and Feed Grains Committee; 2) row crop, timber, forage, fruit-vegetable advisors including ACES agents and specialists, ACES county coordinators, ACES risk preparedness specialists, public and private crops advisors; 3) agriculture and forestry equipment dealers and input supplier organizations; 4) governmental agency personnel including USDA, NRCS, and State of Alabama Soil and Water Conservation Committee; and 5) private citizens impacted by policies and practices used for the production of food, fuel, and fiber. All educational programming efforts targeted audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

- The Master Gardener project is designed to recruit, train and retain participants interested in community volunteer service in partnership with the mission of ACES. REAs and CECs maintained 2013 partnerships with 37 local MG groups who reported contacts 12x greater than our MG membership of 1807 vol's.

- Poultry Industry professionals, poultry farmers, small flock owners were targeted with programs.
- Small producers (organic, transitioning, and certified naturally grown), crop consultants, nonprofit agencies (e.g., food banks), small retailers, and state conservation agency, educators and county Extension coordinators.

- A total of 605 attendees were present at these meetings and represented forage producers, crop advisors, green industry personnel, cattlemen, foresters, land managers, and Master Gardeners. Survey data from four of the ten meetings indicated landowners and land managers in attendance were responsible for approximately 238,000 acres.

- The Urban Gardens and Sustainable Landscapes (USGL) Program is supported by 6 Urban Regional Extension Agents (UREAs), cover 9 urban centers which encompass 21 counties and span the whole state of Alabama. During the course of 2013 six UREAs conducted workshops, seminars and attended various conferences to educate Alabama urban clientele on the benefits of gardening in limited urban spaces, and the options and opportunities available for gardening with limited resources.

3. How was eXtension used?

- Current news topics along with ask the expert responses were provided for posting to various eXtension sites related to crop production and technology.

- MG was not used in these programs.
- eXtension was not used in these programs.
- The Fire Ant program in eXtension provided support to small producers with organic fire ant management recommendations.
- E-extension was not used in this effort. S. Enloe

V(E). Planned Program (Outputs)

1. Standard output measures

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

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	6	2	8

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects, Special Funded Projects, and Ongoing Projects which are described/explained in the prior outcome activities and methods sections. The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, The success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the these program areas that will be formally evaluated using an evaluation instrument designed specifically for that activity.
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Increase profitability of pay to fish operations
 Not reporting on this Output for this Annual Report

Output #3

Output Measure

- Number of workshops to increase knowledge of cogongrass ecology and control

Year	Actual
2013	10

Output #4

Output Measure

- The value of volunteer hours donated (# hours x \$18 for Alabama)

Year	Actual
2013	3779532

Output #5

Output Measure

- Number of workshops and demonstrations to increase knowledge and adoption of organic/natural grown fruit and vegetable production practices

Year	Actual
2013	25

Output #6

Output Measure

- Number of workshops and presentations to increased poultry farmer knowledge of new housing and equipment changes

Year	Actual
2013	39

Output #7

Output Measure

- Rust monitoring program to increase knowledge of spread of soybean rust and control measures

Year	Actual
2013	1

Output #8

Output Measure

- Farm succession methods
Not reporting on this Output for this Annual Report

Output #9

Output Measure

- Increased knowledge of importance of forages in animal production
Not reporting on this Output for this Annual Report

Output #10

Output Measure

- Number of active reporting MG volunteers to increase knowledge of horticultural practices for Master Gardener Interns

Year	Actual
2013	1807

Output #11

Output Measure

- The value of volunteer hours donated by Master Gardeners

Year	Actual
2013	3779532

Output #12

Output Measure

- Number of workshops to encourage adoption of rainwater collection system

Year	Actual
2013	54

Output #13

Output Measure

- Increased number of acres of rainwater irrigated fruits and vegetables
Not reporting on this Output for this Annual Report

Output #14

Output Measure

- Increased knowledge of environmental issues related to electronic waste management, storage and disposal
Not reporting on this Output for this Annual Report

Output #15

Output Measure

- Workshops to enhance environmental knowledge among urban, nontraditional, and underrepresented audiences in the areas of forestry, wildlife, and natural resource management

Year	Actual
2013	65

Output #16

Output Measure

- Number of small flock support and training workshops

Year	Actual
2013	12

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increase profitability of pay-to-fish operations
2	Increase knowledge and awareness of cogongrass ecology and control
3	Increase knowledge and adoption of organic/naturally grown fruit and vegetable production practices
4	Increase poultry farmer knowledge of new housing and equipment changes and techniques
5	Increase awareness of spread of soybean rust and control measures
6	Increase knowledge of ways to successfully provide for farm succession methods
7	Increase knowledge of importance of forages in animal production systems and adoption of profitable forage production systems
8	Increase knowledge of horticultural practices for Master Gardener Interns
9	Sustain volunteer support from Master Gardeners
10	Adoption of rainwater collection systems for urban noncommercial garden
11	Increase awareness of water conservation
12	Increase number of acres of rainwater irrigated fruits and vegetables
13	Increase knowledge and understanding of environmental issues related to electronic waste management, storage and disposal
14	Enhance environmental awareness among urban, nontraditional, and underrepresented audiences in the areas of forestry, wildlife, and natural resource management
15	Small Flock Support and Training Efforts

Outcome #1

1. Outcome Measures

Increase profitability of pay-to-fish operations

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Increase knowledge and awareness of cogongrass ecology and control

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	7000000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Cogongrass is an invasive grass from Southeast Asia that threatens natural areas and forest and pasture productivity across Alabama and the southeastern United States. Despite its presence in Alabama since the early 1900's, cogongrass has literally exploded across the State over the last 20 years, causing significant damage. There is a great need for landowner and land manager education concerning the ecology and control of cogongrass as many have failed in their control attempts or completely neglect the problem.

What has been done

In 2013, ten extension presentations were given by Dr. Enloe that included information on cogongrass ecology and control. These presentations occurred across Alabama at Extension meetings. A total of 605 attendees were present at these meetings and represented forage producers, crop advisors, green industry personnel, cattlemen, foresters, land managers, and Master Gardeners. Two peer reviewed journal articles on cogongrass ecology and control were submitted and accepted for publication in the journal Invasive Plant Science and Management.

Results

Replicated research studies at multiple locations in south Alabama that were conducted from 2008-2012 and published in 2013 have indicated that cogongrass patches can be effectively

controlled with glyphosate and imazapyr herbicides. Survey data from four of the ten meetings indicated landowners and land managers in attendance were responsible for approximately 238,000 acres. Post evaluation surveys generally indicated increases in knowledge concerning invasive plants and most attendees stated that they intended to use what was learned through the extension effort. A longer term survey over the last 12 years was also conducted to document our efforts on overall invasive plant extension efforts, which cogongrass falls under. 98% of survey respondents indicated their knowledge of invasives had increased and 50% has increased substantially. Respondents were responsible for over 2.8 million acres and were treating 25% or more of their infested acreage. These results indicate that ACES is have a very positive impact concerning cogongrass and other invasive plant education in Alabama.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
136	Conservation of Biological Diversity
216	Integrated Pest Management Systems

Outcome #3

1. Outcome Measures

Increase knowledge and adoption of organic/naturally grown fruit and vegetable production practices

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	10044

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Organic/small farm IPM campaign (Auburn Univ.): There is a large demand for local food production in the state of Alabama which has significantly increased the demand for sustainable agriculture/organic program. Many small producers who are receiving NRCS and FSA microloans and incentives are also new to farming or lack the organic systems training. ACES is the only institution that provides education to small producers directly or through collaborating agencies with research-based information and hands-on experience.

What has been done

Organic/small farm IPM campaign (Auburn Univ.): Participants (869) include farmers (80%), backyard horticulturists (14%), state/federal agencies (4%) and crop consultants/nonprofit partners (2%). Participation of producers in 2013 IPM meetings has increased by about 40% since 2011. Small/beginning farmers typically have 2 to 5 acres in production with less than 10 years of experience. These producers (many in underserved areas of the state) and federal agencies like NRCS and FSA are in very high need for research-based information and hands-on experience in organic production methods.

Results

The organic small farm campaign has been highly successful in training small farmers across Alabama with participation at meetings increasing by 40%. About 47% small producers have started to use Extension publications along with substantial rise in the use of Facebook page and IPM website. Overall satisfaction rating among farmers is 97% and the average crop loss prevented range from 40 to 60% among adoptive farmers. The Alabama Vegetable IPM Program has received three awards in the past two years from the Southern Region IPM Center and the National Association of County Agricultural Agents for impactful programming

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems
601	Economics of Agricultural Production and Farm Management

Outcome #4

1. Outcome Measures

Increase poultry farmer knowledge of new housing and equipment changes and techniques

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	24600000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Poultry Industry professionals and poultry farmers are interested in efficient production through improved housing and updated efficiency of existing housing. Poultry growers and poultry company personnel are in need of training on energy efficiency in poultry houses in Alabama and the Southeast. Agricultural lenders also work with the National Poultry Technology Center to set policy for poultry house lending policy. Efficient lighting, air handling, insulation and ventilation control are areas emphasized in 2013.

What has been done

19 scheduled workshops and presentations; 20 unscheduled on-site educational opportunities. Efficient lighting, air handling, insulation and ventilation control were areas emphasized in 2013. Presentations at National Poultry Technology Center-sponsored meetings and other industry meetings, publications in trade magazines, information on the the Poultryhouse.com website and direct consultations were used to transfer information to poultry growers and companies in Alabama and the Southeast.

Results

Energy Conservation Audits completed by the NPTC have saved on average \$3,500/broiler house. Assuming 30% adoption rate, this would amount to \$12,600,000 savings for growers in Alabama. Improved bird performance through better feed conversion could net the Alabama poultry industry and growers another \$12,000,000 in efficiency. Reductions in structural damage through improvements in structural design averages around 10 million dollars per year in Alabama

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection

Outcome #5

1. Outcome Measures

Increase awareness of spread of soybean rust and control measures

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2600000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Farmers growing soybeans remained concerned about the presence and impact of soybean rust to yield. In 2013 Alabama farmers harvested over 425,000 acres of soybeans with an average yield of 43 bushels/acre. Relatively cool, wet growing conditions during the season provided an environment that was optimal for SBR development and spread.

What has been done

Observations provided by the SBR monitoring program indicated the disease spread across the state 3 to 4 weeks faster than in any previous year, with it eventually being detected in all 67 counties. In-season monitoring of SBR allowed team members to warn growers of the rapid spread of the disease. Growers were alerted of the risk of SBR via email, twitter and electronic newsletters, as well as through a telephone hotline. These alerts allowed farmers to make timely applications of fungicides to protect their crop and avoid yield losses that could range from 25-50% in 2013.

Results

The rapid early season spread of the SBR pathogen coupled with over 60% of soybean acreage planted after June 15th meant that a high percentage of soybeans were exposed to the disease at an earlier stage of crop development when the risk of yield losses from SBR are substantial. End-of-year estimates suggest the disease reduced yields by 2.5% statewide, the highest level ever recorded. The SBR monitoring program maintained by the Agronomic Crops Team was estimated to have saved the Alabama soybean industry approximately \$2.6 million in 2013 by providing early season warnings of the threat of SBR and alerting growers to make timely fungicide applications to prevent yield loss from the disease.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #6

1. Outcome Measures

Increase knowledge of ways to successfully provide for farm succession methods

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

Increase knowledge of importance of forages in animal production systems and adoption of profitable forage production systems

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

Increase knowledge of horticultural practices for Master Gardener Interns

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	28

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extension needs volunteers and our programs are inviting to citizens who enjoy volunteering. Volunteers join, or partner with an organization when their experience with them is meaningful, develops their skills, demonstrates impact, and taps into their abilities and interests (The New Volunteer Workforce, D. Eisner, R. T. Grimm Jr., S. Maynard, & S. Washburn. Stanford Social Innovation Review, Winter 2009). Volunteers give their time as an effort to make connections with like-minded people or to a cause that has a personal association for them. Making this happen takes personal investments from the ACES Agents who work with this project.

What has been done

Each MG training series = 12-14 weeks of training/instruction in garden related subjects such as: soil nutrition, pest ID and management, plant ID and management, water management, etc. The project is specifically designed to recruit & train volunteer leaders to assist county offices of the ACES in disseminating knowledge and information relative to landscaping and gardening applicable to their area of Alabama. These vol's expand ACES outreach of research-based information. Master Gardeners are essential to the mission of the ACES.

Results

435 Intern MGs were trained in 2013. Combined, the group's knowledge increased by 28%. Our instruction also influenced their attitude about residential landscape/garden management - 72% said they will choose plants and cultivars known to resist pests; 78% will adopt soil testing to avoid over-fertilizing; 79% will consider pest life cycles to optimize pest management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
124	Urban Forestry
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #9

1. Outcome Measures

Sustain volunteer support from Master Gardeners

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	3779532

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Volunteers join, or partner with an organization when their experience with them is meaningful, develops their skills, demonstrates impact, and taps into their abilities and interests (The New Volunteer Workforce, D. Eisner, R. T. Grimm Jr., S. Maynard, & S. Washburn. Stanford Social Innovation Review, Winter 2009). Volunteers give their time as an effort to make connections with like-minded people or to a cause that has a personal association for them. Forging this partnership takes personal investments from the ACES Agents who work with this project.

What has been done

37 ACES staff (REAs, CECs, and Specialists) reported time given to this project ? attending monthly MG association meetings, volunteer activities, coordinating/supporting the 22 training

series in 2013, etc.

Results

Small and large MG groups reported volunteer hours in 37 counties. 11 MG Helpline (877-252-4769) offices remain active. MG volunteers host/assist Lunch & Learn short programs (5); partner with Agents in program delivery (11); host information venues at County Fairs, and other public locations (37); maintain demonstration gardens (11); partner with local charities (Habitat for Humanity, botanical gardens, etc) and support collegiate scholarships; donate to food pantries from their demonstration gardens/home gardens; host seasonal seminars for the public; contribute time and support to numerous municipal beautification projects. Volunteer time was valued at \$3,779,532

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
124	Urban Forestry
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #10

1. Outcome Measures

Adoption of rainwater collection systems for urban noncommercial garden

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	12000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

While worldwide water consumption is rising at double the rate of the population, the amount of freshwater remains at only 2.5 percent of the world's water resources. Rainfall replenishes much of the water we use. However, it is predicted that by 2025, eighteen countries will use more water than can be replenished. Collected rainwater can be used for urban domestic purposes and

irrigation. In some countries, it is the only source of potable water. Rainwater is usually collected in urban areas from rooftops, greenhouses, pool covers and other relatively clean surfaces. This stored water can be used for irrigation of raised bed and container gardens, flushing toilets, or washing cars.

What has been done

UGSL & Water Wheels Programs conducted 54 scheduled workshops for clientele about the importance, methods, and skills to create and install their own rain water catchment systems. During each workshop/seminar participants also worked on their own rain barrel which were installed in their own homes. UGSL & Water Wheels program teams also provided assistance to local noncommercial small farmers in the procurement and installation of larger rainwater cisterns for hydroponic vegetable production.

