

# 2013 Alabama A&M University and Auburn University Combined Extension Plan of Work

Status: Accepted

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## I. Plan Overview

### 1. Brief Summary about Plan Of Work

The Alabama Cooperative Extension System has initiated major revisions to the program planning and reporting process. The revisions entailed a critical review of current program planning and development protocols, an in-depth analysis of stakeholder inputs, and were culminated by an intense two day plan of work development session involving Associate Directors, Assistant Directors, Extension program coordinators and evaluation personnel. The revisions have transitioned the prior Priority Program Area / Extension Team Project format to an expanded design that adds highly focused Strategic Program Initiatives and Specially Funded Programs to the planning and reporting menu. These changes allow the Alabama Cooperative Extension System to more clearly codify program focus areas. As such, this process enables the System to strategically focus human and fiscal resources on critical issues of both state and national importance and will enhance System capacity to provide measurable program outcomes and impacts for all program areas. A significant aspect of this new process is the flexibility ability to identify and address strategic program initiatives while continuing with important ongoing programs. Central to the new format is the generation of a revised / consolidated list of planned programs for Fiscal Year 2013 and beyond. The revised list offers a more concise and better focused set of Program Priorities for the Alabama Cooperative Extension System.

#### **THE ALABAMA COOPERATIVE EXTENSION SYSTEM FY 2013-2017 NIFA PLAN OF WORK ALABAMA A&M UNIVERSITY AUBURN UNIVERSITY**

#### **OVERVIEW STATEMENT**

Alabama A&M University and Auburn University provide Extension educational outreach as a unified Alabama Cooperative Extension System. The Alabama A&M University (AAMU)-funded portion of the System focuses its resources on serving urban and nontraditional clientele; the Auburn University (AU)-funded portion of the System focuses its resources on serving rural and traditional clientele. However, given that the boundaries between rural and urban, and between nontraditional and traditional, are often vague, the Alabama Cooperative Extension System employs a highly collaborative program development and delivery process that allows for the integrative and collaborative application of the resources from both Alabama A&M and Auburn Universities to serve and meet the needs of all Alabamians.

Alabama is unique in that three institutions are host to Cooperative Extension entities within the state. The Alabama Cooperative Extension System and the Tuskegee University 1890 Cooperative Extension Program share a positive and productive administrative and programmatic relationship. Utilization of joint resource allocation (Extension and Research) is evident in, for example, small ruminant programming, a New Farmer Initiative, and in-service training, with careful scrutiny designed to prevent duplication of effort. It is anticipated that greater dialogue between the Alabama Cooperative Extension System and the Tuskegee Cooperative Extension Program during the FY2013-2017 program cycle will witness even more jointly planned, initiated, and evaluated programs for the benefit of all Alabama residents.

To address the continued negative effects of various internal and external factors, most notably the loss of revenue due to proration, and yet continue the tradition of the provision of educational programs of

excellence to Alabama residents a major restructuring was necessitated. Fundamental to this restructuring effort was a shift from a 'county based' programming focus to a 'regional' orientation--that is, a transition from single-county based agents to teams of Extension educators serving multi-county regions. However, with fewer employees working across larger multi-county geographic regions, the methodology for the provision of educational services to the public has, of necessity, also been modified. The primary emphasis is now on regional educational programs and group activities that allow the System to provide educational services to a maximum number of residents within the constraints of limited human and fiscal resources. Further, the expanded use of technology for training and educational outreach is becoming central to meeting the needs of clients.

### **SYSTEM PROGRAMS: PLANNING FOR OUTCOMES AND IMPACTS**

Alabama Cooperative Extension System educational efforts are aligned along six umbrella areas of emphasis (base programs). These programs are: Agriculture, Forestry and Natural Resources, Urban Affairs and New Nontraditional Programs, Family and Individual Well Being, Community and Economic Development, and 4H and Youth Development. A brief overview of each area of emphasis follows below.

Agriculture: Today there are roughly 45,000 farms in Alabama. Extension helps Alabama's farmers create and maintain healthy, profitable, and environmentally sustainable operations. Regional Research and Extension Centers in the Tennessee Valley, the Black Belt, the Wiregrass, the Gulf Coast, Sand Mountain, and Chilton areas address the specific needs of each region. Home gardening and urban horticulture are also major Extension priorities.

Forestry and Natural Resources: Alabama is rich in natural resources. Almost two-thirds of the state is covered in forests, and Alabama water resources are the envy of the nation. Forestry, fisheries, and wildlife bring billions of dollars into the state's economy and greatly enhance quality of life. Extension is committed to helping people safeguard and develop these resources for recreational, environmental and business enterprises.

Urban Affairs and New Nontraditional Programs: Two-thirds of Alabamians live in urban areas, and the Extension mission of taking the university to the people includes urban as well as rural citizens. Programs include but are not limited to; nutrition, health and wellness, environmental education, small ruminants, urban community and minority economic development, resource management, youth development, and nontraditional agriculture. Eight Urban Extension Centers and two satellite offices help bring Extension education to the state's city dwellers.

Family and Individual Well-Being: One of Extension's key roles is helping families and individuals improve their quality of life through food safety, proper nutrition, parenting, family financial management, and community health. Flagship programs include the Expanded Food and Nutrition Education Program (EFNEP), begun in Alabama more than 30 years ago and since adopted by all other states, and the federally mandated Nutrition Education Program (NEP), which focuses on educating food stamp recipients.

Community and Economic Development: Extension plays a leading role in revitalizing Alabama communities, especially where declining farm populations have resulted in such problems as dwindling revenue bases and youth flight. Extension programs focus on economic and leadership development, environmental quality and community health, and public policy and strategic planning.

4-H and Youth Development: Alabama's 4-H program offers young people opportunities to develop their interests and expand their awareness of our world. Extension educators, volunteers, and the young people themselves work together to provide a wide range of hands-on, minds-on experiences that develop each individual's four H's--head, heart, hands, and health.

### **PROGRAM CATEGORIES**

The newly refined ACES Planning and Reporting System includes four distinct programming entities: Strategic Program Initiatives, Extension Team Projects, Specially Funded Projects, and Priority Program Areas.

**Strategic Program Initiatives (SPI)** represent the System's immediate and time defined 'issue-based' priorities identified through a grass-tops and grassroots needs assessment process. Logic models

have been developed for six Strategic Program Initiatives that provide guidance in terms of cross-cutting objectives, outputs, outcomes, and evaluation plans to measure outcomes. Programs may originate at the Team, region, or county levels. Strategic Program Initiatives will serve as a part of the System's priorities for preparing state, federal, and other stakeholder reports.

**Extension Team Projects** are highly focused educational endeavors of great significance to targeted Alabama populations. Extension Team Projects include clearly articulated educational activities designed to achieve predetermined measurable outcomes and impacts. Extension Team Projects are not ongoing but have a specified lifespan and may be statewide or geographically targeted. The evolution of an Extension Team Project is founded in one or more of the Priority Program Area Teams and/or Specially Funded Projects.

**Specially Funded Projects** generally have their roots in clearly identified and related program priorities associated with a Strategic Program Initiative, Extension Team Project or Priority Program Area (ongoing program / local initiative). Specially Funded Projects are primarily supported by extramural resources and generally have funding source specific development, implementation, evaluation and reporting requirements. These projects are integrated into the overall Plan of Work for planning and reporting purposes.

**Base Programs Areas** (Ongoing Programs--County Program Initiatives) are the familiar, long term, subject matter based areas of emphasis for the Alabama Cooperative Extension System. Base Programs encompass both ongoing subject matter based program efforts and the wealth of ACES programming designed to address local, regional, and state issues of immediate concern. County Program Initiatives represent programs unique to a specific county. All ACES program efforts that are not classed as Strategic Program Initiatives, Extension Team Projects, or Specially Funded Projects are included under the Base Program heading.

**NIFA PRIORITIES AND SYSTEM PLANNED PROGRAMS**

The Alabama Cooperative Extension System is fully cognizant of the necessity to address the NIFA Priorities. Additional modifications, designed to more comprehensively address the NIFA Priorities are evident in the FY2013-2017 Plan of Work. For the FY2013-2017 Plan of Work the Alabama Cooperative Extension System has identified the following Planned Programs:

1. Childhood Obesity (Health and Wellness Across the Lifespan)
2. Workforce Development
3. Food Safety (Safe and Secure Food Supply)
4. Financial Literacy Across the Lifespan
5. Global Food Security and Hunger (Sustainable Agricultural and Forestry Systems)
6. Environmental Stewardship
7. Agriculture, Forestry and Related Industries
8. Family, Home and Youth Development
9. Human Nutrition, Diet and Health
10. Sustainable Energy
11. Economic and Community Development
12. Climate Change

As required, the above Planned Programs for the Alabama Cooperative Extension System FY 2013-2017 Plan of Work fully account for the expenditure of all Federal Formula Funds and the required matching funds. Full details of each Planned Programs are provided in the respective Planned Program sections of the NIFA Plan of Work software.

**Estimated Number of Professional FTEs/SYs total in the State.**

Year	Extension		Research	
		1862	1890	1862

**Estimated Number of Professional FTEs/SYs total in the State.**

Year	Extension		Research	
	1862	1890	1862	1890
2013	228.4	32.4	0.0	0.0
2014	228.4	32.4	0.0	0.0
2015	228.4	32.4	0.0	0.0
2016	228.4	32.4	0.0	0.0
2017	228.4	32.4	0.0	0.0

**II. Merit Review Process**

**1. The Merit Review Process that will be Employed during the 5-Year POW Cycle**

- Combined External and Internal University External Non-University Panel

**2. Brief Explanation**

The Merit Review Process received minor modification and is essentially unchanged for Fiscal Year 2013.

**PROGRAM REVIEW PROCESS**

The review process for the Alabama Cooperative Extension System's FY2013-2017 Plan of Work includes several phases, which will continue yearly for the duration of the Plan. The first phase of review is conducted by the Co-Chairs of the Priority Program Areas (PPA) with input from their team members. Each of PPA Co-Chairs reviewed their respective programs to ensure that they accurately represented and addressed critical needs of Alabama residents.

A second phase of review was conducted by the Assistant Directors. The Assistant Directors checked each program area for: relevancy, ability of Extension to adequately address the issues, potential for / inclusion of Multistate Extension Activities / Integrated Research and Extension Activities, and the inclusion of measurable impact / outcome indicators.

The third phase of Plan of Work review was conducted by the System Administrative Team. That team (Director / 1890 Administrator/ Associate Directors, Chief Financial Officer, Human Resources Officer) reviewed the Plan relative to:

- 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.

As the fourth phase of the review process, relevant University administrators (Alabama

A&M University / Auburn University) were afforded the opportunity to review and comment on the FY2013-2017 Plan of Work. Deans, Department Heads, and others were critical to the review process given that many of the System specialists are housed in the Academic Departments.