Results

A total of 127 were trained in rainwater harvesting and water conservation practices for small farms and noncommercial production. Increased knowledge and adoption of water conservation practices was 31%. A total of 8K gallons of water was conserved as a direct result of the adopted practices. An estimated \$12K was saved by clientele by adopting the conservation practices obtained by the Water Wheels Programming. An estimated 688 pounds of produce resulted from rain water collection

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems

Outcome #11

1. Outcome Measures

Increase awareness of water conservation

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	43

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Clean water is our most valuable resource. Without water we would not survive, drill for oil, cool our power plants, or provide water for our food crops or animals. Clean water is a must and only we can conserve and keep it clean. More importantly, we are now using more water than the water cycle is cleaning, which means we are running out of clean water. Alabama is one of the worst states - we use 50 gallons more water per person than the national average and more than any state east of Nebraska. Catching rainwater helps us to conserve our natural water supplies - just following simple steps can make an impact and help save as much as 500 gallons a year - if everyone followed 1-2 water conservation tips or used rainwater catchment systems, then we could reduce our daily water usage by 104 billion gallons per day!

What has been done

UGSL & Water Wheels successfully scheduled and conducted 54 workshops/seminars at statewide events, schools, and communities. Adult workshops and seminars with Water Wheels instructed participants about rainwater harvesting and its benefits in Alabama. Participants given rain barrels to work on and take home to apply as a rainwater harvesting system. A demonstration of rainwater use in the home for toilet flushing was also provided to all adult participants. Water Wheels also appeared at 13 schools where 6-12 grade students were introduced to Alabama rivers and water sheds, importance of Alabama water sheds, basics of water conservation, rainwater harvesting and uses of rainwater.

Results

Adult & Youth participants of the UGSL & Water Wheels programs learned where our water comes, how water is recycled through the earth's water cycle, why fresh clean water is a limited resource, and what steps can be done to preserve that natural limited resource. Adult and youth participants improved their skills and abilities to recognize, identify, and evaluate poor water conservation practices. Pre and post surveys administered to adults and youth indicated an increase in knowledge of 42.5% in water conservation practices. Water Wheels combined workshops/seminars were attended by 2,663 clientele, 46% adults, 54% youth, 67% white, 26% black, 45% male, 55% female and successfully distributed 302 rain barrels.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
806	Youth Development

Outcome #12

1. Outcome Measures

Increase number of acres of rainwater irrigated fruits and vegetables

Not Reporting on this Outcome Measure

Outcome #13

1. Outcome Measures

Increase knowledge and understanding of environmental issues related to electronic waste management, storage and disposal

Not Reporting on this Outcome Measure

Outcome #14

1. Outcome Measures

Enhance environmental awareness among urban, nontraditional, and underrepresented audiences in the areas of forestry, wildlife, and natural resource management

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	200000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The availability and access to healthier foods like fresh fruits and vegetables for limited resource inner-city families and individuals is very limited. Urban spaces and environments make gardening and landscaping a challenge but not entirely impossible or unmanageable. The role of Urban Gardening and Sustainable Landscapes (UGSL) programs is to provide educational resources and training for the urban clientele. Healthier diets and lifestyles can begin by introducing the benefits, knowledge and skills of urban gardening and sustainable landscaping to limited resource clientele within the urban landscape.

What has been done

UGSL programming team members successfully scheduled and conducted 65 workshops/seminars at statewide events, schools, and communities. Adult workshops and seminars instructed participants about raised bed and container gardening, bee keeping, xeriscaping, composting, vermicomposting, water conservation, and rainwater harvesting.

Results

A total of 4152 clientele, 67% white, 26% black, 45% male, 55% female attended the scheduled workshops and seminars. Increased knowledge and adoption of water conservation practices was

48%. An estimated 200K gallons of water was conserved as a direct result of the adopted practices. An estimated 688 lbs of fresh produce was produced by clientele by adopting the conservation practices obtained by the UGSL Programming. A total of \$177K was generated by UGSL through collaborative donations and volunteer hours.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
124	Urban Forestry
205	Plant Management Systems

Outcome #15

1. Outcome Measures

Small Flock Support and Training Efforts

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a strong interest currently among consumers in learning how to produce poultry on a small flock basis.

What has been done

Instructed hundreds of Alabama backyard flock owners on husbandry, economics and food safety through seminar presentations, posters and backyard flock CDs. Both specialists and county staff participates in various aspects of the Chick Chain 4H project. Many of the backyard flock seminars were combined with 4H Chick Chain groups to get extra training for the 4Hers. Eight seminars were completed in 2013, plus a few more community-wide events (Sunbelt ag Expo, Ag Discovery Adventure, etc.)

Results

Assessment of participants through post-seminar questionnaires revealed that about 75% of participants had some knowledge of poultry husbandry prior to the seminar, yet all participants (100%) said that they would recommend the training to others. Many participants felt that they learned a lot from the training (60%), while 30% felt that they gained a few new tricks while less than 10% felt that new knowledge was minimal. Approximately 40% of participants were interested in basic poultry husbandry, while 60% were interested in health topics and 20% were interested in marketing products from home flocks. Close to 80% of participants were interested in producing eggs (40% for home use, 40% for home use and sales), while only 11% were interested in producing meat on a small scale.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

The ability of the Home Grounds team to support this project is heavily influenced by staffing patterns and available staff resources. There were 20 local ACES staff (REAs, CECs) managing 37 local MG associations in 2013. This ratio additionally influences the ability of the Home Grounds agents to support other educational projects.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

MG Interns gained new knowledge - 28% overall
- MG Interns changed their attitudes about residential landscapes - 55% to 79%
- 1807 MG vol's remained, or newly became involved, with numerous civic, municipal, ACES and other partners

98% of cogongrass workshop survey respondents indicated their knowledge of invasives had increased and 50% has increased substantially. Respondents were responsible for over 2.8 million acres and were treating 25% or more of their infested acreage. These results indicate that ACES is have a very positive impact concerning cogongrass and other invasive plant education in Alabama.

Key Items of Evaluation

Master Gardeners support ACES Agents by sharing their expertise and knowledge in program delivery, offering their own program outreach, implementing demonstration gardens, and volunteering with many community partners. They support their communities through food gardens and food donations, local charities, in numerous beautification projects, collegiate scholarship donations and more.

The organic small farm campaign has been highly successful in training small farmers across Alabama with participation at meetings increasing by 40%. About 47% small producers have started to use Extension publications along with substantial rise in the use of Facebook page and IPM website. Overall satisfaction rating among farmers is 97% and the average crop loss prevented range from 40 to 60% among adoptive farmers.

Energy Conservation Audits completed by the NPTC have saved on average \$3,500/broiler house. Assuming 30% adoption rate, this would amount to \$12,600,000 savings for growers in Alabama. Improved bird performance through better feed conversion could net the Alabama poultry industry and growers another \$12,000,000 in efficiency. Reductions in structural damage through improvements in structural design averages around 10 million dollars per year in Alabama.

The MG Helpline (877-252-4769) answers non-commercial questions related to residential landscapes. The 8 agents who support the 11 MG offices say that this volunteer activity greatly reduces their call volume. Volunteers are not expected to know all the answers, but instead where to find the answer in approved references and to offer friendly support to the caller in need of answers.

The rapid early season spread of the SBR pathogen coupled with over 60% of soybean acreage planted after June 15th meant that a high percentage of soybeans were exposed to the disease at an earlier stage of crop development when the risk of yield losses from SBR are substantial. End-of-year estimates suggest the disease reduced yields by 2.5% statewide, the highest level ever recorded. The SBR monitoring program maintained by the Agronomic Crops Team was estimated to have saved the Alabama soybean industry approximately \$2.6 million in 2013 by providing early season warnings of the threat of SBR and alerting growers to make timely fungicide applications to prevent yield loss from the disease.

Adult & Youth participants of the UGSL & Water Wheels programs learned where our water comes, how water is recycled through the earth's water cycle, why fresh clean water is a limited resource, and what steps can be done to preserve that natural limited resource. Adult and youth participants improved their skills and abilities to recognize, identify, and evaluate poor water conservation practices. Pre and post surveys administered to adults and youth indicated an increase in knowledge of 42.5% in water conservation practices. Water Wheels combined workshops/seminars were attended by 2,663 clientele, 46% adults, 54% youth, 67% white, 26% black, 45% male, 55% female and successfully distributed 302 rain barrels.

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Community, Family, Home and 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
602	Business Management, Finance, and Taxation	10%	10%		
607	Consumer Economics	10%	10%		
801	Individual and Family Resource Management	20%	20%		
802	Human Development and Family Well-Being	20%	20%		
806	Youth Development	40%	40%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	83.8	14.9	0.0	0.0
Actual Paid Professional	58.5	7.7	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
341695	465179	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1016499	465179	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
5454226	537042	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

-All activities in Alabama 4-H that are non-strategic (base programming and volunteerism). Delivery modes include after-school clubs, in-school clubs, community clubs, special interest and project clubs, military clubs, residential camps, day camps, and in-school enrichment. Also includes field days, festivals, fairs, outdoor classrooms, libraries, community service organization, and Boys and Girls Clubs. Programs were delivered to 121,776 4-H members and participants by 67 staff and 2,879 4-H Volunteers.

-**Volunteer in Urban Programs (VIP)** leverages ACES efforts through volunteers in urban communities - ACES staff recruit, enroll, and train volunteers and volunteers serve the citizens of Alabama.

TMI (Teens Making Impact) helps youth development life skills related to career decision-making, effective communication, healthier lifestyles, and better understanding of political issues that impact lives and one's ability to become productive citizens in society.

-**CYFAR Teens Making Impact(TMI)**, is a 12-week youth leadership program focused on decisions relative to careers, healthy lifestyles, civic engagement, and community service.

-**4-H Health Rocks!** is a healthy living program designed for youth 10 -15 years of age. The program serves to engage youth, families, and communities in an effort to reduce tobacco, alcohol, and drug use.

-**The Urban SET (Science, Engineering and Technology)** program is designed to offer educational opportunities for youth and adults (as partners) to engage in science, engineering and technology programs. The program targets underserved youth 9-18 years of age residing in urban metropolitan cities.

Family Advocacy through Caring Engagement Strategies (FACES), a family strengthening curriculum, implemented as a series of five lessons or as a stand-alone program.

The Grand RAPP program focuses on helping parenting grandparents/relatives identify and understand possible ambivalent feelings in their new role, individual differences and temperament, approaches to communicating with adult children/relatives and discipline strategies.

The Successful Aging Initiative focus on understanding the importance of having proper life management documents in place and ways to enhance life during the senior years.

-**Shrimp TAA Project:** The USDA administers a grant program called "Trade Adjustment Assistance for Farmers" for commodities that have been negatively affected by unfair foreign trade. The program seeks to pay producers of the commodities monies to help offset these negative trade practices

2. Brief description of the target audience

4-H Youth age 9-18, other youth 9-18, Catfish Farmers, Shrimp Business Owners and their spouses, and Deck Hands who worked on shrimp boats in Southwest Alabama.

- FACES: approximately 26,594 participants. Of the 2,390 traceable participants, 92% were from urban areas and 8% from rural areas. The majority of the participants were female (76%). The majority of the participants were African Americans (76%) and White Americans (19%). Hispanics made up 2% of the participants, and American Indian, Asian, and Multiracial and Other Race participants made up less than 1% each. On average, 474 (20%) participants completed the five-lesson series.

-Grand RAPP: approximately 510 participants. Of the 351 traceable participants, 90% were from urban areas and 10% from rural areas. The majority of the participants were female (89%). 86% of the participants were African Americans and 14% were White Americans (19%). Other race made up less than 1% of the participants. On average, 50 participants completed the five-lesson series.

-Successful Aging Initiative: approximately 354,645 participants. Of the 2,855 traceable participants, 99% were from urban areas and 1% from rural areas. The majority of the participants were female (80%). 72% of the participants were African Americans and 28% were White Americans (19%). All other race made up less than 1% of the participants.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

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

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	2	1	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of partnerships, publications, newsletters, articles, business plans, volunteers, success stories, testimonies, grants and contracts submitted and/or awarded, support groups, technology-based resources, research-based professional expertise, and curriculum.

Year	Actual
2013	4570

Output #2

Output Measure

- Number of 4-H Clubs

Year	Actual
2013	1375

Output #3

Output Measure

- Number of volunteer hours provided by VIPs and Student volunteers (college, middle and high school)

Year	Actual
2013	46928

Output #4

Output Measure

- Number of positive aging initiatives activities implemented.

Year	Actual
2013	38

Output #5

Output Measure

- Number of support activities for grandparents raising grandchildren.

Year	Actual
2013	53

Output #6

Output Measure

- Number of relationship classes taught

Year	Actual
2013	210

Output #7

Output Measure

- Number of dollars resulting from volunteer service hours

Year	Actual
2013	2200000

Output #8

Output Measure

- Number of Urban SET participants

Year	Actual
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2013 95

Output #9

Output Measure

- Number of Urban Health Rocks participants

Year	Actual
2013	4356

Output #10

Output Measure

- Number of 4-H Club Members

Year	Actual
2013	33150

Output #11

Output Measure

- 4-H New Volunteer Training

Year	Actual
2013	1883

Output #12

Output Measure

- Number of 4H participants

Year	Actual
2013	88626

Output #13

Output Measure

- Number of 4H volunteers

Year	Actual
2013	2879

Output #14

Output Measure

- Number of 4-H Spring Training

Year	Actual
2013	68

Output #15

Output Measure

- Number of 4-H Training Modules

Year	Actual
2013	12

Output #16

Output Measure

- Number of 4-H Military Clubs

Year	Actual
2013	14

Output #17

Output Measure

- Amount of Grants awarded

Year	Actual
2013	93006

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	4-H volunteers recruited, screened, trained, and retained.
2	Life-skills gained
3	Knowledge gains
4	Business Plans Developed
5	Number of people adopting credit, saving, asset management, and career development practices.
6	Dollars saved as a result of counseling and referrals.
7	Increased interest in science, engineering, and technology careers
8	Increase life skills among urban youth
9	Decrease in adolescent risky behavior (substance use)
10	Percentages of older adults implementing positive aging practices learned during Successful Aging activities.
11	Increase in Business Plans Developed by Shrimp and Catfish Farmers
12	Percentage of grandparents & other relative caregivers who are better prepared for assuming role as primary caregiver of children.
13	Percentage of adults implementing positive relationship skills, Dollars saved as a result of counseling and referrals
14	Amount Saved Through Volunteers
15	Number of OMK 4H Youth

Outcome #1

1. Outcome Measures

4-H volunteers recruited, screened, trained, and retained.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Life-skills gained

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Knowledge gains

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Business Plans Developed

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of people adopting credit, saving, asset management, and career development practices.

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

Dollars saved as a result of counseling and referrals.

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

Increased interest in science, engineering, and technology careers

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	95

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Youth need science, engineering and technology (SET) life skills to be competitive in the 21st century.

What has been done

Urban SET Program- 95 urban youth participated in AAMU STEM Day and explored science concepts and careers in SET.

Results

82% of the participating youth (n=95) indicated that the activities increased their interest in science, technology, engineering, and mathematics.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #8

1. Outcome Measures

Increase life skills among urban youth

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1352

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An increasing number of youth lack the life skills to make healthy and informed choices. Today's teens are often overwhelmed with too much information; much of it is not effective regarding life changing choices. Teens need information concerning issues that influence their health and well-being.