The final phase of review centers on scrutiny of the Plan of Work by the various state-wide Priority Program Area Advisory Councils. These Advisory Councils assist each Priority Program Area in the identification of critical issues and in setting specific System programming priorities. Specific roles for the Priority Program Area Advisory Councils include: 1) insure that the included programs address real needs of Alabama citizens; 2) promote the 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. Evaluation of Multis & Joint Activities**

#### **1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?**

The educational programs conducted by the Alabama Cooperative Extension System were not created in a vacuum. Traditionally the Alabama Cooperative Extension System has had a very comprehensive stakeholder input process. The foundation of this process has been the statewide network of sixty-seven County Extension Advisory Boards (CEABs) and the hundreds of county and state-level program advisory committees. Alabama seeks to address the following: Who will be involved? How will they be structured? What are the requirements? When will we begin? How will we report input? Extension Coordinators will lead County Extension Advisory Leader Councils which will focus on Advocacy for Extension, Volunteerism, and Community Development. Regional Extension Agents will lead Regional Extension Advisory Leader Councils which will have a programmatic focus. The Priority Program Area Team Coordinators will be responsible for getting grassroots program-related input through statewide Extension Advisory Leader Councils, commodity groups, listening sessions with stakeholders and the general public, and from reports generated by Regional Extension Agents and County Agent Coordinators. Specialists, Priority Program Area Team Coordinators, and Administrators will provide relevant information to councils, analyze input and adjust priorities / programs accordingly.

However, due to the changing environment in which the Alabama Cooperative Extension System now conducts its business and the related System restructuring and associated loss of human capital resources and static or decreasing fiscal resources it was deemed prudent that we seek to modify our advisory system to better fit our new way of doing business. The Southern Region developed SEAL-- Strengthening Extension Advisory Leaders--training has been conducted for System administrators, specialists and agents. SEAL is designed to provide curriculum to not only train Extension staff in how to better utilize their leaders, it also provides curriculum to help these leaders learn how to more effectively serve in their respective roles.

The revised process will see a three tier advisory structure. The county level will be led by County Agent Coordinators; the regional advisory groups will be led by Regional Extension Agents and the statewide advisory groups will be led by Priority Program Team Coordinators.

County and Regional Extension Advisory Leader Councils will have ten to fifteen members from different parts of the county/region, be representative of the different socio-economic levels within the community, encompass the ethnic diversity of the area, and members will rotate off every 3 years.

In addition, the Alabama Cooperative Extension System has modified the Stakeholder input section of this template and will require that each specialist / agent complete the form each year to more precisely define their relationship with stakeholders and how such input affects the nature and composition of their programs.

## **2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?**

All planned programs contained in the Alabama Cooperative Extension System's FY2013-2017 Plan of Work are developed within the context of educational service delivery to all residents of Alabama who may benefit from the information or service. This commitment is without regard to any personal characteristics, to include age, ethnic origin, gender, religion, sexual orientation, or geographic location. Alabama populations are included, as appropriate, in the program development process. As a part of the program development process, each program that was identified and developed for grass roots program delivery, details the intended audience(s) to be served. As a part of the review process, before approval of a given program, project or activity, the respective Assistant Directors are charged with ensuring that the intended audience(s) for each Project includes the spectrum of potential recipients of the Alabama population. For example, in recognition of the rapidly increasing Hispanic populations in Alabama, many of the System publications are now available in Spanish while other programs specifically target the Spanish speaking residents. Other System programs target 'at risk' youth, low income urban residents, small and minority farm producers, and the elderly.

Given the above (also reference the stakeholder input sections of this Plan of Work) it should be noted that the perspective of all segments of the Alabama population are considered. The System, does however, have programs, or program components, designed to target specific audiences, to include under-served and under-represented segments of the Alabama population.

## **3. How will the planned programs describe the expected outcomes and impacts?**

The real impacts and outcomes of System programming are derived from the performance of the System's program menu offerings. The Alabama Cooperative Extension System utilizes Strategic Program Initiatives, Extension Team Projects, Specially Funded Programs and Priority Program Areas as the primary program implementation tools for the System. All such programs are Logic Model based and include clearly defined expectations regarding program outcomes and impacts. The necessity for, and inclusion of, outcome and impact statements for every funded Extension program offering is paramount in the System's program planning and development process and as such, all Alabama Cooperative Extension System programs are inherently capable of producing quantifiable measures of System educational productivity.

Similar emphasis is placed on many 'specially funded' System programs, many of which come with their unique measurement tools. These programs include special CSREES funded programs such as NEP, EFNEP, IPM, and RREA as well as programs funded partially or in whole by grants, contracts, or other extramural sources of funds.

The ability to answer the question 'So What?' is a driving force in the Alabama Cooperative Extension System program planning / planning development process. All levels of Extension administration continually issue the challenge to first, insure that expected outcomes and impacts are clearly evident in program design, and second, that if not realized, the programs will undergo such modifications as needed to increase the potential for achievement of desired outcomes and impacts. As such, ALL Planned Programs in the FY2013-2017 Plan of Work have been closely scrutinized to ensure that they include provisions to measure changes in knowledge, changes in client behavior, and ultimately changes in the environment or condition and resolution of the issue.

#### **4. How will the planned programs result in improved program effectiveness and/or**

As discussed in the Overview Statement, the Alabama Cooperative Extension System has been proactive and future focused in addressing a host of internal and external factors, many of which have generated serious impacts on how the System conducts its' business. To effectively and efficiently confront the internal and external factors impacting the System, major changes were implemented in how both fiscal and human resources are allocated. These changes have greatly altered the manner in which the Alabama Cooperative Extension System provides educational services to it's publics as well as internally to Extension professionals.

In order to pragmatically address the effects of internal and external factors and yet continue the tradition of the provision of educational programs of excellence to Alabama residents a major restructuring was necessitated. Fundamental to this restructuring effort was a shift from a 'county based' programming focus to a 'regional' orientation--that is, a transition from single-county based agents to teams of educators serving multi-county regions. However, with fewer employees working across larger multi-county geographic regions, the methodology for the provision of educational services to the public has, of necessity, also changed. The primary emphasis is now on regional educational programs and group activities that allow the System to provide educational services to a maximum number of residents within the constraints of limited human and fiscal resources.

Employing the regional programming philosophy coupled with a commitment to optimal utilization of technological advances all Planned Programs in this Plan of Work will realize much improved efficiency and effectiveness. In addition, the System as a whole is better postured to provide a more focused, critical issue oriented, set of educational programs, albeit with constant or shrinking fiscal resources and a much smaller human capital base. Economies of scale are readily evident via the application of regional and commodity/issue specific advisory councils; the 'team' approach to program design, implementation, delivery, and evaluation; greater dependence on technologically generated program delivery, to include web-based on-demand learning protocols and simultaneous, multiple site application of educational outreach; greater dependence on technology and distance education for in-service training; and efficiencies and enhanced effectiveness gained from an increased emphasis on multistate, multidisciplinary, integrated research and Extension, and inter-institutional programming efforts. Related efficiencies will be derived from innovations such as 'print on demand' publications available from county offices or which may be obtained by clientele online, and from eXtension and the related Communities of Practice which allows for the aggregation of expertise from multiple sources while also allowing clientele to obtain state specific information to address their problems.

#### **IV. Stakeholder Input**

##### **1. Actions taken to seek stakeholder input that encourages their participation**

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

**Brief explanation.**

The Alabama Cooperative Extension System conducted a comprehensive grass-tops and grassroots needs assessment in 2010. State-level constituent or consensus building groups, non-governmental agencies, community-based organizations, and governmental agencies were encouraged to participate in the grass-tops needs assessment by inviting both traditional and non-traditional stakeholder groups. Individuals representing diverse socio-economic and racial groups, new client groups, networks, and potential community partners were encouraged to participate in the grassroots needs assessment by inviting both traditional and non-traditional stakeholder individuals. Media was used to announce and encourage individuals to participate in a survey of the general public.

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

**1. Method to identify individuals and groups**

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

**Brief explanation.**

Assistant Directors for Programs provided leadership to 14 program teams, consisting of State Extension Specialists and Regional Extension Agents, to identify 250 state-level constituent or consensus building groups, non-governmental agencies, community-based organizations, and governmental agencies. Methods for identifying these groups included existing advisory committees and interagency directories.

Grassroots stakeholders were identified by County Extension Coordinators who led community conversations in the state's 67 counties. Methods included 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. The grassroots web-based survey was marketed in all 67 counties through the media and directly via the ACES homepage. Citizens were offered the opportunity to participate in the survey via public access computers at County Extension Offices. Participation in the grassroots community conversations and survey was 1,743 and 1,999 respectively.

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

**1. Methods for collecting Stakeholder Input**

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Survey specifically with non-traditional groups



### **Brief explanation.**

A comprehensive approach to needs identification was undertaken given the complexity and scope of issues facing the citizens of Alabama. For the Alabama Cooperative Extension System (ACES), the 2010 comprehensive needs assessment began with the engagement of key external 'grass-tops' stakeholders to determine priority needs affecting Alabamians.

Assistant Directors for Programs and their respective program teams conducted the grass-tops needs assessment by engaging groups through direct telephone contacts, focus groups, advisory committees, networking, or short surveys. Each stakeholder group was asked 1) what priority initiatives were included in their strategic plan or plan-of-work, 2) what issues they envisioned affecting the economic and physical wellbeing of Alabamians across the state, 3) what priority needs of their clientele connect with ACES's educational programming expertise, and 4) what linkages did they envision that would strengthen the working relationship with ACES's educational programming. Results gleaned from the grass-tops needs assessment activities were summarized, and 14 major themes emerged from this analysis.

The second major component of the comprehensive needs assessment involved engagement of 'grassroots' stakeholders. The Assistant Director for Program Operations and Innovations and 67 County Extension Coordinators organized grassroots community conversations to confirm, prioritize, or regionalize the grass-tops needs assessment results. Objectives were 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. A companion grassroots survey was administered via the ACES homepage.

Nearly 4,000 citizens participated in these activities and observational data collected by County Extension Coordinators showed that parity was achieved. Collectively, these local stakeholders helped ACES define six strategic program initiatives.

### **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.**

Six strategic program initiatives were identified from the 2010 comprehensive grass-tops and grassroots needs assessment. The Assistant Directors for Programs collaborated on the development of 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 included an evaluation plan.

The Assistant Directors for Programs helped their respective program teams, consisting of State Extension Specialists and Regional Extension Agents, prepare a plan-of-work. Steps included: 1) to determine which strategic program initiatives fit with

the team's capabilities and resources and to develop a programmatic response consistent with the objectives, outputs, and outcomes of the respective strategic program initiative logic model and 2) to complete the program team plan-of-work to include ongoing programs or special funded projects.

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

**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)

**2. Brief summary about Planned Program**

This Priority Program Area is part of the national Nutrition, Diet and Health base program. Regional Extension Agents, Urban Regional Extension Agents and County Extension Coordinators as well as Specialists work in this area. Staff from both Alabama A&M University and Auburn University which make up the Alabama Cooperative Extension System support this program area. The mission is to teach families and individuals how to apply research-generated information on nutrition and health (including physical activity) to ensure healthy lifestyles. Through family and individual actions/activities programming supports the reversal of childhood obesity.

Program objectives include: 1) Improve the health of Alabamians, with special emphasis on combating obesity; 2) Improve the health of Alabamians through physical activity, nutrition education, and health literacy; 3) Empower families to improve health and well-being of children, youth, and adults and 4) Increase access to consumption of fresh fruits and vegetables.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

## 1. Situation and priorities

Five of the 10 leading causes of death are associated with diet coronary heart disease, some types of cancer, stroke, diabetes mellitus, and atherosclerosis. Half of Alabamians will die of heart and blood vessel diseases; one-third will die of cancer. In addition, one out of four has high blood pressure and diabetes that is sharply on the rise. Although obesity is a risk factor for many leading causes of death in Alabama, high blood cholesterol and high blood pressure are also risk factors. Poor diet and physical inactivity are the two primary reasons why the percentage of people who are physically inactive is almost twice the national average of obesity. Proper nutrition is important during all phases of the lifecycle—from the very young to the senior citizen. Nutritional adequacy is imperative to the 18% of Alabamians living below the federally defined poverty level. This major program area will encompass issues of nutrition and chronic disease, changing lifestyle behaviors such as physical activity, weight management, and nutrition throughout the lifecycle with special interest targeting limited resource audiences. In keeping with the mission and goals of the national Healthy People Healthy Communities Initiative, Alabama's major health program area has three broad goals: to educate and empower individuals and families to adopt healthy behaviors and lifestyles, to educate consumers so they can make informed healthcare decisions, and build community capacity to improve health. Working in partnerships with state and local government agencies, professional and civic organizations, businesses, and health care and public health professionals and institutions, Extension will make unique educational and community development organizing contributions involving urban and rural, moderate and limited resource individuals, families, and communities. This program area will encompass issues of chronic disease prevention and control; community based health promotion; county health council/coalition formation, maintenance and expansion; health care access; economics of health care infrastructures; health literacy, mental health, environmental health; agricultural health, maternal and child health; family health; and youth health.

## 2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

## V(D). Planned Program (Assumptions and Goals)

### 1. Assumptions made for the Program

Assumptions for this program area are:

1. Human Nutrition, Diet, and Health will continue to be an important sub-component of the Family and Consumer Sciences area within NIFA.

2. There will continue to be new research-based information in the area of Human Nutrition, Diet, and Health from Auburn University, Alabama A&M University and other land-grant universities that will be beneficial to individuals and to society as a whole if it is implemented. Alabama Cooperative Extension System will continue to receive adequate Federal and state matching funds to support work in this priority program area, and will continue to fund state and regional specialist positions and regional extension agents who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

The ultimate goal of this program is to is to teach people how to apply research-generated nutritio, diet and health information and knowledge to ensure healthy lifestyles to inckude physical activity.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	9.9	4.8	0.0	0.0
2014	9.9	4.8	0.0	0.0
2015	9.9	4.8	0.0	0.0
2016	9.9	4.8	0.0	0.0
2017	9.9	4.8	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

The primary activities are:

- Arthritis and Osteoporosis Prevention and Control
- Cancer Prevention and Control Education
- CHAMPION - U&NNTP
- Cardiovascular Health Awareness
- Diabetes and Obesity Prevention and Control
- Metropolitan Health, Nutrition and Wellness - U&NNTP
- Healthy Families, Healthy Communities
- 4-H BodyQuest
- 4-H Just Move Alabama!
- 4-H Food and Nutrition from the Garden (JMG)
- Families United through Nutrition (FUN) - UNNTP
- New Leaf

Each project includes a variety of educational activities. Detailed descriptions of the activities of these projects are available on the ACES intranet.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

<b>Extension</b>	
<b>Direct Methods</b>	<b>Indirect Methods</b>
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> <li>● Other 1 (Web Conferencing)</li> </ul>	<ul style="list-style-type: none"> <li>● Newsletters</li> <li>● Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The primary target audience is the general public, youth, and a targeted limited resource families.

**V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## **V(H). State Defined Outputs**

### **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
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.



**V(I). State Defined Outcome**

O. No	Outcome Name
1	<p>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:</p> <p>Why: Explain the reason the program was done, or the situation or problem that the program addressed</p> <p>What: Specifically what was done and how it was done.</p> <p>When: If this was a one-time event, the date it occurred. If it was a series of events, or an on-going program, when it began.</p> <p>Where: Specific location-- the county or counties involved.</p> <p>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.</p> <p>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.</p> <p>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 <u>number and quality of the success stories generated by the individuals who work on these projects.</u></p>
2	<p>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.</p>
3	<p>CHAMPION Pre and Post Tests and Weight Management Observation</p>

## **Outcome # 1**

### **1. Outcome Target**

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. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 701 - Nutrient Composition of Food
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **Outcome # 2**

### **1. Outcome Target**

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.

### **2. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 701 - Nutrient Composition of Food
- 703 - Nutrition Education and Behavior

- 724 - Healthy Lifestyle

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

### **Outcome # 3**

#### **1. Outcome Target**

CHAMPION Pre and Post Tests and Weight Management Observation

#### **2. Outcome Type : Change in Knowledge Outcome Measure**

#### **3. Associated Knowledge Area(s)**

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

#### **4. Associated Institute Type(s)**

- 1890 Extension

### **V(J). Planned Program (External Factors)**

#### **1. External Factors which may affect 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.)

#### **Description**

Programs in Human Nutrition, Diet, and Health are largely affected by all of the areas checked above.

### **V(K). Planned Program - Planned Evaluation Studies**

#### **Description of Planned Evaluation Studies**

Human Nutrition, Diet, and Health includes many different activities and projects. Each of these has its own specific evaluation methods. The evaluation methods for SPIs and SFPs within Human Nutrition, Diet, and Health is explained in detail within the data-collection and evaluation sections of the SPI and SFPs description sections on the ACES program planning, evaluation and reporting section of our intranet.

## **V(A). Planned Program (Summary)**

### **Program # 2**

#### **1. Name of the Planned Program**

Climate Change

#### **2. Brief summary about Planned Program**

The Climate Change Priority Program area is part of the national Agriculture base program area. This program is open to regional extension agents, county extension coordinators, specialists, and supporting staff who work in areas that might be impacted by climate variability and climate change (e.g., agriculture, forestry, water management, and livestock). The Extension Climate Change Team will be made up of regional extension agents, county extension coordinators, specialists working with row crops, fruits and vegetables, forestry, water management, and/or livestock. The primary goal of this program priority area is to educate those involved in these areas how to apply research-generated information and knowledge to sustain crops and livestock production as well as forest and water resources, using best management adaptation practices that can contribute towards environmental sustainability. The underlying principle of this program is to ensure that Alabama stakeholders: (a) integrate climate variability and climate change into resource use and management decisions, (b) understand how climate variability and climate change might affect their systems, and (c) what they should be doing and planning in response to anticipated changes in climate. In addition this program is intended to increase capacity/ ability/ capability of extension staff enabling integrating climate and weather information into agricultural production and natural resource management. Subject matter expertise areas in this program include but are not limited to climatology, agrometeorology, hydrology, soils and fertility, land preparation, land use, tillage systems, irrigation systems, water conservation, variety or hybrid selection, livestock management and nutrition, pest and diseases management (to include insects, pathogens, and weeds, as well as integrated pest management). Team members may also be involved in educational programs in the areas of weather and climate, soil carbon sequestration, fertilizer sources and management, and youth development as the need arises. Team members will have academic training and/or practical experience and knowledge in agronomy, plant science, plant pathology, entomology, ecology, forestry, horticulture, livestock production, or some other closely aligned field of expertise.

**3. Program existence :** New (One year or less)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**V(B). Program Knowledge Area(s)**

## 1. Program Knowledge Areas and Percentage

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
102	Soil, Plant, Water, Nutrient Relationships	15%	15%		
111	Conservation and Efficient Use of Water	10%	10%		
112	Watershed Protection and Management	5%	5%		
125	Agroforestry	5%	5%		
131	Alternative Uses of Land	5%	5%		
132	Weather and Climate	20%	20%		
205	Plant Management Systems	15%	15%		
211	Insects, Mites, and Other Arthropods Affecting Plants	15%	15%		
212	Pathogens and Nematodes Affecting Plants	10%	10%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

## 1. Situation and priorities

The croplands, pastures and forests are progressively being impacted from increased climatic variability and, in the longer run, to climate change. The US southeast region is subject to seasonal droughts, seasonal extreme temperatures, hurricane activity, and flooding rainfall events having implications which are not completely understood. Between the bio-physical climate change implications that could be mentioned are physiological effects on crops, pasture, forests and livestock (quantity, quality), changes in land, soil and water resources (quantity, quality), and increased weed, insects and pathogens dynamics. Some of the socio-economic implications could be a decline in yields and production and fluctuations in world market prices. Therefore, a better understanding of one's influence on climate and climate's influence on society, the magnitude of these changes and potential impacts, as well as the development and implementation of adaptation and mitigation strategies are key to reduce production risks.

In the US, climate variability in most cases has been linked to the phase of El Niño &ndash;Southern Oscillation (ENSO). El Niño, ENSO warm phase, is characterized by lower winter temperatures, high winter-spring rainfall Gulf Coast states and dry summers along the Atlantic Coast and from north Texas to northern Alabama. El Niño has been related to winter yield reductions of tomato and bell pepper (18%), corn (10%), and cotton in the Southeast. In Alabama, corn yield has been historically low under El Niño conditions. Different from El Niño, La Niña (ENSO cold phase) tend to be warmer and drier than the normal from fall through spring. In La Niña years, yields tend to be higher than the average (14% increase for corn). In southern Georgia, it has been observed high June precipitation under La Nina resulting in corn yield increments because of the correspondence with the tasseling period. In addition, the life cycle of crop pest and diseases are also impacted in the ENSO phases, for example, under La Niña, infestation of fall armyworm in corn usually increases.

Frequently, the interannual climate variability causes high uncertainty on a stakeholder's management decisions as weather and climate have a direct impact on crop yield and natural resources, or through indirect effects from changes in pests and pathogens dynamics, fertilizer efficiency or prices. Especially for new growers, which in some cases have moved to non-traditional agricultural land, the impacts of climate on crop productions may be even higher. In Alabama for example, the number of growers with two years or less on-farm experience grew by 54% between 2002 and 2007 according to the U.S. Department of Agriculture

farm census. Additionally, the area planted with grain crops has increased; 54% for corn grain between 2004 and 2007 and 100% for winter wheat between 2004 and 2008. Many of these changes are due to ethanol demand increases and a decrease in area devoted to cotton production.

The primary programming objectives of this program are: a) increase climate literacy of clientele, b) educate stakeholders (farmer, scientists, consultants) about how climate information should be used to support management decisions, c) help clientele understand inter-relationships between climate, agriculture, natural resources and society based on future climate change projections, d) disseminate science-based information on regional climate change and associated societal response options to a diverse audience, e) characterize potential impact of climate change and evaluate various adaptations strategies, f) identify critical gaps in our knowledge and research efforts to fill them.

## **2. Scope of the Program**

- In-State Extension
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

## **V(D). Planned Program (Assumptions and Goals)**

### **1. Assumptions made for the Program**

Assumptions for this program area are:

- Agronomic crops, forages, and forest which could be potentially impacted by climate change will continue to be an integral component of Alabama's agricultural economy as a source of revenue and support for local, rural communities and as an important domestic source of food and fiber for its citizens statewide;
  - Climate change will continue to be primary program area addressed in the future U. S. Farm Bills;
  - Sustainability of agricultural production will continue to be primary program area addressed in the future U. S. Farm Bills;
  - Auburn University, Alabama A&M University, and land-grant universities in the Southeast will continue to provide research-based information to the citizens and industry including producers, consumers, and associated private enterprises;
  - The Alabama Cooperative Extension System will continue to receive adequate federal and state matching funds to support work in the Agronomic Crops program priority area, and will also continue to fund state and regional extension agents, county extension agents, and specialists who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

The ultimate goal of the Climate Change Program Priority Team is to provide research-based decision support tools (e.g., education, information) to ensure that Alabama agriculture systems maintains productivity and profitability under climate variability and change scenarios. This is expected to support state and local communities and consumers decisions toward the development and implementation of adaptation and mitigation strategie, the latter providing even economic and environmental advantages.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	1.1	0.0	0.0	0.0
2014	1.1	0.0	0.0	0.0
2015	1.1	0.0	0.0	0.0
2016	1.1	0.0	0.0	0.0
2017	1.1	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

Planned program activities in this area will be multi-faceted to meet the needs of this diverse program area. Continuous interactions with stakeholders will provide information about their needs and concerns as related to climate change. This information will be used to develop Extension Team Projects - ETPs. The ETPs are individual programs that target specific areas of relevance and interest to a particular community, in this case agricultural and environmental communities around climate change aspects. Regional extension agents, county extension agents, and specialists are required to devote at least 50% of their Extension appointment directly to specific ETPs. Each participant is also required to file an annual report on their activities with those projects for which they are participants.