What has been done

TMI is a 5-12-week youth leadership program focused on decisions relative to careers, healthy lifestyles, civic engagement, and community service.

Results

TMI program pre-posttest indicated a 90 percent (n=795) increase in knowledge of life skills and decision-making,

165 students participated in post assessments of CYFAR TMI programs. 80% of teens reported that they make healthy eating choices to reduce health risks. 83% of the 165 teens reported that they are physically active; 89% of teens reported that their appearance mattered to them. 92% of teens reported that before making a decision, they would think about how their choices would affect their futures

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #9

1. Outcome Measures

Decrease in adolescent risky behavior (substance use)

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	4356

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Middle school age youth are continuing to be involved with illicit drugs, alcohol, and tobacco usage.

What has been done: (6 to 8 Lines Max)

What has been done

Urban Health Rocks! Program- Seven Urban Extension Agents and 68 volunteers reached 4,356 program participants at 47 sites with each youth having completed a minimum of 10 hours of educational training.

Results

Urban Health Rocks! Program-Participants showed consistent increase in knowledge about smoking, drinking and other drug usage upon completion of program training; participants demonstrated enhanced social competencies, self-confidence, and, exhibited a keen sense of awareness for the importance of community service involvement.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #10

1. Outcome Measures

Percentages of older adults implementing positive aging practices learned during Successful Aging activities.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The elderly population in the United States is rapidly expanding. One out of every seven Americans (35 million) is over the age of 65. With the aging of the baby boomers, America's older population will double by 2030 (71.5 million), and will account for 19.6 percent (about 1 in 5) of the population. It is not uncommon for people, as they age, to be concerned about what the future will bring and whether they will be equipped to meet the challenges that lie ahead.

What has been done

The Seniors Can curriculum, a wellness program for older adults developed by the University of Nevada Cooperative Extension System, was used as an educational resource and guide. Additionally, An Overview of Elder Law, A Gift for Your Family, and LegalEASE publications, and Estate Planning Basics, A Guide to Life Organization were used. The program was implemented by use of classes, workshops, seminars, family day programs, conferences, support groups, etc.

Results

- 1)Estate planning among older adults increased by 66% compared to the previous year of 83 individuals.
- 2)Development of Life Care Management Plans saved older adults in Alabama more than \$77,250 in 2013.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management

802 Human Development and Family Well-Being
806 Youth Development

Outcome #11

1. Outcome Measures

Increase in Business Plans Developed by Shrimp and Catfish Farmers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	378

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Completed plans paid the shrimpers monies that could be used to: improve their businesses, reinvest in capital equipment, pay off existing debts, help in the recovery of the BP oil spill, pay off personal debts, and stabilize family finances.

What has been done

326 business plans completed and approved for Shrimp TAA program.

Results

Shrimpers in six counties received \$2,439,171 and Catfish Farmers in 15 counties received \$864,000 totaling \$3,303,171 in direct income

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #12

1. Outcome Measures

Percentage of grandparents & other relative caregivers who are better prepared for assuming role as primary caregiver of children.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	58

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

For the past few decades, the number of grandparents and relatives having to once again raise a child has been increasing throughout the United States of America. In the State of Alabama, more than 148,000 children under the age of 18 are now living with grandparents or other relatives (Grandfacts, 2012). Forty five percent (45%) of the 63,529 grandparent householders responsible for their grandchildren are raising their grandchildren without the presence of the parents in the household.

What has been done

Grand Rapp, a four-lesson series, provides educational resources and training that enhances family members' knowledge of their family strengths. The program was implemented by use of classes, workshops, seminars, family day programs, conferences, support groups, etc.

Results

Pre/Post results

- a)Participants were significantly more knowledgeable of community resources for parenting grandparents/relatives (t = -4.42; 24% increase).
- b)Participants were significantly more knowledgeable of how to effectively discipline without using punishment (t = -2.66; 19% increase).
- c)Participants were significantly more knowledgeable of how to use logical & natural consequences in disciplining (t = -2.93; 19% increase).
- d)Participants were significantly more knowledgeable of how to recognize and address risk behaviors (t = -2.70; 21% increase).

Delayed Post test results

Participants' attitude towards raising their grandchildren/relatives was significantly more positive

(t = -2.34; 8% more positive) and were significantly more knowledgeable of the difference between punishment and discipline (t = -2.38; 15% increase).

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #13

1. Outcome Measures

Percentage of adults implementing positive relationship skills, Dollars saved as a result of counseling and referrals

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	449

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

A direct relationship between the well-being of children, families and communities has been cited by various professionals and organizations. When families are strong and do well, children do well. Likewise, when communities are strong, families are strong. Critical for all families are those attributes that strengthen individuals as well as the family itself.

What has been done

FACES, a five-lesson series, provide educational resources and training that enhances family members' knowledge of their family strengths. The program was implemented by use of classes, workshops, seminars, family day programs, conferences, etc.

Results

Based on pretest and post delayed data ($p < .05$; mode = 3-4 months after program, $N=75$)

- 1) Participants deliberately created more opportunities for their families to spend time together ($t = -10.80$).
- 2) Participants used negotiation skills when dealing with conflicts in their family ($t = -9.29$)
- 3) Participants resolved family conflicts without anyone feeling hurt or unheard ($t = -7.01$)
- 4) Participants decreased the use of name calling, complaining, bring up the past, etc. during family conflicts ($t = 2.61$)
- 5) Participants practiced stress management techniques ($t = -17.10$)
- 6) Participants included their children in financial decision making ($t = -6.91$).

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #14

1. Outcome Measures

Amount Saved Through Volunteers

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2200000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Volunteers make a difference, allowing ACES, Alabama 4-H, and Urban Youth Development to leverage paid staff time and effort into communities through effective volunteerism efforts.

What has been done

4H and Urban New and Non Traditional Volunteers recruitment, screening, training, supervision, reporting, recognition, reward, and mentoring

Results

-2,879 volunteers worked 96,151 hours for Alabama 4-H youth in 2013 = \$2.1M leveraged time in Alabama communities.

-588 volunteers worked 13,340.62 hours for ACES Urban Youth Development programs in 2013 = \$295,361.

-Alabama A&M University service learning had 33,587 hours of service to 57 agencies = \$743,616.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

Outcome #15

1. Outcome Measures

Number of OMK 4H Youth

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2159

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabama has five military installations, families face deployment and other stresses. Military youth need life skills to cope.

What has been done

Community Support Networks established and sustained, summer camps, sports camps, special needs family camps, SOMK Retreat, Winter Leadership Summit, 4-H Club Meetings, Hero Pack events.

Results

2159 Military youth served and 14 4-H Military Clubs are helping military families cope.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other (None)

Brief Explanation

None

V(I). Planned Program (Evaluation Studies)

Evaluation Results

- 2879 4-H Volunteers reported 96,151 hours of service for \$2.1M contribution to 4-H Youth
- 588 VIP Volunteers reported 13,340.62 hours of service for \$295,361 contribution to urban youth development; 4,689 Alabama A&M.
- Estate planning among older adults increased by 66% compared to the previous year of 83 individuals.
- Development of Life Care Management Plans saved older adults in Alabama more than \$77,250 in 2013.

Key Items of Evaluation

Based on pretest and post delayed data (p< .05; mode = 3-4 months after program, N=75)

- Participants deliberately created more opportunities for their families to spend time together (t = -10.80).

- Participants used negotiation skills when dealing with conflicts in their family (t = -9.29)
- Participants resolved family conflicts without anyone feeling hurt or unheard (t = -7.01)
- Participants decreased the use of name calling, complaining, during family conflicts (t = 2.61)

- Participants practiced stress management techniques (t = -17.10)
- Participants included their children in financial decision making (t = -6.91).

Delayed Post test results following Grand Rapp Program

- 1)Participants' attitude towards raising their grandchildren/relatives was significantly more positive (t = -2.34; 8% more positive).
- 2)Participants were significantly more knowledgeable of the difference between punishment and discipline (t = -2.38; 15% increase).

V(A). Planned Program (Summary)

Program # 8

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	0%	20%		
605	Natural Resource and Environmental Economics	15%	10%		
608	Community Resource Planning and Development	70%	50%		
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	10%	10%		
805	Community Institutions, Health, and Social Services	5%	10%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	15.0	2.1	0.0	0.0
Actual Paid Professional	27.6	3.8	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
160890	228030	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
478629	228030	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2103574	293382	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Education and Training

- Conducted two-week Intensive Economic Development Training Course
- Conducted Impact Alabama Roundtable for top economic developers
- Conducted 2 statewide Extension Coordinator Trainings
- Conducted online entrepreneurship, business & community development and leadership training
- Administered AU Graduate Minor in Economic Development
- Conducted Alabama-Mississippi Rural Tourism Conference
- Conducted social media entrepreneurship and business development support activities

Virtual Entrepreneurship Center

- Conducted 7 presentations including a conference lead by Auburn University & the Youth Entrepreneurship Camp lead by Tuskegee University
 - Administered the VEC online network consisting of 2300 individuals - project has members tied into the VEC from: Facebook, LinkedIn, Twitter, and YouTube. There were over 600 visitors to the online video archives.
 - Increased the online video library and redesigned the website

Connections and Partnership

- Administered the Alabama Community Leaders Network
- Managed the Alabama Communities of Excellence program which focuses on communities with populations between 2,000 and 18,000
 - Partnered with Tuskegee University on the Black Belt Leadership project in providing series of leadership workshops
 - organized and conducted with numerous meetings with AU units that have roles in economic and community development
 - Participated on economic and community development advisory boards
 - Provided administrative support for I-85 Corridor Alliance
 - Partnered with AAMU and other institutions and agencies to organize and conduct programs to support community development in urban environments

Research and Communications

- Published quarterly Extension ACTION newsletter
- Published and disseminate research on topics relevant to state economic and community

development policy and practice

- Developed economic impact/forecast models for local communities using software from EMSI (Economic Modeling Specialists)

- Maintained online resources to support the creation of businesses

Consulting, Community Support & Engagement

- Administered the Extension funded Rural Alabama Initiative grant program
- Coordinated a pilot Grassroots Leadership Initiative in 3 counties featuring civic engagement, planning & leadership activities

- Managed the "Stronger Economies Together" Project focused on regional economic development training and strategic planning

- Facilitated deliberative forums, roundtables and town meetings
- Facilitated community and regional strategic planning, assessment and asset mapping
- Explored development of the Small Town Institute on entrepreneurship, leadership & tourism
- Continued support for development of a commercial kitchen to serve central Alabama
- Continued communication and support for community organizations focused on developing Entrepreneurship programs & initiatives

- Supported regional efforts to promote entrepreneurship by local municipalities & chambers

2. Brief description of the target audience

The primary target audiences are current and future community leaders, decision makers, and local and state governmental officials in all communities across the state. The VEC targets individuals contemplating starting a business or preparing for future entrepreneurial endeavors. The target audience also includes existing entrepreneurs looking for additional training and support for current and future ventures. The project focuses on providing services to new and nontraditional populations that may be underserved by traditional entrepreneurship training activities.

3. How was eXtension used?

eXtension was used to identify webinars that would be of interest to the 81 Alabama Cooperative Extension System professionals who make up the Economic and Community Development Program Priority Team. Each week economic and community development webinars along with small business webinars are highlighted and sent to each team member. eXtension is one of the key resources used in the identification of these webinars. Furthermore several team members have joined the new Tourism and Recreation community of practice within eXtension.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	82140	320576	6089	373040

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

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in Section V(F). The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and projects will be measured by the level of participation in the activity. The target boxes below indicate for each year the number of ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- The Virtual Entrepreneurship Center ETP was measured by levels of activity generated by extension staff and partner organizations. During the program year there was an increase in visibility of the VEC through agent presentations in their local communities, Presentations in urban areas to promote the program (Mobile, Shelby, Jefferson, Morgan, Baldwin, and Madison), distribution of materials at 3 regional conferences, and distribution of materials at various community events. An annual advisory group meet to evaluate program and provide feedback on future directions.

Year	Actual
2013	36

Output #3

Output Measure

- The Virtual Entrepreneurship Center ETP and activities was measured by levels of participation. The VEC is a joint ETP between all land grant institutions in the state. A key output measure for the project is program participation. During the program year individuals visited the VEC website, attended conferences, participated in workshops, and requested additional resources

on line and in person at the conferences and workshops. Participant numbers in the in the VEC are generated from the cumulative efforts of each institution.

Year	Actual
2013	600

Output #4

Output Measure

- A key output measure of the Virtual Entrepreneurship Center was the development and launching of additional training modules. These training modules cover the topic areas of: Business expansion, eco-systems, government opportunities, innovations and technology, social entrepreneurship, and start-up.

Year	Actual
2013	15

Output #5

Output Measure

- The Rural Alabama Initiative (RAI) program administered by the Economic and Community Development Institute offered grant support to worthwhile rural initiatives that help boost a wide range of economic and community development efforts. The focus of this program is on educational initiatives related to community and economic development and can include community and regional adult and youth leadership development programs, workforce development academies, technology camps for high school counselors, high school robotics competitions, computer skills training for adults, rural tourism development programs, and entrepreneurship training.

Year	Actual
2013	15

Output #6

Output Measure

- This program area included numerous output activities and the success of those projects and activities was measured by levels of participation. Included were Small business webinars and training sessions; Training courses, publications, and other resources for economic developers, community leaders, and small business; Alabama Community Leadership Network; Economic Development Plan for a 5-county Black Belt region (Marengo, Wilcox, Sumter, Perry, and Dallas counties) through SET; ACE leadership development programming; Bimonthly Rural Community and Economic Development Advisory Board meetings; Action newsletters; Two-state conference providing best practices in rural tourism; Comprehensive system of birding trails covering the entire state in which all 67 counties are involved; Regional effort to promote nine rural counties as a tourism destination.

Year	Actual
2013	115

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Outcomes from this program area include: a) Number of community and economic development projects conducted, b) Community and economic development training resources developed, c) Number of community and economic development programs conducted, and d) number of educational grant projects funded.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: · Why: Explain the reason the program was done, or the situation or problem that the program addressed. · What: Specifically what was done and how it was done. · When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. · Where: Specific location-- the county or counties involved. · Who and how many: The ?who? includes both who did the program and who were the clients of the program, as well as how many people were served. · So what: This is the part that gives the real meaning to ?success.? The basic question to be answered in this part is ?what difference did this program make.? The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since the Economic and Community Development program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.
3	In order to assess the utility of the information and the value added to entrepreneurs' business activities a survey instrument was designed to measure each component of the VEC including: training modules, printed materials, and applicability of the training to their business

Outcome #1

1. Outcome Measures

Outcomes from this program area include: a) Number of community and economic development projects conducted, b) Community and economic development training resources developed, c) Number of community and economic development programs conducted, and d) number of educational grant projects funded.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	156

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Successful local community and economic development requires active engagement, connections among public, private, and education sector stakeholders, and strong local leadership. Natural and man-made disasters in Alabama over the recent years have provided two important lessons: the importance of working together to deal with crisis and the value of tourism to the economy. Of course, many communities may have good community leadership with excellent ideas for projects that would enhance local community and economic development. What they may lack is a source of funding to seed those local projects.