The main activities planned for this program are:

- Increase stakeholders (farmers, county and faculty extension specialists, consultants) literacy on climate variability and change. This will be achieved through in-service training sessions, multi-state conferences, workshops, development of news letter and extension bulletins, and participation in outreach activities.
- Evaluate at state level, climate change projections developed for the Southeast which will improve skill of summer and fall forecasts.
- Identification of potential adaptation strategies to reduce the impact of climate change on agricultural systems. This is expected to be achieved through in-service training sessions combined with panel discussions with participation of farmers, agribusiness representatives, commodity associations, cooperatives, water management districts, and county and state governments.
- Evaluation of changes in pest/diseases as consequence of climate change - Monitoring and management of row crops, fruits and vegetables pest education.
- Evaluation of changes in water resources as consequence of climate change &ndash Education on monitoring and management of water resources.



- Evaluate the scenarios for agricultural trade at international/regional levels under different climate change scenarios to understand potential implications for agricultural and trade policy as a result of climate change.
- Development of Decision Support Systems.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>• Education Class</li> <li>• Workshop</li> <li>• One-on-One Intervention</li> <li>• Demonstrations</li> <li>• Other 1 (Web Conferences)</li> </ul>	<ul style="list-style-type: none"> <li>• Newsletters</li> <li>• TV Media Programs</li> <li>• Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The activities of the Climate Change Program Priority Team will target 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, Alabama Wheat and Feed Grains Committee, and the Alabama Fruit and Vegetable Producers; 2) row crop and fruit-vegetable advisors including ACES agents and specialists, public and private crops advisors; 3) governmental agency personnel including USDA, NRCS, federal crop insurance and risk managers, and State of Alabama Soil and Water Conservation Committee; 4) public policy makers requesting information that impact Alabama's agricultural and water resources communities, and 5) private citizens impacted by policies and practices used for the production of food, fuel, and fiber. All educational programming efforts will target audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

## V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
    - Direct Adult Contacts
    - Indirect Adult Contacts
    - Direct Youth Contacts
    - Indirect Youth Contact
  - Number of patents submitted
  - Number of peer reviewed publications
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## V(H). State Defined Outputs

### 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](http://www.alabamacrops.com)).
- -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).
- -Reports based on reviews of current knowledge about the relationships between agriculture and climate change and potential impacts.
- -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.

- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

O. No	Outcome Name
1	<p>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.</p> <p>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;</p>
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	<p>Medium-term outcomes: The medium-term outcomes of the Climate Change Extension Program are:</p> <p>1) implementation of a new system of management practices for row crops and vegetables according to ENSO phase</p>
12	2) Improved agronomic management row crops and vegetables
13	<p>Long-term outcomes: The long-term outcomes of the Climate Change Extension Program are: 1)</p> <p>increased profitability of Alabama growers</p>
14	2) improved soil conditions
15	3) reduced environmental impacts
16	4) competitive Auburn and ACES Agronomic Research, Extension and Education system.

**Outcome # 1**

**1. Outcome Target**

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. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 125 - Agroforestry
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 205 - Plant Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 2**

**1. Outcome Target**

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

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

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

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 3**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 132 - Weather and Climate

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 4**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 132 - Weather and Climate

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 5**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

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

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 6**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

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

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

### **Outcome # 7**

#### **1. Outcome Target**

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

**2. Outcome Type** : Change in Knowledge Outcome Measure

#### **3. Associated Knowledge Area(s)**

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

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

### **Outcome # 8**

#### **1. Outcome Target**

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

**2. Outcome Type** : Change in Knowledge Outcome Measure

#### **3. Associated Knowledge Area(s)**

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

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension



**Outcome # 9**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 10**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

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

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 11**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 12**

**1. Outcome Target**

2) Improved agronomic management row crops and vegetables

**2. Outcome Type** : Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 13**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Condition Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 14**

**1. Outcome Target**

2) improved soil conditions

**2. Outcome Type** : Change in Condition Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 205 - Plant Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 15**

**1. Outcome Target**

3) reduced environmental impacts

**2. Outcome Type :** Change in Condition Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 125 - Agroforestry
- 131 - Alternative Uses of Land
- 132 - Weather and Climate

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 16**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Condition Outcome Measure

**3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 125 - Agroforestry
- 131 - Alternative Uses of Land
- 132 - Weather and Climate

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **V(J). Planned Program (External Factors)**

### **1. External Factors which may affect Outcomes**

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

#### **Description**

The external factors include but not limited: natural environmental disasters, input costs, commodity prices, Farm Bill regulations, the economic environment across the world, technology introduction and adoption rates, associated costs of production, and many others that are unforeseen. Failure of climate change predictions and impacts could affect education programs as well as suggested adaptation and mitigation strategies. Resilience of farmers to climate variability and climate change might reduce the success and impacts of the program. Unpredictable weather conditions (hurricanes, tropical storms, droughts, etc.) can affect erosion, runoff, and movement of water-borne sediments within the environment. The overall impact can result in its affecting water quality, crop planting, grow and development during the season, and ultimately may reduce crop yields and revenue.

## **V(K). Planned Program - Planned Evaluation Studies**

### **Description of Planned Evaluation Studies**

The evaluation methods to assess the impacts of the Climate Change project will be:

- Number of REAs (Regional Extension Agents) and other Extension personnel who incorporate weather and climate information and climate decision support tools into their own programming efforts. Number and type of climate change adaptation strategies implemented by the farmers. Acreage change by management practice (e.g., conservation tillage) used as adaptation/mitigation climate change strategy will be documented. Documentation of direct positive impact on a producer or local production area as a result of REAs' interaction with stakeholders. This will include acreage and financial information as supporting evidence. In addition, an attempt will be made to measure the number of Extension clientele who benefit from the training provided to Extension personnel. The benefit may come in the form of the adoption of information or in the assistance of its use.

## **V(A). Planned Program (Summary)**

### **Program # 3**

#### **1. Name of the Planned Program**

Food Safety (Safe and Secure Food Supply)

#### **2. Brief summary about Planned Program**

This Priority Program Area is part of the national Food Safety base program area and is open to Regional Extension Agents, Urban Regional Extension Agents and County Extension Coordinators as well as Specialists working in this area. All Agents working in this area of specialization as well as the Specialists who support this area will form the Extension Food Safety, Preparation and Preservation Team. The mission of this program area is to ensure a safe and high quality food supply, to educate the general public on how to avoid food-borne diseases, and to educate food handlers and processors on how to apply research-generated information and knowledge to ensure safe food products. This area of specialization also includes the Food Safety and Quality national initiative. Team members working in this area will also be involved in educational programs in the areas of safe food handling and safe home food preservation. This team will meet several times annually and will develop the strategic plan for Food Safety, Preparation and Preservation. The team will collectively develop the specific statewide Extension Team Projects for this program area, and will be responsible for implementing these projects. Team members may also be involved in working with 4-H'ers in food safety, preparation and preservation programs. Team members should have academic training and/or recent job experience in food safety, human nutrition, food technology or some other closely aligned area.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**V(B). Program Knowledge Area(s)**

## 1. Program Knowledge Areas and Percentage

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
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	10%	10%		
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	20%	35%		
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	15%	35%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

## 1. Situation and priorities

The most recent account of the incidence of laboratory-confirmed infections in 2010 compared with the average annual incidence in 1996-1998, a main-effects, model was used. The model accounts for site-to-site variation and changes over time in the size of the population under surveillance in FoodNet. Therefore, in the comparison with the 1996-1998 period, rates of infection in 2010 were lower for Shigella (57% decrease), Yersinia (52% decrease), STEC O157 (44% decrease), Listeria (38% decrease), and Campylobacter (27% decrease); slightly higher for Salmonella (though not significantly different); and significantly higher for Vibrio (115% increase). The most severe cases tend to occur in the very old, the very young, those who have an illness already that reduces their immune system function, and in healthy people exposed to a very high dose of an organism. A former Food and Drug Administration economist estimates the total economic impact of foodborne illness across the nation to be a combined \$152 billion annually. In Alabama that total cost of foodborne illness is 2.321 billion. In Alabama, food borne pathogens cause illness and deaths each year. About 1, 500 cases from pathogenic microorganisms are reported yearly to the Department of Public Health in the state of Alabama. It is also estimated that approximately 60 percent of the food borne illness occurs as a result of eating in retail foodservice operations. In 2000, the Food and Drug Administration conducted a study to determine the frequency of unsafe food handling practices in retail food service operations. Practices that contributed to the incidences of food borne illnesses were: potentially hazardous foods held at temperatures above 41 degrees F and below 140 degrees F, commercially processed potentially hazardous ready to eat foods not properly dated and marked when stored, surfaces and utensils not properly cleaned and sanitized, and improper and inadequate hand washing. Proper food preservation and preparation can also contribute to deaths from improperly canned or processed food products. Therefore, part of our priority team area is in

the area of home food preservation and preparation.

**2. Scope of the Program**

- In-State Extension
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

**V(D). Planned Program (Assumptions and Goals)**

**1. Assumptions made for the Program**

Assumptions for this program area are:

1. Food Safety will continue to be a national priority.
2. There will continue to be new research-based information in the area of Food Safety, from Auburn University, Alabama A&M University and other land-grant universities that will be beneficial to individuals and to society as a whole when it is implemented. Alabama Cooperative Extension System will continue to receive adequate Federal and state matching funds to support work in this priority program area, and will continue to fund state and regional specialist positions and regional extension agents who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

The ultimate goal of this program is to ensure a safe and high quality food supply, to educate the general public on how to avoid food-borne diseases, and to educate food handlers, processors and producers on how to apply research-generated information and knowledge to ensure safe food products.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	12.8	1.3	0.0	0.0
2014	12.8	1.3	0.0	0.0
2015	12.8	1.3	0.0	0.0
2016	12.8	1.3	0.0	0.0
2017	12.8	1.3	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

FoodSafety Training includes:



Food Service Workers (ServSafe and Cook4Safety)  
 Home and Commercial Food Processors (Better Process Control School)  
 Seafood HACCP certification through AFDO  
 Good Agricultural Practices/Good Handling Practices certification for producers through USDA.  
 Another activity is Home Grown in residential food gardens.

Each project includes a variety of educational activities. Detailed descriptions of the activities of these projects are available on the ACES intranet.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

<b>Extension</b>	
<b>Direct Methods</b>	<b>Indirect Methods</b>
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> <li>● Other 1 (Web Conferencing)</li> </ul>	<ul style="list-style-type: none"> <li>● Newsletters</li> <li>● TV Media Programs</li> <li>● eXtension web sites</li> <li>● Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The primary target audiences are consumers, food service workers, food producers, food processors and home gardeners

**V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## **V(H). State Defined Outputs**

### **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.
  
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

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	<p>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:</p> <p>Why: Explain the reason the program was done, or the situation or problem that the program addressed</p> <p>What: Specifically what was done and how it was done.</p> <p>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.</p> <p>Where: Specific location-- the county or counties involved.</p> <p>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.</p> <p>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.</p> <p>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, <u>one very significant outcome measure is the number of success stories generated.</u></p>
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.

## **Outcome # 1**

### **1. Outcome Target**

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

### **2. Outcome Type : Change in Action Outcome Measure**

### **3. Associated Knowledge Area(s)**

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

### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **Outcome # 2**

### **1. Outcome Target**

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.

### **2. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

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

### **4. Associated Institute Type(s)**

- 1862 Extension

### **Outcome # 3**

#### **1. Outcome Target**

Increase knowledge of alternate pest management strategies in home food gardens

#### **2. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

### **4. Associated Institute Type(s)**

- 1862 Extension

### **Outcome # 4**

#### **1. Outcome Target**

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

#### **2. Outcome Type : Change in Action Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 5**

##### **1. Outcome Target**

# vol's who assist teaching workshops and demonstrations

##### **2. Outcome Type : Change in Action Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 6**

##### **1. Outcome Target**

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

##### **2. Outcome Type : Change in Action Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 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

#### **4. Associated Institute Type(s)**

- 1862 Extension

### **Outcome # 7**

#### **1. Outcome Target**

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

#### **2. Outcome Type : Change in Action Outcome Measure**

#### **3. Associated Knowledge Area(s)**

- 205 - Plant Management Systems
- 501 - New and Improved Food Processing Technologies
- 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

#### **4. Associated Institute Type(s)**

- 1862 Extension

### **V(J). Planned Program (External Factors)**

#### **1. External Factors which may affect Outcomes**

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

#### **Description**

Programs in Food Safety, Preparation, and Preservation as well as Home Grown are largely affected by all of the areas checked above. Less face to face meetings are being conducted due to financial constraints. However, the use of technology has allowed for workshops and trainings to continue to take place.

### **V(K). Planned Program - Planned Evaluation Studies**

#### **Description of Planned Evaluation Studies**

Food Safety, Preparation, and Preservation and Home Grown includes many different activities and projects. Each of these has its own specific evaluation methods. The evaluation methods for the Food Safety, Preparation, and Preservation and Home Grown Teams are explained in detail within the data-collection and evaluation sections of the Extension Team Project description sections on the ACES program planning, evaluation and reporting section of our intranet.





## **V(A). Planned Program (Summary)**

### **Program # 4**

#### **1. Name of the Planned Program**

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

#### **2. Brief summary about Planned Program**

Global food production will fall short of population growth over the next 25 years, according to Dr. Norman Borlaug, Nobel Peace Prize winner and father of the Green Revolution. Current prediction by some scientists is that more food will have to be produced in the next 40 years than has been produced in the past 10,000 years. The challenge for the nation's producers to continue feeding the world and sustaining the environment will be solved in part by improvements in technology, unbiased university-based research and training, and the adaption of production cultures for a changing environment.

Almost 80 percent of forest land in Alabama, or approximately 23 million acres, belongs to nonindustrial private owners. The need to meet the nation's requirement for both traditional forest products and associated amenities such as clean water, recreation, wildlife habitat, and fuel, will continue to increase. Research-based education is needed to help these landowners and land-users actively manage their forestland for potential benefits. Agroforestry, which combines agriculture and timber production on the same acreage, also has a role to play. Landowners can benefit from agroforestry systems at all stages in their forest land management while increasing productivity and improving environmental conditions.

Additionally, this program includes commercial production of food animals (beef, dairy, swine, poultry, sheep, goats, ratites, rabbits, etc.) and non-commercial management of companion animals (horses, dogs, etc.). Furthermore, it includes row crop production, fruits and vegetables, turf and ornamentals.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**V(B). Program Knowledge Area(s)**

## 1. Program Knowledge Areas and Percentage

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities**

The mission of this planned program is to assist private citizens, land owners, resource managers and producers in applying research-generated information. The management practices and decisions made by these groups have a significant impact not only on local economies, but equally important, on the environmental and water quality of much of rural Alabama.

**2. Scope of the Program**

- In-State Extension

- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

**V(D). Planned Program (Assumptions and Goals)**

**1. Assumptions made for the Program**

Assumptions for this program area are:

1. Sustainable agricultural and forestry systems will continue to be an important component of Alabama's economy, and an important area within future US Farm Bills.
2. There will continue to be new research-based information in the area of sustainable agriculture and forestry from Auburn University, Alabama A&M University and other land-grant universities that will be beneficial to individual producers and to society as a whole if it is implemented.
3. The Alabama Cooperative Extension System will continue to receive adequate federal and state matching funds to support work in this priority program area, and will continue to fund state and regional specialist positions and regional extension agents who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

The ultimate goal of this program area is to teach private citizens, land owners, resource managers and producers in applying research-generated information to adopt practices that are environmentally safe and promote commonly accepted animal welfare standards.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	25.0	2.4	0.0	0.0
2014	25.0	2.4	0.0	0.0
2015	25.0	2.4	0.0	0.0
2016	25.0	2.4	0.0	0.0
2017	25.0	2.4	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

The primary activities in this area are 3 statewide Strategic Program Initiatives and 3 Special Funded Projects. These are:

- SPI 403 - Safe and Secure Food Supply
- SPI 405 - Sustainable Agricultural and Forestry Systems
- SPI 406 - Environmental Stewardship

- SFP 206 - BEEF U
- SFP 207 - DAIRY U
- SFP 214 - UANNP - Small Ruminant Management Education Program

Each initiative and project includes a variety of educational programs and subject matters. These are:

- Livestock and Forage Economics
- Alabama Heifer Development Program
- Forage-Focus Program: Growing Pastures, Growing Profits
- Opportunities for Value Added Livestock Marketing
- Broiler Litter Management
- Production and Marketing of Horticultural Crops
- Alabama Ethnic Food Security Network
- Improving Soil Quality
- Best Management Practices for Nutrient Management
- Improved Pecan Cultivars
- Row Crop Insect and Disease Management
- IPM Strategies and Tactics
- Herbicide Resistance Management
- Alabama Farm Analysis Program
- Retirement Planning
- Farm Succession and Sustainability
- Education for New and Nontraditional Landowners
- Precision Agriculture
- Geospatial Technologies
- Climate Information to Reduce Agricultural Risk
- Rapid Agronomic Response Program
- Community Forestry
- Invasive Plant Ecology and Control
- Recreational Fishpond Management
- Catfish Pond-To-Plate
- Development of Alternate Species and Systems for Aquaculture
- K-12 Aquaculture/Aquascience Education
- Oyster Mariculture in Alabama
- Promotion and Awareness of eXtension

Each initiative and project includes a variety of educational activities. Detailed descriptions of the activities of these initiatives and projects are available on the ACES intranet.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

<b>Extension</b>	
<b>Direct Methods</b>	<b>Indirect Methods</b>

<ul style="list-style-type: none"><li>● Education Class</li><li>● Workshop</li><li>● Group Discussion</li><li>● One-on-One Intervention</li><li>● Demonstrations</li><li>● Other 1 (Web Conferencing)</li></ul>	<ul style="list-style-type: none"><li>● Newsletters</li><li>● TV Media Programs</li><li>● eXtension web sites</li><li>● Web sites other than eXtension</li></ul>
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### 3. Description of targeted audience

The target audiences include private citizens, landowners, resource managers and producers.

### V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

### V(H). State Defined Outputs

#### 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.

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

O. No	Outcome Name
1	<p>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.</p> <p>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.</p>
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

## **Outcome # 1**

### **1. Outcome Target**

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. Outcome Type : Change in Condition Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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

### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **Outcome # 2**

### **1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 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

**4. Associated Institute Type(s)**

- 1890 Extension

**Outcome # 3**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 302 - Nutrient Utilization in Animals
- 307 - Animal Management Systems
- 311 - Animal Diseases

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4**

**1. Outcome Target**

Increase knowledge of horticultural production methods and marketing

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**



- 111 - Conservation and Efficient Use of Water
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

Adoption of row crop production practices that are sustainable and profitable

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 6**

**1. Outcome Target**

Integrated pest management adoption

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 7**

##### **1. Outcome Target**

Increase in active, viable forestry and wildlife county committees

##### **2. Outcome Type : Change in Condition Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 123 - Management and Sustainability of Forest Resources
- 124 - Urban Forestry
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 8**

##### **1. Outcome Target**

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. Outcome Type : Change in Knowledge Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 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

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 9**

##### **1. Outcome Target**

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

##### **2. Outcome Type : Change in Knowledge Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife
- 307 - Animal Management Systems

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 10**

##### **1. Outcome Target**

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

##### **2. Outcome Type : Change in Knowledge Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife
- 806 - Youth Development

#### **4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 11**

**1. Outcome Target**

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

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 12**

**1. Outcome Target**

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. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 311 - Animal Diseases
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 13**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 14**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 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
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**V(J). Planned Program (External Factors)**

**1. External Factors which may affect 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.)

**Description**

Programs in sustainable agriculture are largely affected by the farm bill, economy, public preference, weather and natural disasters.

**V(K). Planned Program - Planned Evaluation Studies**

**Description of Planned Evaluation Studies**

Global Food Security and Hunger includes many different activities and projects. Each of these has its own specific evaluation methods. The evaluation methods for Strategic Program Initiatives (SPIs) and Special Funded Project (SFPs) within this area are explained in detail within the data-collection and evaluation sections of the SPIs and SFPs description sections on the ACES program planning, evaluation and reporting section of our intranet.

**V(A). Planned Program (Summary)**

**Program # 5**

**1. Name of the Planned Program**

Sustainable Energy

**2. Brief summary about Planned Program**

The Sustainable Energy Program Area is a key part of the Alabama Cooperative Extension programming effort. The primary effort of this program priority area is to educate farmers, home owners, municipalities, entrepreneurs (business), fleet managers and forest workers in energy conservation, utilization and production by utilizing research-based knowledge. These goals were set after contacts with farmers, home owners, businessmen starting up energy related businesses, fleet managers, city officials, loggers and forest owners and utilization of result demonstrations, experimentation station and laboratory research trials by research colleagues across the world. The underlying principle of this planned program is to reduce imported oil usage in a manner that is environmentally friendly and economically sustainable. Subject matter expertise areas in this program area include but are not limited to biosystems engineering, forestry, agronomy, biotechnology, agriculture economics, forestry economics, fleet management, mechanical engineering, chemical engineering, aquaculture and best management and regulatory practices for energy conservation and production. Team members will have academic training and/or practical experience and knowledge in biosystems engineering, agricultural education, agronomy, agriculture economics or some closely aligned field of expertise.

**3. Program existence :** Intermediate (One to five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**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%		
	<b>Total</b>	100%	0%		

**V(C). Planned Program (Situation and Scope)**

## **1. Situation and priorities**

Alabama has abundant energy sources. It has a lot of conventional and unconventional natural gas reserves, huge deposits of coal and several rivers capable of hydroelectric generation. Alabama generates a lot of the country's nuclear energy. Alabama is fifth among states in nuclear power production. Alabama is one of the highest producers of hydroelectric power. Alabama produces 1% of the U.S. natural gas.