What has been done

Rural Alabama Initiative (RAI) grant program was created to provide seed money worthwhile community initiatives. Priority was given to projects featuring collaborations among organizations and jurisdictions in rural Alabama. Promoted education and training in economic development through the Intensive Economic Development Training Course, in leadership development through Alabama Community Leadership Network Conference, and in tourism development through annual Alabama-Mississippi Rural Tourism Conference. Leadership specialists and County Extension Coordinators have conducted conferences, workshops and roundtables. The VEC collaborated with Tuskegee to conduct a Youth entrepreneurship camp and with all of the land grant agencies to provide high quality training modules to residents of the state. Of the 17 individuals who contacted the VEC for additional services all were pointed to resources provided by the VEC and or refereed to community agencies specializing in one on one counseling.

Results

ECDI funded 15 Rural Alabama Initiative projects for 2013 at a total of \$52,894, many focusing on community development, engagement, and youth leadership. The RAI grant application process was very competitive. Over \$1.3 million dollars has been distributed since 2007 to support 163 local economic and community development projects throughout Alabama. At least 6 cities/communities started new leadership development programs. Over 100 consultation sessions conducted in support of tourism-related economic development programs, primarily for rural and agri-tourism initiatives. Elected Officials Alliance in Pickens County brought together all mayors and county commissioners for monthly engagement and planning sessions. Strategic plans were developed for Western Colbert County, Washington County Economic Development Initiative, and the 5-county region in Alabama Black Belt (Perry, Marengo, Sumter, Dallas and Wilcox counties) within the "Stronger Economies Together" project. There were over 600 visitors to the online video archives. Of the centers visitors 12 individuals sought additional resources and or referrals for further assistance. During this program year the online video library was increased and the website was redesigned.

4. Associated Knowledge Areas

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services

Outcome #2

1. Outcome Measures

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements:

- Why: Explain the reason the program was done, or the situation or problem that the program addressed.
- What: Specifically what was done and how it was done.
- When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began.
- Where: Specific location-- the county or counties involved.
- Who and how many: The ?who? includes both who did the program and who were the clients of the program, as well as how many people were served.
- So what: This is the part that gives the real meaning to ?success.? The basic question to be answered in this part is ?what difference did this program make.? The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program.

Since the Economic and Community Development program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

In order to assess the utility of the information and the value added to entrepreneurs' business activities a survey instrument was designed to measure each component of the VEC including: training modules, printed materials, and applicability of the training to their business

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	600

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Successful local community and economic development requires active engagement, connections among public, private, and education sector stakeholders, and strong local leadership. Of course, many communities may have good community leadership with excellent ideas for projects that would enhance local community and economic development. What they may lack is a source of funding to seed those local projects and provide training to local entrepreneurs. The VEC is designed to provide services to emerging entrepreneurs. These individuals are a part of the fastest growing sector in the state's economy, small business. State and local community leaders have placed a focus on the start-up and development of new small businesses. Based on current projections they will be a key part of the Alabama economy, tax base, and future employment outlook.

What has been done

During this program year the VEC (through working with its advisory board, contacting program participants, and conducting research) has endeavored to stay abreast of changes in the business environment as well as the needs of emerging entrepreneurs. As a result of these efforts timely topics were selected for new module development and launched on the VEC platform and advertised through traditional mechanisms and via social media.

Results

Individuals participating in the Virtual Entrepreneurship Center were contacted through social media and via email to provide feedback on the program. Of the program participants that responded to the survey they reported the following: 70% reported that they thought that the VEC videos and printed materials were extremely informative; 60% said that they were extremely likely to use the information to improve entrepreneurship activities; 50% were extremely likely to

recommend the VEC to others; 60% reported that they were extremely satisfied with the training and website.

4. Associated Knowledge Areas

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Other (Attitudes towards partnerships, digital divide within the state and target population)

Brief Explanation

The largest single external factor for the next several years is most likely to be the nation's and state's weak economies. This has put pressures on Extension and changes in budgeting priorities within ACES have steadily and dramatically reduced funding for the Rural Alabama Initiative program. Over the past six years the budget for this program has been reduced by almost 90%, starting with \$500,000 the initial year and reduced to \$52,894 in 2013.

Outcomes were also influenced by the willingness of external groups to work collaboratively. For the most part partnerships with universities (University of Alabama, Tuskegee, etc.), governmental agencies (ADECA, USDA, etc.), non-profits (Alabama Association of Community Development Corporations, Alabama Rural Health Association, etc.) and the private sector (Alabama Power, Regions Bank, etc.) have enhanced outcomes. However, in a few instances reluctant attitudes by agencies and groups have hindered outcomes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

A year ago the 18-member ECDI Board of Advisors was created to provide feedback, direction, and advice. This external advisory board includes leaders of all major economic development organizations in Alabama. This has become the primary method of evaluating the effectiveness of ECDI in accomplishing its mission.

ECDI training courses are evaluated through participant evaluation surveys and all of these events indicate high satisfaction with all aspects of training provided. The success of other activities and projects was measured by the level of participation.

ECDI funded 15 Rural Alabama Initiative projects for 2013 at a total of \$52,894, many focusing on community development, engagement, and youth leadership.

- The Hospitality Job Readiness Program in Chilton County conducted six educational sessions with older teens to reinforce job skills needed for employment in the businesses that often cater to tourists. Six students accepted the scholarships and after four days of classroom study, five students passed the rigorous course completion test.
- The Hatchet Creek Festival in Coosa County drew 140 participants and included a two-day float trip, overnight camping, live music and educational presentations. Evaluations indicated that many had never floated Hatchet Creek and will likely return in the future. Participants reported spending around \$4,440 in tourism related expenditures.
- The Jobs for Life program in Cullman County involved a curriculum designed to remove roadblocks related to finding and maintaining employment for prison inmates. 40 people took part in the training and approximately 50% of participants completed the entire 16-session course. About 25% percent of participants have been released from jail to date and are actively seeking employment.
- The Elected Officials Symposium program in Pickens County has brought elected county and municipal officials together each quarter to discuss shared problems and possible cooperative solutions.

At least 6 cities/communities started new leadership development programs. Over 100 consultation sessions conducted in support of tourism-related economic development programs, primarily for rural and agri-tourism initiatives. Strategic plans were developed for Western Colbert County, Washington County Economic Development Initiative, and a 5-county region in Alabama Black Belt. Plans are being implemented.

Individuals participating in the Virtual Entrepreneurship Center were contacted through social media and via email to provide feedback on the program. Of the program participants that responded to the survey they reported the following: 70% reported that they thought that the VEC videos and printed materials were extremely informative; 60% said that they were extremely likely to use the information to improve entrepreneurship activities; 50% were extremely likely to recommend the VEC to others; 60% reported that they were extremely satisfied with the training and website.

Key Items of Evaluation

N/A

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Environmental Stewardship

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%	10%		
104	Protect Soil from Harmful Effects of Natural Elements	10%	10%		
111	Conservation and Efficient Use of Water	10%	10%		
112	Watershed Protection and Management	10%	20%		
123	Management and Sustainability of Forest Resources	10%	0%		
131	Alternative Uses of Land	10%	0%		
132	Weather and Climate	10%	0%		
133	Pollution Prevention and Mitigation	10%	10%		
135	Aquatic and Terrestrial Wildlife	10%	0%		
136	Conservation of Biological Diversity	10%	0%		
403	Waste Disposal, Recycling, and Reuse	0%	20%		
723	Hazards to Human Health and Safety	0%	20%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	3.9	1.1	0.0	0.0
Actual Paid Professional	39.6	2.5	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
231028	150803	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
687279	150803	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
3565028	202629	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Classroom-in-the-Forest (CIF)

CIF is designed to help communicate and promote wise management of all of our forest resources and to educate youth concerning the importance of private land ownership and private landowners

4-H Coosa River Science School (CRSS)

CRSS programs are designed using a hands-on, experiential learning model with a focus of promoting comfort in the woods, environmental education, and an appreciation for Alabama's natural spaces

Alabama 4-H Outdoor Classroom (AOC)

AOC programs provide guidance to develop outdoor classrooms on school campuses and provide professional development workshops for educators and those that work with youth

4-H Skins N Skulls

4-H SnS program provides youth opportunity hands-on lessons to learn about wildlife, their habitats, and the larger ecosystems, in which we all coexist

Mobile Bay Oyster Garden Program

MBOGP is a volunteer restoration program. Volunteers grow oysters on private wharves for collection and planting on restoration sites

Water Wheels

A mobile, interactive, 3-D game-based learning lab provides educational programming concerning water quality and conservation

Watershed Management

Educational multi-team programs were conducted to integrate the link between land use and water quality. Topics include link between soils, forages, riparian forests, urban landscapes and water quality. Actions include citizen science training and monitoring of waterways, implementation of BMPs, and engagement of decision makers

Aquatic Nuisance Species

Educational programs and resources were developed in response to current and future concerns related to the spread of nuisance species that results in economic or ecological damage

Nutrient Management Planning for Poultry Growers

Educational programs were conducted to provide continuing education for Concentrated Animal Feeding Operations (CAFO) registration requirements

Alabama Smart Yards (ASY)

(ASY projects offer residential landscape management solutions to reduce nonpoint source pollution associated with the everyday activities within a watershed.

Professional Logger Manager (PLM)

PLM focuses on continuing education for professional loggers with regard to resource conservation, safety, and business management

Invasive Species Identification/Ecology/Control (ISIEC)

ISIEC focuses on education for forest landowners, professionals, and practitioners to enhance their ability to identify and control invasive plants and wild pigs.

E-waste Institute

E-waste institute provides educational programming related to proper management and disposal of electronic waste.

Synergistic Efforts to Reduce Pharmaceuticals in the Environment (SerPIE)

SerPIE enables citizens to safeguard their home and the environment from expired and unwanted pharmaceuticals.

Urban Environmental Science Education Program (UESeP)

UESeP provides educational programming focused on improving environmental stewardship.

Urban Home*A*Syst

Urban Home*A*Syst helps homeowners identify, low, medium and high risks found in and around the home and offers integrated approaches to help resolve them

2. Brief description of the target audience

4-H youth 9-19, educators, youth, volunteers and other youth development professionals, coastal residents and visitors, landowners, homeowners, elected officials, farmers, loggers, poultry growers, consumers of horticulture goods and services, citizens, coaches, volunteers, managers of municipal recreational fields and parks, and teachers

3. How was eXtension used?

Nutrient Management Planning for Poultry Growers

Livestock and Poultry Environmental Stewardship sections from eXtension were used as reference materials and the Livestock and Poultry Environmental Stewardship newsletter is forwarded to Poultry and Animal Science program team members

Alabama Smart Yards

eXtension was employed to host "Don't Bug Me Webinar Series 2013"

Invasive Species Identification/Ecology/Control (ISIEC)

Information dissemination concerning wild pig management.

V(E). Planned Program (Outputs)

1. Standard output measures

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

Patent Applications Submitted

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	12	7	19

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- ACES will reach both adult and youth audiences, agricultural producers, homeowners, agribusinesses, and rural and urban populations through participation in workshops, targeted PPT programs, 4-H enrichment programs, 4-H Club meetings, Coosa River Science School, media exposure, websites, partnerships, and curriculum.
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of environmental stewardship activities conducted

Year	Actual
2013	44579

Output #3

Output Measure

- Number of trained volunteers to produce, collect, and plant oysters in restoration areas in Mobile Bay

Year	Actual
2013	100

Output #4

Output Measure

- Number of individuals participating in Water Wheels programs and receiving educational resource materials, website, radio, television, and social media

Year	Actual
2013	2536

Output #5

Output Measure

- Number of individuals who participated in water quality educational activities

Year	Actual
2013	9832

Output #6

Output Measure

- Number of individuals participating in meetings focused on Nutrient Management Planning for Poultry Growers

Year	Actual
2013	825

Output #7

Output Measure

- Number of participants reached in Alabama Smart Yards (ASY) Program

Year	Actual
2013	7074

Output #8

Output Measure

- Number of participants engaging in continuing education Professional Logger Manager course.

Year	Actual
2013	63

Output #9

Output Measure

- Number of participants engaging in Invasive Species Identification/Ecology/Control conferences

Year	Actual
2013	2119

Output #10

Output Measure

- Number of participants in E-waste Institute

Year	Actual
2013	1316

Output #11

Output Measure

- Number of Synergistic Efforts to Reduce Pharmaceuticals in the Environment.

Year	Actual
2013	3461

Output #12

Output Measure

- Number of Urban Environmental Science Education Program participants

Year	Actual
2013	6528

Output #13

Output Measure

- Number of individuals participating in Urban Home*A*Syst.

Year	Actual
2013	1908

Output #14

Output Measure

- Number of participants attending workshops and consultations concerning BMPs for athletic field turf management.

Year	Actual
2013	19

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	-knowledge increase local and state environment -how one's action affect the environment - increased knowledge of environmental sustainability -understand value of local involvement - increased knowledge of career choices related to environmental stewardship
2	-increased respect for citizenry, community, and environment; -increased frequency of sustainability behaviors; -increased community service related to environmental stewardship; -inform the policy process as it relates to environmental stewardship; -increased implementation of environmental stewardship management practices
3	-increased perception of self-empowerment - ability to make a difference; -increased capacity for planning organizing, problem solving, decision-making, and teamwork to address problems; -Increased leadership skills; -increased number of citizens practicing environmental stewardship leading to a cleaner, safer environment; -increased capacity to create innovative solutions for complex environmental problems; -increased environmental stewardship advocacy; - revenue generation attributed to improved environmental sustainability; -increased use of alternative, renewable sources of energy
4	Increase citizen awareness of best management practices for residential landscapes
5	Increase adoption of principles taught: IPM, rain barrels installed, pruning for plant health/aesthetics, proper use of garden chemicals, right plant - right place, identification of invasive exotic plants, environmentally sound production of livestock and poultry
6	Increased knowledge and awareness of household hazards and their impact on the environment and human health; -Increased adoption of environmentally friendly homesite BMPs; -Modified behavior towards homesite and residential land management;-Increased conservation of soil and water resources; -Improved management of the household waste generated from urban and suburban homes
7	knowledge increase, increased knowledge of environmental sustainability, understanding the value of local involvement, increased community service related to environmental stewardship, increased implementation of environmental stewardship management practices
8	Knowledge increase local and state environment
9	change in knowledge, outcome, and condition related to Watershed Management and Aquatic Nuisance Species
10	to change knowledge and actions related to perceptions about poultry litter; poultry litter should not be perceived as waste, rather as a valuable commodity.
11	To change knowledge of calculating storm water runoff and the importance of reducing runoff total flow, and to change knowledge and actions related to pollinators and of IPM.
12	Invasive Species Identification/Ecology/Control programs increase knowledge of forest landowners related to how to manage invasive species.
13	E-waste Institute program increased perception of self-empowerment - ability to make a difference; -increased capacity for planning organizing, problem solving, decision-making, and teamwork to address problems; -Increased leadership skills; -increased number of citizens practicing environmental stewardship leading to a cleaner, safer environment; - increased capacity to create innovative solutions for complex environmental problems; - increased environmental stewardship advocacy; - revenue generation attributed to improved

	environmental sustainability
14	Synergistic Efforts to Reduce Pharmaceuticals in the Environment programs increased respect for citizenry, community, and environment; -increased frequency of sustainability behaviors; -increased community service related to environmental stewardship; -increased implementation of environmental stewardship management practices
15	Urban Environmental Science Education Program increased knowledge of the local and state environment, how one's action affect the environment, environmental sustainability, understanding of the value of local involvement and increased knowledge of career choices related to environmental stewardship
16	Urban Home*A*Syst programs change knowledge related to household hazards.

Outcome #1

1. Outcome Measures

-knowledge increase local and state environment -how one's action affect the environment - increased knowledge of environmental sustainability -understand value of local involvement - increased knowledge of career choices related to environmental stewardship

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	302

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

While worldwide water consumption is rising at double the rate of the population, the amount of freshwater remains at only 2.5 percent of the world's water resources. Rainfall replenishes much of the water we use. However, it is predicted that by 2025, eighteen countries will use more water than can be replenished. Collected rainwater is used for domestic purposes and irrigation. In some countries, it is the only source of potable water. Rainwater is usually collected from rooftops, greenhouses, pool covers and other relatively clean surfaces. This stored water can be used for irrigation, flushing toilets, or washing cars; however, it is nonpotable and requires extensive treatment for use as tap water. Potable water purification requirements vary with state and local ordinances and must be inspected by local authorities.

What has been done

44 workshops and seminars for clientele about the importance, methods, and skills to create and install their own rain water catchment systems. During each workshop/seminar participants also worked on their own rain barrel which were installed in their own homes. A total of 1162 adult clientele, 67% white, 26% black, 45% male, 55% female attended the scheduled workshops and seminars.

Results

302 rain barrels were constructed and distributed to conserve water. Youth participants through Water Wheels improved skills and abilities to recognize, identify, and evaluate poor water conservation practices. Increased knowledge and adoption of water conservation practices was 31%. A total of 27K gallons of water was conserved as a direct result of the adopted practices. An estimated \$40K was saved by clientele by adopting the conservation practices obtained by the Water Wheels Programming.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water

Outcome #2

1. Outcome Measures

-increased respect for citizenry, community, and environment; -increased frequency of sustainability behaviors; -increased community service related to environmental stewardship; -inform the policy process as it relates to environmental stewardship; -increased implementation of environmental stewardship management practices

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

-increased perception of self-empowerment - ability to make a difference; -increased capacity for planning organizing, problem solving, decision-making, and teamwork to address problems; - Increased leadership skills; -increased number of citizens practicing environmental stewardship leading to a cleaner, safer environment; -increased capacity to create innovative solutions for complex environmental problems; -increased environmental stewardship advocacy; - revenue generation attributed to improved environmental sustainability; -increased use of alternative, renewable sources of energy

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Increase citizen awareness of best management practices for residential landscapes

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Increase adoption of principles taught: IPM, rain barrels installed, pruning for plant health/aesthetics, proper use of garden chemicals, right plant - right place, identification of invasive exotic plants, environmentally sound production of livestock and poultry

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

Increased knowledge and awareness of household hazards and their impact on the environment and human health; -Increased adoption of environmentally friendly homesite BMPs; -Modified behavior towards homesite and residential land management;-Increased conservation of soil and water resources; -Improved management of the household waste generated from urban and suburban homes

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

knowledge increase, increased knowledge of environmental sustainability, understanding the value of local involvement, increased community service related to environmental stewardship, increased implementation of environmental stewardship management practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
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2013 40115

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Oyster restoration in Mobile Bay is important to the environment and to the local economy. Local citizens and tourism are concerned with the environment as well as economic vitality of the region.

What has been done

Mobile Bay Oyster Garden Program

Results

- 100 volunteers engaged in the Mobile Bay Oyster Garden Program to establish oyster beds
- 40,115 oysters were produced and planted in Mobile Bay populating over 8,000 square meters;
- 124.75 volunteer hours and 580 miles volunteer travel.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
132	Weather and Climate
133	Pollution Prevention and Mitigation
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

Outcome #8

1. Outcome Measures

Knowledge increase local and state environment

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
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2013

5290

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Youth are disconnected from nature and 4-H makes a real investment in environmental education and outdoor learning. Studies show environmental education engages students in learning, raising test scores, and encouraging youth to pursue careers in environmental education and natural resources.

What has been done

4-H Skins and Skulls, 4-H Classroom in the Forest, 4-H Coosa Science River School, and 4-H Outdoor Classroom

Results

88% of the respondents (n=2884) reported that because of their involvement in the Skins n? Skulls program, they have a better understanding of different ecosystems and the interconnectivity between them. 300 public and private schools across Alabama have enrolled in the AOC where teachers were equipped to expand educational opportunities through the use of an outdoor classroom. 75 percent of Classroom in the Forest participants (n=869) reported they can more effectively assess a tree's health. Youth feel more connected to nature, enjoy meeting youth from other areas of the state, many stay away from home for the first time, and most want to come back. Youth learn life skills related to environmental stewardship.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
123	Management and Sustainability of Forest Resources
131	Alternative Uses of Land
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

Outcome #9

1. Outcome Measures

change in knowledge, outcome, and condition related to Watershed Management and Aquatic Nuisance Species

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	250000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local, state and federal agencies increasingly value partnerships with Extension to demonstrate practices that assist in meeting their goals that include improved quality of life; safe, abundant drinking water; waters that meet their designated use standard; and increased awareness of new technologies to achieve these goals.

What has been done

Implementation of demonstration projects that incorporate field days and technical trainings

Results

850 linear feet of stream enhanced or restored, improved storm water quality from the implementation of 16 storm water control measures, and 52 agricultural best management practices value at \$250,000 completed; including waste management facilities, pasture improvements, stream crossings, and heavy use areas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
136	Conservation of Biological Diversity

Outcome #10

1. Outcome Measures

to change knowledge and actions related to perceptions about poultry litter; poultry litter should not be perceived as waste, rather as a valuable commodity.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Poultry litter is a valuable commodity when handled, stored, and used properly and can be sold by producers to increase sustainability of the farm enterprise and to reduce phosphorus buildup on surrounding farm land.

What has been done

Nutrient Management CAFO registration meetings.

Results

Over 50 percent of poultry litter generated in Alabama is now used off the farm of origin increasing poultry farm of origin sustainability and reducing phosphorus buildup on surrounding farm land.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
112	Watershed Protection and Management
403	Waste Disposal, Recycling, and Reuse

Outcome #11

1. Outcome Measures

To change knowledge of calculating storm water runoff and the importance of reducing runoff total flow, and to change knowledge and actions related to pollinators and of IPM.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	290

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Significant surface and ground water combined with the level of consumer spending in Alabama's home landscapes/gardens (\$843 million - 2009, AU Special Report #7) suggest huge impacts from home landscapes/garden runoff.

What has been done

"What do I spray on it", is still a common question Extension Agents hear today, but a pesticide isn't always necessary to address the perceived problem. We teach our clients how to identify the problem, determine the severity of the problem, and then multiple options to address it. When suggesting pesticides, we teach them to "READ the label", proper use, and that pesticides are just one option for management.

Results

-76% of participants showed knowledge gain in calculating runoff potential; 60% said they would install a rain barrel; and 60% felt confident calculating runoff potential; total harvest potential = 3400 gal/person.

-81% of participants increased their knowledge of using pesticides safely and reading the label; 71% said they would educate others about importance of pollinators; and 92% said they would adopt/implement the IPM practices shown

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
136	Conservation of Biological Diversity

Outcome #12

1. Outcome Measures

Invasive Species Identification/Ecology/Control programs increase knowledge of forest landowners related to how to manage invasive species.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1911

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Forest land owners, timber professionals, and practitioners need to know how to identify and control invasive plants and wild pigs.

What has been done

Workshops, publications, and social media

Results

1911 (98%) participants reported change in knowledge. These 1911 participants are responsible for over 2.8 million acres of forestland.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

Outcome #13

1. Outcome Measures

E-waste Institute program increased perception of self-empowerment - ability to make a difference; -increased capacity for planning organizing, problem solving, decision-making, and teamwork to address problems; -Increased leadership skills; -increased number of citizens practicing environmental stewardship leading to a cleaner, safer environment; -increased capacity to create innovative solutions for complex environmental problems; -increased environmental stewardship advocacy; - revenue generation attributed to improved environmental sustainability

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1054

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Educational information to respond to community needs related to electronic waste (e-waste) management is becoming increasingly important. According to the USEPA the number of electronic products in households and businesses that are considered to be obsolete, broken, or irreparable is growing at 3 times the rate of household trash. Continued production of e-waste in such a rapid manner creates a need for improved education and increased adoption of e-waste BMPs. The E-Waste Institute serves as a medium to educate, train, raise public awareness, and influence public policies about safe environmental practices for e-waste.

What has been done

a). Economic and environmental impacts were observed from reductions in CO2 emissions, e-waste fated for landfills, and the reclamation of precious resources. A continuous small electronics recycling program (SERP) was conducted via a partnership with recycler Funding Factory. Over 959 lbs. of printer cartridges (586) and cell phones (41) were recycled, resulting in 722 lbs. of remanufactured items and 235 lbs. of recycled items. b). ACES also led the Wiregrass E-waste Recycling Drive in Dothan, AL resulting in 60 cars dropping off 5200 lbs. of e-waste. Collaborative efforts included assisting with the promotion of the Madison Co. AL Electronics and Mercury Collection Drive, resulting in 485 cars dropping of 39,388 lbs. e-waste. Participants were reached via radio, television and web; they also received ACES publications on e-waste hazards.

Results

a). Over 591 lbs. of resources (copper , aluminum, steel, plastic, nylon) were reclaimed. Over 10 MtCO₂e (metric ton CO₂ equivalent) were prevented through remanufacturing and recycling. The quantity of e-waste recycled was equivalent to offsetting CO₂ emissions from the consumption of 1,141.63 gals. of gasoline. The total ACES's yearly earnings generated from recycling with Funding Factory are \$321.00.

b).The economic and environmental gains observed from the Wiregrass E-waste Drive totaled \$733.00 for 2100 lbs. of metal (\$147.00); 200 lbs. of wire (\$160.00), 400 lbs. of electrical units (\$160.00)?...etc. The event deferred 8,232 lbs. of carbon emissions from entering the atmosphere. This equates to 1,397 gals. of gasoline conserved (@ \$3.19 per gal. = \$4,456.43), 317 trees saved, 11,931 plastic bottles recycled or 54,882 aluminum cans recycled (@0.60 per lb. = \$32,929.20). Results also revealed that 69% of workshop participants improved their knowledge of the benefits of reusing, reducing and recycling e-waste and 78% showed knowledge gains on how to dispose of e-waste properly (n=144).

4. Associated Knowledge Areas

KA Code	Knowledge Area
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
133	Pollution Prevention and Mitigation
403	Waste Disposal, Recycling, and Reuse
723	Hazards to Human Health and Safety

Outcome #14

1. Outcome Measures

Synergistic Efforts to Reduce Pharmaceuticals in the Environment programs increased respect for citizenry, community, and environment; -increased frequency of sustainability behaviors; -increased community service related to environmental stewardship; -increased implementation of environmental stewardship management practices

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	171

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In recent years, pharmaceuticals and personal care products (PPCPs) have been detected in the environment by scientists all over the world. The Synergistic Efforts to Reduce Pharmaceuticals in the Environment (SerPIE) Program aims to help individuals understand the environmental safeguards germane to proper management and disposal of unwanted medicine, ensuring improved human, animal and environmental health. Results of questionnaires provided by ACES during a drug take-back initiative (n= 48) Female (67%); Male (33%)] revealed that 73% of the participants had never utilized a drug-take back event before. Results also revealed that minority participation was extremely low at 11% versus that of Caucasians at 89%. Similar demographic trends were seen throughout the state, suggesting a need for increased outreach among minorities.

What has been done

a). SerPIE, which entails workshops, research activities, and participation in drug-back initiatives has led to reductions in the number of pharmaceutical drugs fated for the environment (i.e., water supplies) and stockpiled in homes, significant increases in knowledge, anticipated positive changes in behavior, adoption of recommended pharmaceutical BMPs, and achievement of social, and environmental expectations. Eight workshops were offered to diverse audiences ranging from small ruminant producers to youth counselors. Significant knowledge gains were observed among educators and youth counselors (n = 77) as well as among small ruminant producers (n = 36).

Results

A total of 1253 lbs. of pharmaceutical drugs were collected during 4 drug-back initiatives, resulting in reduced potential for drug abuse or misuse, and anticipated improved environmental and water quality. Results of the workshops revealed that 80% of the youth educators increased their knowledge concerning the impacts of improperly disposing of pharmaceuticals; 92% increased their knowledge of how pharmaceuticals affect human health; and 96% increased their knowledge of street names commonly used for pharmaceuticals (n=77). 90% of the small ruminant producers showed knowledge gains concerning the drug take-back initiative; and 80% increased their knowledge of risks posed to human and environmental health. As a result of the program, 47% stated that they would no longer flush medication down the toilet and 50% stated that they had already adopted that recommended BMP (n=36). Of the 10 participants responding to 3 to 6 month follow-up surveys, 100% had eliminated the practice of flushing drugs down the toilet; 40% had participated in a drug-take back program, and 100% had achieved their social expectation of a more drug-free, safer home (n=10).

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
135	Aquatic and Terrestrial Wildlife
403	Waste Disposal, Recycling, and Reuse
723	Hazards to Human Health and Safety

Outcome #15

1. Outcome Measures

Urban Environmental Science Education Program increased knowledge of the local and state environment, how one's action affect the environment, environmental sustainability, understanding of the value of local involvement and increased knowledge of career choices related to environmental stewardship

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	337

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Environmental education is the key to advances in conservation and to avoiding the long-term consequences associated with poor environmental stewardship and management of natural resources. The Urban Environmental Science Education Program (UESeP) seeks to improve citizen appreciation for science and enhance their understanding of the environment. It provides a framework for citizens to become better stewards by identifying environmental issues and providing unbiased, science-based information to aid in their understanding of these issues.

What has been done

A team-based approach was used to implement UESeP in various settings. Multiple delivery modes, including classroom enrichment, workshops, field days, fairs, festivals and expos were used. Two extramural grants were received and presentations were also made at local, regional and national meetings. Research activities were used to create experiential learning opportunities for undergraduate students and to provide researched-based data for Extension program enhancement.

Results

UESEP youth learned the impacts of non-point pollution; the importance of natural resource conservation, the importance of pollinators; and the benefits of reducing, reusing and recycling discarded waste.

Youth improved their skills and abilities to problem solve, evaluate, reason, focus, observe, research a problem, and measure (PERFORM) via hands-on activities involving GPS and geocaching, constructing wildlife habitats, and participating in Enviroscape demonstrations. The average youths' knowledge before the workshops was rated very low to moderate (1-3) compared to ratings of high and very high (4-5) after the workshops. Surveys revealed that 98% of youth

surveyed increased their level of knowledge concerning the environment and 94% agreed that the program made them want to become better stewards of the environment (n= 337).

Comments: This workshop was not only extremely informative but it was fun and interesting! It was awesome! I learned that it is important to take care of the planet and keep it clean! They are very good at what they do, I hope they come back! Thank you for teaching us about the environment! I liked it!