The state does have one demonstration scale cellulosic ethanol facility that is capable of producing other types of liquid fuels. According to the U.S. Energy Information Administration, in 2010, Alabama consumed over 45 million gallons of ethanol or 1.7% of the states volume of gasoline sold. The state has 175 million gallons of annual biodiesel production capacity. 99% plus of this capacity is not being utilized due to feedstock and biodiesel prices.

## **2. Scope of the Program**

- In-State Extension
- In-State Research
- Multistate Extension
- Integrated Research and Extension

## **V(D). Planned Program (Assumptions and Goals)**

### **1. Assumptions made for the Program**

1. Alabama and the U.S. will continue to need energy.
2. Alabama farmers, foresters and energy entrepreneurs will continue to have opportunities for profit in sustainable energy.
3. Sustainable energy will be a primary program area in the future U.S. Farm Bills.
4. Land-grant universities will continue to provide research-based information to producers, consumers and energy entrepreneurs.
5. The Alabama Cooperative Extension System will continue to receive adequate federal and state funds to support work in this program area.

### **2. Ultimate goal(s) of this Program**

1. To provide research-based production management tools to enable Alabama feedstock to be produced economically and environmentally sustainable.
2. To provide municipalities and other public groups with the information they need to produce biodiesel from used cooking oil.
3. To assist energy entrepreneurs with their start up and production process.
4. To provide Alabama citizens with research-based information about sustainable energy options and energy conservation.

## **V(E). Planned Program (Inputs)**



**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	2.0	0.0	0.0	0.0
2014	2.0	0.0	0.0	0.0
2015	2.0	0.0	0.0	0.0
2016	2.0	0.0	0.0	0.0
2017	2.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

The project will consist of programs and demonstrations that 1) increase production of energy feedstocks (corn, soybeans, rapeseed, cottonseed, peanuts, wheat and biomass); 2) work with municipalities, counties and other public organizations to produce biodiesel from used cooking oil; 3) work with entrepreneurs to develop renewable energy manufacturing plants; 4) work with petroleum distributors, farmers and the general public to increase usage of renewable fuels; 5) work on renewable energy opportunities including gasification of woody feedstocks; and 6) increase crop production fuel efficiency.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Workshop</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> </ul>	<ul style="list-style-type: none"> <li>● Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The activities of the sustainable Energy Program will 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 will target audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

### **V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

### **V(H). State Defined Outputs**

#### **1. Output Measure**

- Participants reached
- video produced
- web pages developed

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

O. No	Outcome Name
1	Knowledge gained
2	recomendations addopted
3	Energy saved and produced

**Outcome # 1**

**1. Outcome Target**

Knowledge gained

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 101 - Appraisal of Soil Resources
- 102 - Soil, Plant, Water, Nutrient Relationships
- 216 - Integrated Pest Management Systems
- 402 - Engineering Systems and Equipment
- 403 - Waste Disposal, Recycling, and Reuse
- 603 - Market Economics

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

recomendations adopted

**2. Outcome Type :** Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 101 - Appraisal of Soil Resources
- 102 - Soil, Plant, Water, Nutrient Relationships
- 216 - Integrated Pest Management Systems
- 402 - Engineering Systems and Equipment
- 403 - Waste Disposal, Recycling, and Reuse
- 603 - Market Economics

**4. Associated Institute Type(s)**

- 1862 Extension

### **Outcome # 3**

#### **1. Outcome Target**

Energy saved and produced

#### **2. Outcome Type : Change in Condition Outcome Measure**

#### **3. Associated Knowledge Area(s)**

- 101 - Appraisal of Soil Resources
- 102 - Soil, Plant, Water, Nutrient Relationships
- 216 - Integrated Pest Management Systems
- 402 - Engineering Systems and Equipment
- 403 - Waste Disposal, Recycling, and Reuse
- 603 - Market Economics

#### **4. Associated Institute Type(s)**

- 1862 Extension

### **V(J). Planned Program (External Factors)**

#### **1. External Factors which may affect 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.)

#### **Description**

This program is built around the knowledge that external factors are always changing for producers and consumers and that it is our charge to help them adapt to those changes. The external factors include but are not limited to: natural environment disasters, input costs, energy and feedstock prices, Farm Bill regulations, the economic environment across the world, technology introduction and adoption rates, associated costs of production and many others that are unforeseen. Inclement weather conditions (hurricanes, tropical storms, droughts, ice storms, etc.) can affect energy usage and feedstock production. Government actions, both domestic and foreign, will have a dramatic effect on energy production and usage.

### **V(K). Planned Program - Planned Evaluation Studies**

**Description of Planned Evaluation Studies**

A written evaluation for will be part of the fleet managers renewable energy training program and feedstock trials will be evaluated to determine increase or decrease in feedstock yields.

## **V(A). Planned Program (Summary)**

### **Program # 6**

#### **1. Name of the Planned Program**

Agriculture, Forestry, and Related Industries

#### **2. Brief summary about Planned Program**

Global food production will fall short of population growth over the next 25 years, according to Dr. Norman Borlaug, Nobel Peace Prize winner and father of the Green Revolution. Current prediction by some scientists is that more food will have to be produced in the next 40 years than has been produced in the past 10,000 years. The challenge for the nation's producers to continue feeding the world and sustaining the environment will be solved in part by improvements in technology, unbiased university-based research and training, and the adaption of production cultures for a changing environment.

Almost 80 percent of forest land in Alabama, or approximately 23 million acres, belongs to nonindustrial private owners. The need to meet the nation's requirement for both traditional forest products and associated amenities such as clean water, recreation, wildlife habitat, and fuel, will continue to increase. Research-based education is needed to help these landowners and land-users actively manage their forestland for potential benefits. Agroforestry, which combines agriculture and timber production on the same acreage, also has a role to play. Landowners can benefit from agroforestry systems at all stages in their forest land management while increasing productivity and improving environmental conditions. Additionally, this program includes commercial production of food animals (beef, dairy, swine, poultry, sheep, goats, ratites, rabbits, etc.) and non-commercial management of companion animals (horses, dogs, etc.). Furthermore, it includes row crop production, fruits and vegetables, turf and ornamentals.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

1. Situation and priorities

The mission of this program area is to assist private citizens, land owners, resource managers and producers in applying research-generated information. The management practices and decisions made by these groups have a significant impact not only on local economies, but equally important, on the



environmental and water quality of much of urban and rural Alabama.

**2. Scope of the Program**

- In-State Extension
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

**V(D). Planned Program (Assumptions and Goals)**

**1. Assumptions made for the Program**

Assumptions for this program area are:

1. Agricultural, forestry, and related systems will continue to be an important component of Alabama's economy, and an important area within future US Farm Bills.
2. There will continue to be new research-based information in the area of agriculture and forestry from Auburn University, Alabama A&M University and other land-grant universities that will be beneficial to individual producers and to society as a whole if it is implemented.
3. The Alabama Cooperative Extension System will continue to receive adequate Federal and state matching funds to support work in this priority program area, and will continue to fund state and regional specialist positions and regional extension agents who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

Institutionalize profitable and successful production and management practices that result in optimal environmental conditions and conserve natural resources.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	57.9	1.3	0.0	0.0
2014	57.9	1.3	0.0	0.0
2015	57.9	1.3	0.0	0.0
2016	57.9	1.3	0.0	0.0
2017	57.9	1.3	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

Sweepnet monitoring for fall armyworms  
Alabama fire ant management program

- Estrus synchronization and fixed time artificial insemination
- Pesticide safety education
- Youth livestock and equine programs
- Beef U
- Dairy U
- Dairy goat U
- Developing online aquaculture curricula
- Angler education
- Harmful algal blooms in the southeastern U.S.
- Community resiliency
- Alabama working waterfront
- Implementation of resiliency index for communities
- Sustainable horticultural crop production
- Integrated pest management systems
- Organic horticulture initiatives
- Protocol for evaluating farming as a business vs. hobby
- Budgeting planning and evaluating cost of agriculture production
- Integrated cogongrass program
- Master Gardener volunteer training
- Gamebird industry support programs
- Animal welfare training
- Backyard poultry flock seminars
- National poultry technology center educational programs
- Sustainable energy
- Soybean and corn rust monitoring program
- Sustainable row crop production

- Urban Environmental Science Education Program
- AAMU/ACES E-waste Institute
- Urban Gardens and Sustainable Landscapes
- Interactive 3-D Game-Based Mobile Water Conservation Learning Lab

**2. Type(s) of methods to be used to reach direct and indirect contacts**

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Newsletters</li> <li>● TV Media Programs</li> <li>● eXtension web sites</li> <li>● Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The target audiences include private citizens, landowners, resource managers and producers.

## V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## V(H). State Defined Outputs

### 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.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

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

**Outcome # 1**

**1. Outcome Target**

Increase profitability of pay-to-fish operations

**2. Outcome Type** : Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 112 - Watershed Protection and Management
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Increase knowledge and awareness of cogongrass ecology and control

**2. Outcome Type** : Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 123 - Management and Sustainability of Forest Resources
- 136 - Conservation of Biological Diversity
- 205 - Plant Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

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

**2. Outcome Type** : Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 205 - Plant Management Systems

- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 4**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

Increase awareness of spread of soybean rust and control measures

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 6**

**1. Outcome Target**

Increase knowledge of ways to successfully provide for farm succession methods

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 7**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 205 - Plant Management Systems
- 307 - Animal Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 8**

**1. Outcome Target**

Increase knowledge of horticultural practices for Master Gardener Interns

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

#### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 9**

##### **1. Outcome Target**

Sustain volunteer support from Master Gardeners

##### **2. Outcome Type : Change in Action Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

##### **4. Associated Institute Type(s)**

- 1862 Extension

#### **Outcome # 10**

##### **1. Outcome Target**

Adoption of rainwater collection systems for urban noncommercial garden

##### **2. Outcome Type : Change in Action Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 205 - Plant Management Systems
- 605 - Natural Resource and Environmental Economics

##### **4. Associated Institute Type(s)**

- 1890 Extension



**Outcome # 11**

**1. Outcome Target**

Increase awareness of water conservation

**2. Outcome Type : Change in Action Outcome Measure**

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1890 Extension

**Outcome # 12**

**1. Outcome Target**

Increase number of acres of rainwater irrigated fruits and vegetables

**2. Outcome Type : Change in Action Outcome Measure**

**3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 205 - Plant Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1890 Extension

**Outcome # 13**

**1. Outcome Target**

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

**2. Outcome Type : Change in Action Outcome Measure**

**3. Associated Knowledge Area(s)**

- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation

- 806 - Youth Development

#### **4. Associated Institute Type(s)**

- 1890 Extension

### **Outcome # 14**

#### **1. Outcome Target**

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

#### **2. Outcome Type : Change in Action Outcome Measure**

#### **3. Associated Knowledge Area(s)**

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 123 - Management and Sustainability of Forest Resources
- 124 - Urban Forestry
- 133 - Pollution Prevention and Mitigation
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife
- 136 - Conservation of Biological Diversity
- 806 - Youth Development

#### **4. Associated Institute Type(s)**

- 1890 Extension

### **V(J). Planned Program (External Factors)**

#### **1. External Factors which may affect Outcomes**

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

#### **Description**

Programs in sustainable agriculture are largely affected by the farm bill, weather, public preference, natural disasters and the economy. Willingness of participants to adopt practices will affect outcome of the program.

## **V(K). Planned Program - Planned Evaluation Studies**

### **Description of Planned Evaluation Studies**

Many different activities and projects are included in this program. Each of these has its own specific evaluation methods. The evaluation methods for Special Funded Projects, Ongoing Projects, and Extension Team Projects within this area are explained in detail within the data-collection and evaluation sections of these description sections on the ACES program planning, evaluation and reporting section of our intranet.

## **V(A). Planned Program (Summary)**

### **Program # 7**

#### **1. Name of the Planned Program**

Community, Family, Home and Youth Development

#### **2. Brief summary about Planned Program**

-Family and Child Development program area focuses on strengthening families by teaching all family members, but especially parents, how to apply research-generated information and knowledge to improve the quality of their lives and family relationships. This area of specialization also includes the Extension Cares, for America's Children and Youth national program initiative and the Urban Family Development program. Team members will also be involved educational programs in the areas of early childhood and provider training, and several other related areas.

-Consumer Science and Personal Financial Management team members will provide programs designed to teach adults how to manage financial resources wisely and make wise consumer decisions regarding purchases, budgeting, managing money, credit and debt management, saving, investing, retirement planning, and estate management. Additionally, consumer education programs will focus on identity theft, fraud, and scams.

-4-H & Youth Development creates supportive environments in which culturally diverse youth reach their fullest potential and develop into productive contributing members of society. Activities and programs include recruitment, training, and management of volunteers and program emphasis includes extending knowledge, teaching life skills, and providing opportunities for belonging, independence, mastery, and generosity.

-Urban youth development offers positive life changing and skill broadening programs with the primary focus placed on programs that are considered new and nontraditional with greater emphasis on reaching urban audiences.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

1. Situation and priorities

-In the State of Alabama and across the nation, the general well being of today's children and families are diverse and educators must exercise caution in the way they respond to family diversity and offer solutions to family issues. Alabama has a growing aging population requiring increased outreach to provide financial, health, legal education, and Alabama home caregivers training. Additionally, grandparents and relatives are taking on greater responsibilities for parenting within extended and nontraditional households. The program cycle will include parenting, child development and family strengthening approaches designed to impact urban, new and nontraditional families, as well as traditional families in underserved communities.

- Recent studies indicate a growing need for families to become more sophisticated in their financial decision-making skills. Financial issues include the management of personal finance, intricate tax laws, fluctuating interest rates, and increase in the use of electronic technology by the financial industry and a proliferation of insurance products. With a proliferation of technology in the marketplace and in the home limited resource families, individuals, homemakers and youth lack consumer education and life-long skills such as decision-making, financial management, time management and care and maintenance of textile items, equipment and resources.

-In 2009, Alabama ranked 48th in composite rankings for indicators related to health, education, safety, and security according to Alabama Kids County data. We ranked 46th in dropout rate, 39th in teen birth rate, 45th in percent children in poverty, and 46th in percent single-parent families. Environmental challenges facing Alabama families and youth will require improved lifeskills with relation to goal setting, critical thinking, communication, career development, healthy living, and self-efficacy.

2. Scope of the Program

- In-State Extension
- Multistate Extension

**V(D). Planned Program (Assumptions and Goals)**

**1. Assumptions made for the Program**

-There is a research-based body of knowledge in the areas of Community, Family, Home and Youth Development that has been established by LGUs and other universities that is beneficial to individuals and society - both urban and rural audiences.

-New researched-based knowledge will be created in Community, Family, Home, and Youth Development and will be beneficial to individuals and to society if it is included in ACES programming.

-Community, Family, Home, and Youth Development programs are a valued component of NIFA and will remain important in future farm bills.

-Community, Family, Home and Youth Development programs fill an important need with regard to society and help prepare youth and adults to be better citizens, leaders, and employees.

-ACES will continue to receive federal and state matching funds to support work in the Community, Family, Home, and Youth Development programs and will continue to fund state and regional positions who work in these program areas.

-The Urban Youth programming unit will continue to expand and offer programs that are designed to attract and engage urban audiences as a program priority with specific emphasis on life skill enhancement, volunteerism, and youth leadership development.

**2. Ultimate goal(s) of this Program**

-Strengthen traditional and non-traditional families including childcare providers, grandparents raising grandchildren, aging populations, and family caregivers by teaching all family members how to apply research-generated information and knowledge to improve the quality of their lives and family relationships.

-Strengthen the capacity of families to obtain economic stability and financial security.

-The Urban Youth Programming Initiative provides personal development, leadership, volunteerism, service-learning and healthy living programs that will empower youth to reach their fullest potential as positive and contributing members of an economically and socially diverse society.

-Create supportive environments in which culturally diverse youth can reach their fullest potential and develop into productive and contributing members of society.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	83.8	14.9	0.0	0.0
2014	83.8	14.9	0.0	0.0
2015	83.8	14.9	0.0	0.0
2016	83.8	14.9	0.0	0.0
2017	83.8	14.9	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

- Grand Parenting
- Successful Aging Initiative
- Shrimp TAA Project
- Youth Learning About Money Management (YLAMMS)
- High School Financial Management Program (NEFE)
- Estate Planning
- eCommerce Training for Small Businesses
- Consumer Score with Credit In Check
- Alabama Home Caregiver
- Strengthening Relationships and Marriages
- Relationship Smarts
- Parenting
- Childcare Provider Education
- Teens Making Impact (TMI)/SET
- Health Rocks
- Volunteer in Urban Programs (VIP)/Service Learning Network
- Positive Youth Development Utilizing Volunteers
- For Youth For Life (FYFL)
- 4-H Base Programming
- Operation Military Kids (OMK)/4-H Military Partnerships

**2. Type(s) of methods to be used to reach direct and indirect contacts**

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> <li>● Other 1 (Web Conferencing)</li> <li>● Other 2 (Social Media)</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Billboards</li> <li>● Newsletters</li> <li>● TV Media Programs</li> <li>● eXtension web sites</li> <li>● Web sites other than eXtension</li> <li>● Other 1 (Newspaper)</li> <li>● Other 2 (Social Media)</li> </ul>

**3. Description of targeted audience**

General Population

## **V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## **V(H). State Defined Outputs**

### **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.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.



**V(I). State Defined Outcome**

<b>O. No</b>	<b>Outcome Name</b>
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.

**Outcome # 1**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Condition Outcome Measure

**3. Associated Knowledge Area(s)**

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Life-skills gained

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Knowledge gains

**2. Outcome Type :** Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 802 - Human Development and Family Well-Being
- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4**

**1. Outcome Target**

Business Plans Developed

**2. Outcome Type :** Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 602 - Business Management, Finance, and Taxation

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

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

**2. Outcome Type :** Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 801 - Individual and Family Resource Management

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 6**

**1. Outcome Target**

Dollars saved as a result of counseling and referrals.

**2. Outcome Type :** Change in Condition Outcome Measure

### **3. Associated Knowledge Area(s)**

- 607 - Consumer Economics
- 802 - Human Development and Family Well-Being

### **4. Associated Institute Type(s)**

- 1890 Extension

## **V(J). Planned Program (External Factors)**

### **1. External Factors which may affect 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.)

#### **Description**

ACES programming efforts have been flexible as a result of adjustments related to natural disasters tornados and hurricanes. Economic issues like the recent downturn and other external factors such as the BP Oilspill also result in programmatic adjustments. Appropriations, policy changes and changes in local, regional and state demographics will always impact programmatic focus.

## **V(K). Planned Program - Planned Evaluation Studies**

### **Description of Planned Evaluation Studies**

-Community, Family, Home, and Youth Development includes many different activities and projects. Each of these has it's own specific evaluation methods. Evaluation methods include pre and post tests evaluations, in some cases, delayed post-test, tracking of volunteer numbers and time devoted to ACES programs, qualitative assessments, grant-required evaluations per funder specs.

## **V(A). Planned Program (Summary)**

### **Program # 8**

#### **1. Name of the Planned Program**

Economic and Community Development

#### **2. Brief summary about Planned Program**

This Priority Program Area is part of the national Economic and Community Development base program area and is intended for all County Extension Coordinators, Urban Regional Extension Agents working in the area of Workforce and Economic Development, and ECD Specialists. All CECs will automatically have an assignment in Economic and Community Development. All CECs, Urban Regional Extension Agents working in this area, Specialists who support this area, and Economic and Community Development Institute (ECDI) staff members will form the Extension Economic and Community Development Priority Program Team. The mission of this program area is to improve the long-term well-being of all communities throughout Alabama by promoting economic prosperity and improved quality of life. This will be accomplished by a four-pronged approach - education and training, research communication, connections and partnerships, and consultation and engagement. Education & Training: improve the practice of economic and community development in the state through targeted educational programs. Consultation & Engagement: help build and strengthen economic and community capacity in communities through leadership development, civic engagement, strategic planning, and economic development. Research Communication: disseminate research findings on issues related to economic and community development. Connections and Partnership: facilitate communication, coordination, and partnerships among the state's economic development community, Extension, and universities. This Priority Program Area is part of the national Economic and Community Development base program area and is intended for all County Extension Coordinators, Urban Regional Extension Agents working in the area of Workforce and Economic Development, and ECD Specialists. All CECs will automatically have an assignment in Economic and Community Development. All CECs, Urban Regional Extension Agents working in this area, Specialists who support this area, and Economic and Community Development Institute (ECDI) staff members will form the Extension Economic and Community Development Priority Program Team. The mission of this program area is to improve the long-term well-being of all communities throughout Alabama by promoting economic prosperity and improved quality of life. This will be accomplished by a four-pronged approach - education and training, research communication, connections and partnerships, and consultation and engagement. Education & Training: improve the practice of economic and community development in the state through targeted educational programs. Consultation & Engagement: help build and strengthen economic and community capacity in communities through leadership development, civic engagement, strategic planning, and economic development. Research Communication: disseminate research findings on issues related to economic and community development. Connections and Partnership: facilitate communication, coordination, and partnerships among the state's economic development community, Extension, and universities.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

**1. Situation and priorities**

Despite the current state and national recessions Alabama, as part of the growing Southern regional economy, has the potential to be among the nation's economic leaders in the 21<sup>st</sup> Century. Successful efforts, which promote sustainability and revitalization, are dependent upon having skilled community leaders. The long-range economic stability of a community correlates positively with the quality of its organized economic and community development. Before economic development can take place, community development must precede it. Various studies and reports from the state department indicate that before significant progress can be achieved in community and economic development, a broad-based economic and community development infrastructure must be in place. Economic and community growth and development are educational processes, which support new and emerging leaders and alert citizens to the importance of promoting viable communities. Having a prepared cadre of leaders available for impacting constructive change in ensuring skilled and educated workforce to meet the challenges being brought by technology is essential. Economic and community development is at the central core of developing a state system capable of producing the energy needed to sustain and improve the state. Approaching economic and community development from a system's view means pulling from the diversity of the entire system - people from different community segments, race, gender, age and thought. We accomplish this in part through: (a) community development; (b) economic development education; (c) entrepreneurship training; and (d) small business development.