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
135	Aquatic and Terrestrial Wildlife
403	Waste Disposal, Recycling, and Reuse
723	Hazards to Human Health and Safety

Outcome #16

1. Outcome Measures

Urban Home*A*Syst programs change knowledge related to household hazards.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	166

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Education and citizen involvement is critically important to the improvement of environmental stewardship. Outreach programs that address emerging environmental issues and offer integrated approaches to help resolve them are needed to combat environmental illiteracy among urban and suburban home owners. In order to enhance decision-making, homeowners must understand that their actions are crucial to the protection of their health and the environment.

What has been done

- a).Urban Home*A*Syst workshops were conducted to help homeowners identify risks or problems found in and around the home, and encourage them to take action. Program outcomes were shared via poster presentations at the 2013 Water Education Summit and AAMU Annual STEM Day.
- b). A collaborative effort with the Mobile Co. Environmental Department, ACES and Keep America Beautiful resulted in the development and implementation of an ACES questionnaire (n = 779) along with collection of 12,625 containers of paint and 596 miscellaneous containers at a Mobile Co. Paint Disposal Collection Day.

Results

- a).Participants showed increased knowledge in water quality; runoff management; lawn and garden; managing hazardous products; storing automotive products; household wastewater treatment; and managing trash and waste prevention (n=166). Of the 22 participants responding to 3 to 6 month follow-up surveys, the majority had adopted at least 3 of the recommended BMPs and 90% felt that the program enabled them to achieve a social (hazard free, securer home), environmental (protecting the environment from poor home site management practices) or economic (saving money) expectation (n=22).
- b). Of the 779 participants/cars surveyed at the Paint Disposal Collection: 83% (637) were recycling paint for the first time; and 81% (633) recycled other products regularly. Although participants from 32 zip codes were represented, 62% came from 5 zip codes. These findings, along with demographic data [Caucasian (93%), African American (6%) and other (1%); Female (37%), Male (63%)] highlighted the need for more outreach and participation from minorities in future household hazardous waste collections.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
403	Waste Disposal, Recycling, and Reuse
723	Hazards to Human Health and Safety

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

Cold temperatures delayed larval setting of oysters resulting in lower year-end

plantings and oyster gardening is restricted to areas allowed by Alabama Department of Public Health

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Classroom-in-the Forest

- 99% of participants learned new information regarding natural resources and how to teach information to youth.

Skins n' Skulls-84% indicated they are better prepared and more capable of positive, beneficial stewardship of natural resources.

40,115 oysters were produced and planted to restore over 8,000 square meters at 47 sites.

4-H Coosa River Science School

- 88% of the respondents reported they have a better understanding of different ecosystems and the interconnectivity.

Alabama Outdoor Classroom

- 99% of the workshop participants learned new information regarding natural resources and how to teach this information to their students.

• Alabama Outdoor Classroom Program is in 57 of Alabama's 67 counties.

• Through the Alabama Outdoor Classroom Program, more than 80,000 youth in grades K-12 are learning about Alabama's natural resources.

4-H Skins N Skulls

- 87% of the respondents reported that because of the program, they have a better understanding of the anatomical differentiations between herbivores and carnivores.

• 88% of the respondents reported that because of their involvement in the Skins n' Skulls program, they have a better understanding of different ecosystems and the interconnectivity between them.

Mobile Bay Oyster Garden Program

Invasive Species Identification/Ecology/Control

- 1911 (98%) participants reported change in knowledge. These 1911 participants are responsible for over 2.8 million acres of forestland.

E-waste Institute:

• Over 591 lbs. of resources (copper , aluminum, steel, plastic, nylon) were reclaimed. The quantity of e-waste recycled was equivalent to offsetting CO2 emissions from the consumption of 1,141.63 gals. of gasoline.

• The economic and environmental gains observed from the Wiregrass E-waste Drive totaled \$733.00 This equates to 1,397 gals. of gasoline conserved, 317 trees saved, 11,931 plastic bottles recycled or 54,882 aluminum cans recycled

Synergistic Efforts to Reduce Pharmaceuticals in the Environment:

• A total of 1253 lbs. of pharmaceutical drugs were collected during 4 drug-back initiatives, resulting in reduced potential for drug abuse or misuse, and anticipated improved environmental and water quality. Of the 10 participants responding to 3 to 6

month follow-up surveys, 100% had eliminated the practice of flushing drugs down the toilet; 40% had participated in a drug-take back program, and 100% had achieved their social expectation of a more drug-free, safer home (n=10).

Urban Home*A*Syst

- Of the 22 participants responding to 3 to 6 month follow-up surveys, the majority had adopted at least 3 of the recommended BMPs.
- Of the 779 participants surveyed at the Paint Disposal Collection: 83% (637) were recycling paint for the first time; and 81% (633) recycled other products regularly

Key Items of Evaluation

4-H Programs:

- Youth life skill development builds adults that will make the good decisions for the individual, families, community, nation, and world.

Mobile Bay Oyster Garden:

-Volunteer program resulted in economic and action change of condition with 40,115 oysters produced, collected and planted to restore over 8,000 square meters of Mobile Bay oyster beds.

Water Wheels:

-302 rain barrels were constructed and distributed and put into use to save over 27,000 gallons of water

Nutrient Management Planning for Poultry Growers:

-Over half of the poultry litter produced in Alabama now moves off the farm of origin as a commodity for use as fertilizer.

Alabama Smart Yards:

-214 participants out of 357 said they would install a rain barrel and felt confident calculating runoff potential.

. 346 out of 357 attendees reported they would adopt/implement the IPM practices shown.

E-waste Institute:

\$1054.00 earnings from recovered valuable metals from E-waste campaigns.

Synergistic Efforts to reduce Pharmaceuticals in the Environment:

-A total of 1253 lbs. of pharmaceutical drugs were collected during 4 drug-back initiatives

Urban Home*A*Syst:

-637 participants recycled paint for the first time.

V(A). Planned Program (Summary)

Program # 10

1. Name of the Planned Program

Financial Literacy Across the Lifespan

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
602	Business Management, Finance, and Taxation	5%	5%		
607	Consumer Economics	5%	5%		
801	Individual and Family Resource Management	85%	85%		
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	5%	5%		
Total		100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	5.9	1.9	0.0	0.0
Actual Paid Professional	12.7	2.0	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
73992	121616	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
220116	121616	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1099264	128725	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Consumer Score with Credit in Check through Responsible Spending, a financial management curriculum, was implemented as a series of five lessons or as stand-alone programs in various settings throughout the state. It focuses on bank accounts, credit, spending plans, the buying process, and career plans.

Promoting Readiness for Employment Possibilities (PREP), a Job-Readiness curriculum was implemented as a series of four lessons or as stand-alone programs in various settings throughout the state. It focuses on job applications, resume writing, interviewing, and professional dress

2. Brief description of the target audience

Consumer Score: approximately 4,513 participants. Of the 2,413 traceable participants, 98% were from urban areas and 2% from rural areas. 25% of the participants were youth. The majority were female (78%) and African Americans (82%) participants. White Americans represented 15% of the participants while Multiracial, Hispanics and Other Race each represented 1%.

PREP: approximately 2,338 participants. Of the 1,538 traceable participants, all (100%) were from urban areas. The majority of the participants were female (73%) and African Americans (86%). White Americans represented 12%, Multiracial Americans 1%, American Indians, and Hispanics less than 1% of the participants.

Money Management for Adults: approximately 13,830 participants. Of the 4,420 traceable participants, 94% were from rural areas and 6% urban areas. African Americans represented 44%, White Americans represented 50% and Hispanics represented 3%. Multiracial and Other Races represented 3%. Females were 57% and males 43%. Adults comprised 7% and youth 93%.

Financial Education for Youth: approximately 10,519 participants. Of the 9,339 traceable participants, 95% were from rural areas and 5% urban areas. African Americans represented, 43% and White Americans represented 54%. Multiracial, Hispanics and Other Races represented 3%. Females were 70% and males 30%. Youth comprised 99% and adults 1%.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

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

Year: 2013

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	2	1	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Strategic Program Initiative (SPI) which are described/explained in the prior "outcome activities and methods sections." The success of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the SPIs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of Financial classes taught

Year	Actual
2013	466

Output #3

Output Measure

- Number of financial activities implemented

Year	Actual
2013	35

Output #4

Output Measure

- Number of job resources and tools provided to participants

Year	Actual
2013	50

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Total number of people completing financial management education programs who actually adopted one or more recommended practices to decrease consumer credit debt, or increase investing and savings, and plan for retirement within six months after completing one or more of these programs.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. In addition to quantitative data, qualitative measurement like client comments or another type of testimonial about the program may be included. The impacts for this program area are measured by use of pre, post and delayed post assessments. Additionally, the number and quality of the success stories generated by the individuals who work on these projects are also used.
3	Percentage of participants better prepared for job seeking and getting hired
4	Percentage of adults implementing Money Management practices after financial classes
5	Percentage of youth making more informed financial decisions
6	Percentage of participants implementing financial practices learned in the 5-series of ConsumerScore classes

Outcome #1

1. Outcome Measures

Total number of people completing financial management education programs who actually adopted one or more recommended practices to decrease consumer credit debt, or increase investing and savings, and plan for retirement within six months after completing one or more of these programs.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. In addition to quantitative data, qualitative measurement like client comments or another type of testimonial about the program may be included. The impacts for this program area are measured by use of pre, post and delayed post assessments. Additionally, the number and quality of the success stories generated by the individuals who work on these projects are also used.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Percentage of participants better prepared for job seeking and getting hired

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2338

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Various programs throughout the state require individuals to attend job readiness classes as a means for transitioning into the workforce. Many TANF (Dept. of Human Resources) have such requirements. If such preparation is neglected, limited-resource individuals will lose public assistance.

What has been done

PREP, a four-lesson series, designed around main concepts, the program promotes building resumes, completing job applications, interviewing skills, and professional image. The program was implemented by use of classes, workshops, job fairs, seminars, etc.

Results

- a) 94 (15%) participants found a job as a result of the training.
- b) The number of participants having a resume increased by 102% (from 189 to 381).
- c) The number of participants knowing how to participate in a technology assisted interview increased by 72% (from 218 to 375).
- d) The number of participants knowing how to complete a job application increased by 32% (from 344 to 455).
- e) Participants' confidence in their overall job search skills increased significantly (t= -30.49).
- f) Participants' confidence in their interviewing skills increased significantly (t = -54.00).
- g) participants' confidence in ability to select the appropriate attire for an interview increased significantly (t = -28.75)

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

Outcome #4

1. Outcome Measures

Percentage of adults implementing Money Management practices after financial classes

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Low levels of financial literacy in Alabama, the struggling economy and rising costs make it necessary for citizens to gain the knowledge and skills to acquire and manage family financial resources effectively.

What has been done

Seminars were presented to diverse groups of adults across the state on budgeting, credit, debt, saving, identity theft and other financial topics. Tax returns were prepared for 76 limited resource Alabamians at VITA sites. 160 citizens set financial goals and enrolled in the Alabama Saves program. Financial management publications were distributed as aids for tracking, managing and recording financial information including; 60,000 Money Management Calendars, 15,000 Planvelope kits and 2,696 Records and Important Papers publications.

Results

431 participants completed pre- and post-surveys.

- a) 235 (54.6%) of participants learned ways to manage money effectively as a result of the program.
 - b) 216 (50.2%) of participants learned how to set short-term and long-term financial goals.
 - c) 223 (51.8%) of participants learned how to create a spending plan (budget).
 - d) 224 (52.0%) of participants learned strategies to reduce monthly expenses.
 - E) 150 (34.9%) of participants learned to distinguish needs from wants.
 - f) 232 (54.0%) of participants learned to use money management tools to manage finances.
- \$93,750g) 76 taxpayers resulting in \$93,750 recovered in tax refunds and \$21,969 in Earned Income Tax Credit

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management

803 Sociological and Technological Change Affecting Individuals, Families, and Communities

Outcome #5

1. Outcome Measures

Percentage of youth making more informed financial decisions

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Youth need to acquire the knowledge and skills to make wise financial decisions and function successfully as adults in society.

What has been done

Programs consisted of 125 activities including: the Reality Check simulation, budgeting, credit and career development seminars focused on resume writing, interviewing and dressing professionally. Alabama Saves exhibits and saving seminars were presented.

Results

3,650 participants completed pre/post surveys

a) 2354 Students that learned to make smart money decisions increased by 11.9% (pre- 52.6%, post- 64.5%).

b) 2335 Students that learned to distinguish needs from wants increased by 17.2% (pre- 46.8%, post- 64.0%).

c) 723 Students that gained awareness of the link between income and lifestyle choices increased by 19.8% (pre- 44.1%, post- 63.9%).

d) 544 Students that learned saving is important increased by 14.9% (pre- 49.5%, post- 64.4%).

e) 493 Students that gained awareness of the link between education and careers increased by 13.5% (pre- 50.5%, post- 64.0%).

4. Associated Knowledge Areas

KA Code	Knowledge Area
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602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

Outcome #6

1. Outcome Measures

Percentage of participants implementing financial practices learned in the 5-series of ConsumerScore classes

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Many households within the US are faced with problems such as overextended credit, limited savings, underemployment and many other finance-related issues. Financial educators agree that many families and individuals lack the financial literacy needed to make good financial choices about spending, banking, saving, investing and securing their financial resources.

What has been done

Consumer Score with Credit in Check, a five-lesson series, provides education on responsible management of resources to avoid financial risks, indebtedness and bankruptcy. It offers training in budgeting, credit management, saving and investing to help citizens maintain and build credit scores and financial standings for their family's financial health. The program was implemented by use of classes, workshops, seminars, conferences, etc.

Results

Based on posttest and delayed posttest data,

- a)Of the 200 participants who anticipated opening a checking account, 21% opened a checking account.
- b)Of the 240 participants who anticipated opening a savings account, 20% opened a savings account.
- c)Of the 230 participants who anticipated developing a spending plan, 33% started a spending plan.

d)Of the 115 participants who anticipated adjusting their career goals, 49% adjusted their career plans.

Based on posttest data,

a)35% of 200 participants anticipated obtaining their credit score.

b)32% of 246 participants understood steps to manage credit to increase credit score.

c)35% of 268 participants were more aware of advantages and disadvantages of credit cards.

d)30% of 226 participants anticipated limiting the use of credit card for needs verse wants.

e)195 of the participants anticipated paying more than the minimum balance on credit card.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
607	Consumer Economics
801	Individual and Family Resource Management
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy

Brief Explanation

N/A

V(I). Planned Program (Evaluation Studies)

Evaluation Results

1. 94 (15%) participants found a job as a result of the training.
2. The number of participants having a resume increased by 102% (from 189 to 381).
3. The number of participants knowing how to participate in a technology assisted interview increased by 72% (from 218 to 375).
4. The number of participants knowing how to complete a job application increased by 32% (from 344 to 455).
5. Participants confidence in their overall job search skills increased significantly (t= -30.49).
6. Participants' confidence in their interviewing skills increased significantly (t = -54.00).
7. Participants' confidence in ability to select the appropriate attire for an interview increased significantly (t = 54.00)
8. When given a financial situation, student were able to increase (11.9%) their ability to make smart money decisions 11.9% (pre- 52.6%, post- 64.5%).

Key Items of Evaluation

After a Prep Job training participants found jobs, prepared a resume, increased their confidence to job seek and were more confident in using technology for job interviews.

V(A). Planned Program (Summary)

Program # 11

1. Name of the Planned Program

Human Nutrition, Diet and Health

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	40%	20%		
703	Nutrition Education and Behavior	50%	40%		
724	Healthy Lifestyle	5%	30%		
903	Communication, Education, and Information Delivery	5%	10%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	6.4	1.0	0.0	0.0
Actual Paid Professional	39.9	4.7	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
233129	283972	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
693531	283972	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
5826168	756613	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Expanded Food and Nutrition Education Program (EFNEP) assisted limited-resource audiences in acquiring knowledge, skills, and changed behavior necessary for nutritionally sound diets, and contribute to personal development and improvement of family diet and nutritional wellbeing. EFNEP provided audiences with opportunities for informed dietary choices, lifestyle changes, reduction in health care costs, and healthier lives. EFNEP was leveraged by Smith-Lever and 1890 Extension funds.

Urban Expanded Food and Nutrition Education Program (UEFNEP) Nutrition education classes are provided for Alabamians with limited resources to empower people to make better nutrition choices and health decisions. Research studies reveal families receiving nutrition and health education through EFNEP programs exhibits healthier children, positive youth development, and better food management skills. In addition, families were healthier and spent less money on junk food and healthcare. UEFNEP was leveraged by Smith-Lever and 1890 Extension funds.

The Eat Healthy, Be Active Community Workshop Series is based on the 2010 Dietary Guidelines for Americans and the 2008 Physical Activity Guidelines. In this program, the information is packaged into six easy to conduct, interactive workshops. Each 60-minute workshop contains learning objectives, icebreaker activities, talking points, instructions for stretch breaks, and hands-on learning activities, and provides opportunities to implement new practices that will lead to lasting lifestyle changes.

Community Health Aerobic Motivational Program Initiating Optimal Nutrition (CHAMPION) curriculum is a series of six lessons; activities include nutrition, health and physical activity classes, and food demonstrations and pre/post weight assessments.

Special Nutrition Assistance Program-Education (SNAP-Ed): Goals of SNAP-Ed are to improve the likelihood that individuals eligible for SNAP will improve dietary quality and physical activity. SNAP-Ed was leveraged by Smith-Lever and 1890 Extension funds.

Urban Supplemental Nutrition Assistance Program-Education (Urban SNAP-Ed): Goals of Urban SNAP-Ed are to provide nutrition education that enhances the capacity of limited resource individuals and their families to make healthy food choices, to use proper food handling and storage techniques, and to eat nutrient-dense foods. Snap-Ed was leveraged by Smith-Lever and 1890 Extension funds.

2. Brief description of the target audience

EFNEP: target audience is limited-resource families with young children.

UEFNEP Program: 292 of the participants were Hispanics, females and most could not speak any English.

Eat Healthy, Be Active: The workshops and corresponding materials are suitable for groups of adults, including busy people with limited time and those with low health literacy.

CHAMPION: Adults and elderly (18 and above)

SNAP-Ed Program: Demographics of the 40,633 adult participants: Gender: 65% female and 35% male; Ethnicity: 45% Black, 48% White and 7% others.

Urban Supplemental Nutrition Assistance Program (Urban SNAP-Ed) target audience is limited resource individuals and families in Alabama's Metropolitan Statistical Area (MSAs).

SNAP-Ed Demographics: Adults: 1,556; 65% female and 35% male; Ethnicity: 68% Black, 26% White, 6% Hispanic, Asian and others.

3. How was eXtension used?

N/A

V(E). Planned Program (Outputs)

1. Standard output measures

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

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	3	0	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- ACES will reach families and individuals in rural and urban populations through participation in workshops, targeted PPT programs, enrichment meetings, faith-based organizations, 4-H Club meetings, health fairs, conferences, social networking, media exposure, websites, partnerships, and curricula.
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- EFNEP provides a series of six nutrition education classes to limited-resource adults. This audience is recruited and enrolled in places where limited-resource families live, work, and frequent. Typical places include local housing authorities, county health departments, Departments of Human Resources county offices, HeadStart, food banks, family resource centers, laundromats, schools, work sites, and community action agencies.

Year	Actual
2013	16511

Output #3

Output Measure

- UEFNEP provides a series of eight nutrition education classes, in group and individual settings, to limited-resource Hispanic adults. This audience is recruited and enrolled in places where live, work, frequently receive services. Typical places include trail parks, local housing authorities, county health departments, Departments of Human Resources county offices, HeadStart, family resource centers, schools, and community action agencies.

Year	Actual
2013	684

Output #4

Output Measure

- UEFNEP Number of Participants

Year	Actual
2013	172

Output #5

Output Measure

- UEFNEP In-service trainings, Health Fairs, updated website

Year	Actual
2013	15

Output #6

Output Measure

- UEFNEP partnerships-community centers, Catholic churches, Hispanic organizations

Year	Actual
2013	6

Output #7

Output Measure

- Eat Healthy, Be Active Community Workshops provides science-based advice to promote health and reduce obesity and risk for major chronic diseases. The program is based off of the 2010 Dietary Guidelines for Americans and the 2008 Physical Activity Guidelines for Americans. The workshops and corresponding materials are suitable for groups of adults, including busy people with limited time and those with low health literacy.

Year	Actual
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2013 252

Output #8

Output Measure

- CHAMPION will reach families and individuals in rural and urban populations through participation in workshops, targeted PPT programs, enrichment meetings, faith-based organizations, 4-H Club meetings, health fairs, conferences, social networking, media exposure, websites, partnerships, and curricula.

Year	Actual
2013	384

Output #9

Output Measure

- Number of CHAMPION adult nutrition, health and physical activity classes conducted

Year	Actual
2013	60

Output #10

Output Measure

- CHAMPION: Number of adult partnerships initiated or strengthened

Year	Actual
2013	15

Output #11

Output Measure

- SNAP-Ed: 24 nutrition educators conducted 13,520 nutrition classes 40,633 adult SNAP-Ed participants.

Year	Actual
2013	40633

Output #12

Output Measure

- SNAP-Ed: 12 nutrition educators conducted 3,300 nutrition classes with 326 different groups and 40 one- time classes to 5,932 participants throughout the state; provided 194 food demonstrations; program marketing and recruitment through 30 health fairs; also, did PSA on radio and TV.

Year	Actual
2013	5932

Output #13

Output Measure

- Urban SNAP-Ed provides a series of ten nutrition education classes, in group and individual settings, to limited resource adults. This audience is recruited and enrolled in places where they live, work, frequency receive services.

Year	Actual
2013	1320

Output #14

Output Measure

- Urban SNAP-Ed number of participants

Year	Actual
2013	1556

Output #15

Output Measure

- Urban SNAP-Ed In-service Trainings, health fairs, updated Snap-Ed website and resource materials

Year	Actual
2013	37

Output #16

Output Measure

- Delivery sites for adults: Elderly Centers, WIC, DHR, Library, Public Housing

Year	Actual
2013	52

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	This program area will include numerous output activities and methods which are described/explained in the logic model. The success of many of these outcomes will be formal evaluations/measured by using individual activity evaluation forms designed specifically for each activit. The success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities for this program area that will be formally evaluated using the evaluation instrument designed specifically for that activity
2	CHAMPION Pre and Post Tests and Weight Management Observation
3	Increase Dietary Quality and Physical Activity- EFNEP
4	EFNEP: Entry and Exit Healthy Behaviors
5	UEFNEP Hispanic adult showed improvement in resource management and physical activity indicated by WebNEERS
6	Eat Healthy Be Active: Post Workshop Survey
7	SNAP-Ed

Outcome #1

1. Outcome Measures

This program area will include numerous output activities and methods which are described/explained in the logic model. The success of many of these outcomes will be formal evaluations/measured by using individual activity evaluation forms designed specifically for each activity. The success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities for this program area that will be formally evaluated using the evaluation instrument designed specifically for that activity

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

CHAMPION Pre and Post Tests and Weight Management Observation

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	384

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabamians' obesity rate is significantly high in adults (33%) and youth 2-17 years old (28%). This rate has an effect on the increased incidents of obesity-related diseases (Diabetes-14.1%, Hypertension-40.0%, High Cholesterol-34.1 %, Coronary Heart Disease-7.4%). Contributing key factors are unhealthy eating habits- consume under the recommended servings of fruits and vegetables combined (adults-52% and youth-165%) and physical inactivity (adults-31% and youth-22.4%).

What has been done

A series of six educational and instructional nutrition, chronic diseases and physical activity classes were conducted by nine Urban Regional Extension Agents. Participants were administered nutrition, chronic diseases and physical activity pre/posttests to assess knowledge and pre/post nutrition, health and physical activity questionnaire to assess changes in behavioral

habits. Participants were weighed pre/post program

Results

A paired-samples t-test revealed that CHAMPION adult and elderly participants? (N=384) scored significantly higher (p<#8804;0.05) on the posttest (M=80.41) than the pretest (M= 59.77), t= - 5.301. Majority of adult participants had health problems (76%) such as high blood pressure (49%), high cholesterol (23%), and diabetes (20%); increased fruits and vegetables consumption from sometimes (41%) to most of the time (48%) and physical activity from 5-20 minutes (45%) to 30 minutes (47%) / 3-5 days per week. Weight lost among 34 participants was 83 pounds.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

Increase Dietary Quality and Physical Activity- EFNEP

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2632

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and poor nutrition are significant health concerns linked to several serious health conditions and diseases.

What has been done

Through six weeks of nutrition education, EFNEP reduces the risk of chronic diseases of Alabama's most vulnerable populations by promoting healthy eating and physical activity to individuals most disproportionately affected. Goals accomplished through education, food demonstrations, and hands-on activities.

Results

Of the 2,632 adults, 99% of EFNEP adult participants showed a positive change in any one food group upon exiting the program. Increasing fruits, vegetables, whole grains, protein foods, and dairy while decreasing oils, solid fats, and sugars help to guard off chronic diseases and encourage healthy food choices. Moreover, 30% of EFNEP adult participants showed an increase in physical activity.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
903	Communication, Education, and Information Delivery

Outcome #4

1. Outcome Measures

EFNEP: Entry and Exit Healthy Behaviors

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	2632

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity, poor nutrition, and limited physical activity are significant health concerns linked to several serious health conditions and diseases. Poor health disproportionately affects limited-resource populations

What has been done

Through a series of nutrition classes, 37 EFNEP educators taught 2,632 adult participants from Alabama's most vulnerable populations. EFNEP reduces the risk of chronic diseases by promoting healthy eating and physical activity to individuals most disproportionately affected. Educating heads of households who make food purchases and prepare meals improve the health of families.

Results

As a result of participating in the EFNEP program, eighty-four percent (84%) of EFNEP adult participants showed improvement in one or more nutrition behaviors such as planning meals (53%), making healthy food choices (44%), preparing foods without adding salt (43%), reading nutrition labels (58%), and feeding children breakfast (37%). Positive changes in these behaviors may improve participants' health and quality of life.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
903	Communication, Education, and Information Delivery

Outcome #5

1. Outcome Measures

UEFNEP Hispanic adult showed improvement in resource management and physical activity indicated by WebNEERS

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	172

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Limited resource populations have a tendency spend their food dollars on poor quality food such as chips, cookies, and candy.

What has been done

UEFNEP provides a series of eight nutrition education classes, in group and individual settings, to limited-resource Hispanic adults. This audience is recruited and enrolled in places where live, work, frequently receive services. Typical places include trail parks, local housing authorities, county health departments, Departments of Human Resources county offices, HeadStart, family resource centers, schools, and community action agencies.

Results

Responses on the adult assessments (n= 172) 60%-94% showed improvement in how often they used wise money management and shopping techniques; 29% of the participants showed improvement in all 4 food resource management practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
903	Communication, Education, and Information Delivery

Outcome #6

1. Outcome Measures

Eat Healthy Be Active: Post Workshop Survey

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	5557

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

According to America's Health Rankings, Alabama's overall ranking has improved from 48th in 2011 to 45th in 2012 (Alabama has the fifth highest rate of adult obesity in the nation (33%) and the sixth highest rate of overweight youths (ages 10-17 at 36%). Overall, two-thirds of Alabama's adults are either overweight or obese. If obesity rates continue on their current trajectory, by 2030, 13 states, one of which is Alabama, could have adult obesity rates above 60% (Alabama 62.6%) and all 50 states could have rates above 44%. America's Health Ranking lists Alabama's health challenges as; diet-related chronic diseases (obesity, diabetes, heart disease, stroke, and cancer).

What has been done

The workshops were offered in all 67 counties, but were successfully implemented in 47 counties by 8 Regional Extension Agents.

Results

All of the participants "agreed" that they planned to: Change their eating habits, Become more

active, Order healthier foods at a restaurant, Plan out their meals for the week, and Keep track of what they ate for 3 days. Participants gained knowledge on having eating healthier and ways to incorporate more physical activity into their daily lifestyle. Information reported by the participants as the most helpful for: Workshop 1: "How to reduce sodium using herbs and spices. Workshop 2: "Healthy tips for eating at a restaurant." Workshop 3; Budgeting by using coupons/loyalty cards/sales flyer.? Workshop 4; "Keeping track of intake" Workshop 5; "Nutrition Facts Label" Workshop 6; "Exercise and Stretches"

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #7

1. Outcome Measures

SNAP-Ed

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	40633

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Alabama population shows great disparity in terms of obesity rates, obesity-related disease rates, low fruit and vegetable intakes and minimal physical activity levels. The SNAP population is disproportionately affected by these health issues.

What has been done

Twenty-four Extension SNAP-Ed educators provide direct nutrition education in 47 rural Alabama counties to SNAP-Ed eligible recipients. This education is provided in county food assistance offices, emergency food banks and subsidized housing.

Results

Eighty-six percent of adults reported using food resource management skills to extend the food

dollar for their families.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other (Limited facilities available for classes in certain areas and limited funds)

Brief Explanation

Families United through Nutrition (FUN):
External Factors: Limited facilities to accommodate classes, lack of family interest, work schedules, transportation and lack of incentives.

External Factors

Urban EFNEP Program Limitations:

- Hispanic migration to other states
- Alabama's Immigration Law (NEW)
- Hispanic access- transportation
- Hispanic culture and trust issues
- Adequate funds to support future outreach

V(I). Planned Program (Evaluation Studies)

Evaluation Results

- Ninety-nine percent (99%) of EFNEP adult participants showed a positive consumption change in any one food group upon exiting the program.

- Thirty percent (30%) of EFNEP adult participants showed a positive change in physical activity.

- Eighty-four percent (84%) of EFNEP adult participants showed improvement in one or more nutrition behaviors such as planning meals, making healthy food choices, preparing foods without adding salt, reading nutrition labels, and feeding children breakfast.

Nutrition Practices of participants improved as indicated by the following:

- 53%(1386 of 2632) more often planned meals in advance.
- 44% (1149 of 2626) more often thought about healthy food choices when deciding what to feed their families.

- 43% (1133 of 2625) more often prepared foods without adding salt.
- 58% (1526 of 2624) more often used the "Nutrition Facts" on food labels to make food choices.
- 37% (951 of 2566) reported their children at breakfast more often.

Key Items of Evaluation

N/A

V(A). Planned Program (Summary)

Program # 12

1. Name of the Planned Program

Workforce 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
608	Community Resource Planning and Development	55%	90%		
806	Youth Development	10%	10%		
903	Communication, Education, and Information Delivery	35%	0%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	4.6	1.7	0.0	0.0
Actual Paid Professional	22.7	2.1	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
132624	125872	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
394540	125872	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1730209	171759	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Education & Training

- Administered \$1.2 million Sustainable Broadband Adoption grant. "Connecting Alabama: Boosting Broadband to Bridge the Digital Divide "was a training project to help Alabamians understand the benefits of broadband technology and to promote engagement about the digital economy. Project resulted in: a) 10 training modules developed: Introduction to the Internet and Broadband 101, eHome, eCommunity, eCommerce, eGovernment, eLearning, eGlobal, eHealth, eWorkforce, and ePublic Safety; b) Over 500 county-level training sessions conducted; c) Over 7000 participants; d) 15 AU based extension staff participated along with 64 County Extension Coordinators; and e) 4085 professionally-printed trainer guides distributed
- 4-H conducted the new 4-H Innovators program that focused on engaging Alabama youth in "hands-on, minds-on" inquiry based learning. 40 activities were carried out. Each participant received 3 to 10 hours of instruction
- Health Rocks! is a curriculum-based life skills development program for youth ages 8 to 12. Program prepares young people to be a productive member of the workforce. 28 Health Rocks activities were carried out. Each activity required 6 to 8 hours of contact
- Urban Regional Agents (UREAs) working with local partners conducted 18 Career Countdown programs in 8 counties across the state of Alabama. The program: (a) simulates economic deterioration; (b) educates on the causes of economic deterioration, (c) provides direction and training on career planning, and (d) provides direction and training on education planning. A total of 1450 youth participated in the program.

Community Engagement

- Conducted Community Broadband Forums in 49 Alabama counties with 832 Alabama residents and stakeholders discussing opportunities related to high-speed Internet adoption; a statewide Alabama Broadband Summit and Roundtable was also conducted
- County Extension Coordinators reported multiple county-level meetings, attracting 847 stakeholders. When the largest employer in the region closed operations, 5 county Extension Coordinators participated with other regional stakeholders in planning and training events to respond to the crisis
- Developed and managed the "Stronger Economies Together (SET)" planning project for a five-county region of the Alabama Black Belt; facilitated two county-level economic development strategic plans
- Alabama Community Leadership Conference featured a Community Café where 200 individuals participated in roundtable discussions on issues related to community leadership development
- 51 participants in Alabama Intensive Economic Development Training Course engaged in roundtable discussions about issues related to Alabama economic development
- Each quarter, Impact Alabama brought together a class of 16 of Alabama's top economic development executives for two-day issue-oriented forums
- County Extension Coordinators (CECs) conducted Small Business Roundtables in many counties throughout Alabama

2. Brief description of the target audience

The primary target audiences are current and future community leaders, decision makers, and local and state governmental officials and youth in communities across the state.

3. How was eXtension used?

4-H Innovators, a work survey STEM initiative, is based on the eXtension website. Internal and external clientele use this site to obtain program materials.

V(E). Planned Program (Outputs)

1. Standard output measures

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

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	11	0	11

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Broadband modules created, broadband workshops conducted, and broadband community forums conducted.

Year	Actual
2013	569

Output #2

Output Measure

- 2. Alabama 4-H and youth development day camps, after-school programs, in-school enrichment groups conducted and partnerships created with other youth serving organizations.

Year	Actual
2013	7269

Output #3

Output Measure

- 3. Employment simulations, career awareness, skills assessment, and career planning conducted throughout urban and rural Alabama.

Year	Actual
2013	18

Output #4

Output Measure

- The number of Career Countdown program simulation and career exploration workshops

Year	Actual
2013	18

Output #5

Output Measure

- The number of pre/post surveys completed by Career Countdown participants

Year	Actual
2013	1200

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	<p>Short-Term Outcomes Increased awareness among citizens and stakeholders of the social and economic benefits and practical applications of broadband technology. Increased awareness of available workforce development resources. Increased awareness among young people about the negative impacts of early exit from high school, the rewards available through technical careers, and entrepreneurship opportunities. Increased Extension capacity for meeting facilitation, public deliberation, and strategic planning. Medium-Term Outcomes Increased knowledge, skills, usage, adoption, and application of broadband technologies by local residents. Changed youth behavior related to staying in high school and taking advantage of technical career and entrepreneurship opportunities. Increased capacity of county citizens and stakeholders to deliberate, plan, and act - ensuring that local resources are fully utilized and that stakeholder groups are informed, engaged, and working together to improve education and workforce preparation. Long-Term Outcomes Workforce knowledge and skills are elevated; increased number of entrepreneurs; increased utilization of broadband to support individual and community economic prosperity. Reduced high school dropout rates; increased number of students in technical career and dual enrollment programs, and increased number of youth entrepreneurship programs in high schools throughout the state. Stakeholder groups are informed, engaged, and working together to improve education and workforce development in each county; Extension participates as valuable stakeholders for issues related to workforce and entrepreneurship. A culture of engagement characterizes each county in Alabama.</p>
2	<p>Youth will: 1. Learn how to take control of and make healthy choices. 2. Make decisions based on accurate information 3. Learn importance of youth/adult partnerships 4. Understand consequences of risk behavior 5. Make a difference 6. Do the right thing</p>
3	<p>Participants will: 1. Complete a career plan. 2. Complete a skills assessment. 3. Complete an education plan.</p>

Outcome #1

1. Outcome Measures

Short-Term Outcomes Increased awareness among citizens and stakeholders of the social and economic benefits and practical applications of broadband technology. Increased awareness of available workforce development resources. Increased awareness among young people about the negative impacts of early exit from high school, the rewards available through technical careers, and entrepreneurship opportunities. Increased Extension capacity for meeting facilitation, public deliberation, and strategic planning. Medium-Term Outcomes Increased knowledge, skills, usage, adoption, and application of broadband technologies by local residents. Changed youth behavior related to staying in high school and taking advantage of technical career and entrepreneurship opportunities. Increased capacity of county citizens and stakeholders to deliberate, plan, and act - ensuring that local resources are fully utilized and that stakeholder groups are informed, engaged, and working together to improve education and workforce preparation. Long-Term Outcomes Workforce knowledge and skills are elevated; increased number of entrepreneurs; increased utilization of broadband to support individual and community economic prosperity. Reduced high school dropout rates; increased number of students in technical career and dual enrollment programs, and increased number of youth entrepreneurship programs in high schools throughout the state. Stakeholder groups are informed, engaged, and working together to improve education and workforce development in each county; Extension participates as valuable stakeholders for issues related to workforce and entrepreneurship. A culture of engagement characterizes each county in Alabama.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabama business leaders identify workforce development as the state's number one economic development issue. As technological advances and global competition increase the pace of change for today's businesses, a knowledgeable, skilled, and adaptable workforce has never been a more valuable asset, or a greater necessity for economic survival. A particular focus is to provide training in the use of broadband communication technologies, both to bolster needed workforce capacity and to support entrepreneurial enterprises, as well as to create new community connections to foster a shared vision for workforce and economic development. Maintaining skills in the use of communications technology is a requisite for most New Economy jobs. There is a deficit in these skills within many rural communities.

What has been done

Over 500 county-level broadband education training sessions conducted involving over 7000 participants. 15 AU based extension staff participated along with 64 County Extension Coordinators and 4085 trainer guides distributed. Conducted "Connected Community Forums" in 49 Alabama counties that 832 Alabama residents attended. 83 adults participated in the Alabama Broadband Summit and Roundtable. 16 of Alabama's top economic development executives participated in quarterly two-day issue-oriented forums, addressing important issues facing Alabama in the field of economic development. Developed "Stronger Economies Together (SET)" project aimed at regional economic development strategic planning assistance for a five-county region of the Alabama Black Belt.

Results

Increased capacity of citizens to make informed decisions about the use of broadband. As a result of the broadband adoption project, 1,275 participants indicated that they intended to subscribe to broadband at home and 172 indicated that they would subscribe to broadband at work. Other participants applied for additional grants and received equipment that allowed them to offer additional one-on-one training to rural residents. Increased capacity of Alabama's community development stakeholders to share ideas and develop collaborative strategies, resulting in increased community prosperity and quality of place. Increased citizen engagement in community leadership, planning and development activities, contributing to improved quality of life and economic prosperity. Communities and organizations better aligned to achieve goals. Residents and leaders at all levels who recognize the value of citizen engagement as an important determinant of economic development, resulting in improved community decision making and outcomes. Increased level of consensus and collaboration among Alabama's leading economic developers in successfully addressing the state's economic development challenges.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development
903	Communication, Education, and Information Delivery

Outcome #2

1. Outcome Measures

Youth will: 1. Learn how to take control of and make healthy choices. 2. Make decisions based on accurate information 3. Learn importance of youth/adult partnerships 4. Understand consequences of risk behavior 5. Make a difference 6. Do the right thing

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1885

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

For our nation to be economically robust and globally competitive, our young people have to be an educated, creative and powerful workforce. It's not just important to our nation, it is directly important to our families and communities, and especially to the young people themselves. We can't foretell the future, the challenges and opportunities that are awaiting our young people. However, that is the future for which we must help them prepare. Today's work environment requires that workers receive continuous training and embrace lifelong learning at an early age to survive. The best preparation for many is the development of a good work ethic, a value for lifelong learning, and transferable skills like flexibility, teamwork, timeliness, self-reliance, communication, and the avoidance of unhealthy lifestyle choices.

What has been done

40 4-H Innovators program activities were conducted that focused on engaging Alabama youth in hands-on, minds-on inquiry based learning. 111 individual contact reports were submitted by 25 REAS, 4 State Specialists, and 1 County Extension Agent. 5503 youth and 113 adults participated with each participant receiving 3 to 10 hours of instruction. 28 Health Rocks activities were carried out in 25 counties. This is a curriculum-based life skills development program designed to help youth learn skills such as decision-making, critical thinking, and stress management. The program also prepares young people to make healthy lifestyle choices which ultimately impact their potential to secure a place in the workforce and stay a productive member of the workforce. 1,653 youth and 128 adults participated and each activity required 6 to 8 hours of contact.

Results

4-HInnovators: From the Pre-Test to the Post-Test, there was a 3% increase in youth participants who reported that Math "is fun." From the Pre-Test to the Post-Test, there was a positive change of 4% in the number of youth who indicated that those individuals who take science and math classes will have higher paying jobs. More than 73% of youth participating in this program indicated that jobs or careers in Science, Technology, Engineering, or Mathematics are "Fun", while 65% said that those same jobs or careers are "Challenging."

Health Rocks: More than 87% of program participants indicated that they did not believe that trying tobacco, alcohol, and drugs was worth the risk to their health and future. 85% of the program participants reported that managing stress in a positive manner is important and beneficial. More than 90% of participants felt strongly that it was important for them to help a friend stop using drugs. At the end of the program, 89.7% of participants felt more confident that they would be better able to successfully resist or refuse drugs if offered by peers, family members, or others.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
903	Communication, Education, and Information Delivery

Outcome #3

1. Outcome Measures

Participants will: 1. Complete a career plan. 2. Complete a skills assessment. 3. Complete an education plan.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

For our nation to be economically robust and globally competitive, young people have to be an educated, creative and powerful workforce. It's not just important to our nation, it is important to families and communities, and to the young people personally. Although we can't foretell the future and the challenges youth will face, we can prepare them to successfully face the future equipped with skills and abilities. Today's work environment requires that workers receive continuous training and embrace lifelong learning at an early age and continue the process throughout life.

What has been done

A total of 1450 youth participated in 18 Career countdown programs across the state.

Results

1200 pre/post surveys were received from the 1450 youth participants. Delayed survey responses indicated that there was a change in behavior following the programs. The average study time for the 1200 program participants completing the surveys increased from 1.9 hours per week to 3.3 hours per week. Prior to the program 21% of participants reported that they had an education plan, however after the program 82% reported they had developed an education plan. Prior to the

program 18% reported that they had a career plan, responses after the program indicated 76% had a career plan and understood what was needed to successfully reach their career goal.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
903	Communication, Education, and Information Delivery

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations
- Other (Attitudes of collaboration, student issues, competition for physical space)

Brief Explanation

The "Connecting Alabama: Boosting Broadband to Bridge the Digital Divide" project was funded through the Alabama Department of Economic & Community Affairs and they had several internal policy and personal changes, which slowed the project.

Stakeholder connection outcomes were influenced by the willingness of external groups to develop partnerships and collaborative strategies.

Competition for classroom time, appropriate classroom conditions to engage youth in inquiry, the cost of providing the materials for inquiry, and the time and effort to create environments where true inquiry experiences can happen were external factors which affected 4-HInnovators outcomes.

Health Rocks outcomes were affected by fire drills, students late to class, classroom interruptions, sick youth that did not complete all sessions.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Increased capacity of citizens to make informed decisions about the use of broadband. As a result of the broadband adoption project, 1,275 participants indicated that they intended to subscribe to broadband at home and 172 indicated that they would subscribe to broadband at work. Other participants applied for additional grants and received equipment that allowed them to offer additional one-on-one training to rural residents.

Following the completion of the Career Countdown program students were contacted to see what changes they had made as a result of having participated in the program. Of the 1200 responding to the post delayed surveys, 52% reported that they had explored new careers, 20% were now studying for the ACT to get into college, 51% indicated they were

taking school more serious and studying more, 57% of the students had improved their grades, and 8% applied to post-secondary education institutions.

80% of the fastest growing occupations depend upon mathematics and scientific knowledge and skills. Alabama 4-H is committed to meet this need by providing opportunities for youth to develop the belief and security that they can do math and science through fast paced, engaging, hands on experiences in math, science, engineering and technology. From the Pre-Test to the Post-Test for the 4-HInnovators program, there was a 3% increase in youth participants who reported that Math "is fun." From the Pre-Test to the Post-Test, there was a positive change of 4% in the number of youth who indicated that those individuals who take science and math classes will have higher paying jobs. More than 73% of youth participating in this program indicated that jobs or careers in Science, Technology, Engineering, or Mathematics are "Fun", while 65% said that those same jobs or careers are "Challenging."

Youth that have an increased level of self-sufficiency and self-determination are less likely to engage in risk behaviors that have the potential to create barriers to educational, family, community and workforce success. More than 87% of Health Rocks program participants indicated that they did not believe that trying tobacco, alcohol, and drugs was worth the risk to their health and future. 85% of the program participants reported that managing stress in a positive manner is important and beneficial. More than 90% of participants felt strongly that it was important for them to help a friend stop using drugs. At the end of the program, 89.7% of participants felt more confident that they would be better able to successfully resist or refuse drugs if offered by peers, family members, or others.

Key Items of Evaluation

Of the 1200 youth responding to Career Countdown post delayed surveys, 52% reported that they had explored careers for the future, 20% were now studying for the ACT to get into college, 51% indicated they were taking school more serious and studying more, 57% of the students improved their grades, and 8% applied to post-secondary education institutions.