Diversity within communities allows citizens to capitalize on the unique skills and expertise which their neighbors have to share. Effective and efficient community economic and community development also promotes communities and organizations working together on issues through organized

collaborations and partnerships. Presently, a shift is occurring in the level of responsibility for public decision-making. Local government leaders are assuming more financial and management responsibilities for programs and services that were once provided by the state or federal government. This means that stronger, more competent public officials are required at the local levels. When leaders emerge and concerned citizens take a stand to make a difference, communities can mobilize to effect positive changes that will benefit the social, emotional, financial and physical needs of citizens. In today's world of constant change, communities need to be aware of networking procedures to acquire resources and build powerful linkages between individuals, groups, and organizations. Through organized efforts in a support atmosphere, agencies and organizations can systematically solve existing and emerging problems that could not be solved by a single group. Solving problems collaboratively means changing policies, laws and regulations to fit the needs of the people. Collaboration also encourages a goal to promote the development, management, and use of Alabama's natural resources consistent with sound environmental principles and ethics, awakening of the community spirit, an emerging trend.

## **2. Scope of the Program**

- In-State Extension
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

## **V(D). Planned Program (Assumptions and Goals)**

### **1. Assumptions made for the Program**

Assumptions for this program area are:

1. Economic and Community Development will continue to be an important sub-component of the Rural Development area within NIFA.
2. There will continue to be new research-based information in the area of Economic and Community Development from Alabama A&M University, Tuskegee University, Auburn University and other land-grant universities that will be beneficial to individuals and to society as a whole if it is implemented.
3. The Alabama Cooperative Extension System will continue to receive adequate Federal and state matching funds to support work in this priority program area, and will continue to fund specialist positions and other extension personnel who work exclusively in this priority area.
4. All CECs will have an economic and community development assignment as part of their overall responsibilities.
5. The use of technology to deliver economic and community development programing will grow in importance in reaching our target audience.

### **2. Ultimate goal(s) of this Program**

The ultimate goal of this program is to achieve economic prosperity and improved quality of life for communities throughout Alabama.

## **V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	15.0	2.1	0.0	0.0
2014	15.0	2.1	0.0	0.0
2015	15.0	2.1	0.0	0.0
2016	15.0	2.1	0.0	0.0
2017	15.0	2.1	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

The primary activities in this area are individualized community, county and regional economic and community development programs. The planned program activities and projects for these include:

**Connections and Partnership**

1. Administer the Alabama Community Leaders Network
2. Provide leadership and support for Alabama Communities of Excellence
3. Provide administrative support for I-85 Corridor Alliance

**Education and Training**

1. Conduct Intensive Economic Development Training Course and Prosperity Forums, a series of courses that explores strategies that lead to economic prosperity.
2. Conduct Alabama-Mississippi Rural Tourism Conference
3. Conduct Impact Alabama Roundtable, a new executive economic development training program for Alabama's top economic developers
4. Conduct online entrepreneurship and business development training
5. Conduct online community development and leadership training
6. Conduct social media entrepreneurship and business development support activities

**Research and Communications**

1. Publish and disseminate research on topics relevant to state economic and community development policy and practice
2. Develop economic impact/forecast models for local communities using software from EMSI (Economic Modeling Specialists)
3. Develop online tracking and evaluation techniques utilizing social media and social network theory

**Consulting, Community Support & Engagement**

1. Continue support for development of a commercial kitchen to serve central Alabama
2. Administer the Extension funded Rural Alabama Initiative grant program
3. Explore development of the Small Town Institute to focus on entrepreneurship, leadership and tourism
4. Participate in the "Stronger Economies Together" Project in association with USDA Rural



Development and the Southern Rural Development Center

- 5. Facilitate deliberative forums, roundtables and town meetings
- 6. Participate on economic and community development advisory boards throughout the state
- 7. Facilitate community and regional strategic planning, assessment and asset mapping efforts throughout the state
- 8. Support regional efforts to promote tourism and retiree attraction

**2. Type(s) of methods to be used to reach direct and indirect contacts**

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> <li>● Other 1 (Web Conferencing)</li> <li>● Other 2 (Economic Modeling)</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Newsletters</li> <li>● TV Media Programs</li> <li>● Web sites other than eXtension</li> <li>● Other 1 (Direct marketing)</li> </ul>

**3. Description of targeted audience**

The primary target audiences are current and future small business owners, community leaders, and local governmental officials in all communities across the state.

**V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## **V(H). State Defined Outputs**

### **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.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

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.

## **Outcome # 1**

### **1. Outcome Target**

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. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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

### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **Outcome # 2**

### **1. Outcome Target**

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.

### **2. Outcome Type : Change in Condition Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

### **V(J). Planned Program (External Factors)**

#### **1. External Factors which may affect 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.)

#### **Description**

Programs in Economic and Community Development are largely affected by all of the areas checked above. However, for the next several years the largest single factor is mostly likely to be the nation's and state's struggling economies.

### **V(K). Planned Program - Planned Evaluation Studies**

#### **Description of Planned Evaluation Studies**

Economic and Community Development includes many different activities and projects. Each of these has its own specific evaluation methods. The evaluation methods for Extension Team Project (ETP) within Economic and Community Development is explained in detail within the data-collection and evaluation sections of the Extension Team Project description sections on the ACES program planning, evaluation and reporting section of our intranet.

**V(A). Planned Program (Summary)**

**Program # 9**

**1. Name of the Planned Program**

Environmental Stewardship

**2. Brief summary about Planned Program**

Environmental Stewardship is a Strategic Program Initiative for ACES and is integrated across all major program areas.

**3. Program existence :** Intermediate (One to five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

**1. Situation and priorities**

Alabama has some of the most diverse landscapes in the US and has 1.3M acres of surface water. These landscapes and water resources provide habitat for the nation's highest number of species and among the highest number of land species. Land cover consists of 72% forest and 17% pasture and cropland. Forest and agricultural products; outdoor tourism and recreation; and access to ample, clean water drive a significant sector of the state's economy. For the future, Alabama has the potential to become a leader in growing biomass and biofuels and other biorenewables.

Risk factors to environmental stewardship include rapid land development, new industry growth, growth in military bases, population growth, drought, aquifer depletion, fossil fuel depletion, high electricity consumption, introduction of invasive species, climate change, and competition for water (tri-states water war). Education and citizen involvement are critical to environmental stewardship. Better decision-making depends upon understanding why local actions are important to achieving goals such as habitat protection; improving fishing, hunting, timber production; economic growth; and long-term quality of life. Heightened environmental awareness will lead to better planning, better project implementation, and increased energy security.

## **2. Scope of the Program**

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

## **V(D). Planned Program (Assumptions and Goals)**

### **1. Assumptions made for the Program**

1. There is a research-based body of knowledge for environmental stewardship that has been established by LGUs and other universities that is beneficial to individuals and to society if relevant educational programs are implemented.

2. New research-based knowledge will be created in environmental stewardship and will be beneficial to individuals and to society if it is included in our environmental stewardship programs.

3. Environmental stewardship is a valued component of ACES and NIFA and will remain important.

4. Environmental stewardship programs fill an important educational need for both Alabama youth and adults.

5. Both staff and volunteers can effectively deliver environmental stewardship programs.

6. ACES will continue to receive federal and state matching funds to support environmental stewardship programs and will continue to fund state and regional positions who work in the subject-matter areas associated with environmental stewardship.

### **2. Ultimate goal(s) of this Program**

Provide research-based information through multiple delivery modes to both youth and adults in an effective educational manner that equips Alabama citizens to make better decisions concerning environmental stewardship -- ensure future generations have the same opportunities to enjoy Alabama's diverse environment as past generations.

## **V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	3.9	1.1	0.0	0.0
2014	3.9	1.1	0.0	0.0
2015	3.9	1.1	0.0	0.0
2016	3.9	1.1	0.0	0.0
2017	3.9	1.1	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

- Alabama Radon Program
- Healthy Homes
- Watershed Management
- The Mobile Bay Oyster Gardening Program
- Aquatic Nuisance Species
- Climate Information to Reduce Agricultural Risk
- Improving Athletic Field Safety and Playability
- GPS 101
- Wildlife Management
- Alabama Master Naturalist Program
- Alabama Backyard Wildlife Habitat Program
- Nutrient Management Planning for Poultry Growers
- Urban Home-A-Syst Program -Urban Natural Resources & Home Grounds Unit
- Skins-N-Skulls
- Classroom in the Forest
- Coosa River Science School
- Alabama Smart Yards

**2. Type(s) of methods to be used to reach direct and indirect contacts**

Extension	
Direct Methods	Indirect Methods



- Education Class
- Workshop
- Group Discussion
- One-on-One Intervention
- Demonstrations
- Other 1 (Web Conferencing)

- Public Service Announcement
- Newsletters
- TV Media Programs
- eXtension web sites
- Web sites other than eXtension
- Other 1 (Proclamations)
- Other 2 (Newspaper)

### 3. Description of targeted audience

Alabama citizens ages 5 - 8 (4-H Cloverbuds), ages 9 - 18 (4-H & Youth Development), and citizens who manage residential landscapes.

### V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

### V(H). State Defined Outputs

#### 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.

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

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

## **Outcome # 1**

### **1. Outcome Target**

- 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. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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
- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 135 - Aquatic and Terrestrial Wildlife
- 136 - Conservation of Biological Diversity

### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **Outcome # 2**

### **1. Outcome Target**

- 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

### **2. Outcome Type : Change in Action Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 135 - Aquatic and Terrestrial Wildlife
- 136 - Conservation of Biological Diversity

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

### **Outcome # 3**

#### **1. Outcome Target**

-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

#### **2. Outcome Type : Change in Condition Outcome Measure**

#### **3. Associated Knowledge Area(s)**

- 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
- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 135 - Aquatic and Terrestrial Wildlife
- 136 - Conservation of Biological Diversity

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

#### **Outcome # 4**

##### **1. Outcome Target**

Increase citizen awareness of best management practices for residential landscapes

##### **2. Outcome Type : Change in Knowledge Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management

##### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

#### **Outcome # 5**

##### **1. Outcome Target**

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

##### **2. Outcome Type : Change in Action Outcome Measure**

##### **3. Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management

##### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

#### **Outcome # 6**

##### **1. Outcome Target**

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

**2. Outcome Type :** Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 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
- 133 - Pollution Prevention and Mitigation

**4. Associated Institute Type(s)**

- 1890 Extension

**V(J). Planned Program (External Factors)**

**1. External Factors which may affect 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.)

**Description**

Natural disaster always have an impact on environmental stewardship. Economy issues have implications for environmental stewardship programs as does any change in appropriations, up or down, and public policy changes and government regulations. There will always be competing programmatic challenges, both internal and external and finally, increasing urbanization has tremendous environmental implications.

**V(K). Planned Program - Planned Evaluation Studies**

**Description of Planned Evaluation Studies**

Evaluation of 4-H & Youth development programming will be facilitated using a question bank that will be available on the ACES intranet. Both adult and youth audience templates will be available. Short-term evaluation will be predominately pre-then-post tests but mid-term and long-term will also use follow-up surveys and may include interviews for qualitative evaluation. Aggregation of local/county evaluations will be facilitated by REAs/UREAs and regional evaluation aggregation will be facilitated by PPT coordinators and statewide evaluation aggregation will be facilitated by the program team providing reports for local/county level, regional level, and state level.



## **V(A). Planned Program (Summary)**

### **Program # 10**

#### **1. Name of the Planned Program**

Financial Literacy Across the Lifespan

#### **2. Brief summary about Planned Program**

This Strategic Program Initiative (SPI) is part of the national Family Development and Resource Management base program area and the Financial Security in Later Life national Extension initiative. The state of the economy is a direct indicator of the financial state of individuals, families and communities. Recent shifts in our nation's economy have caused Alabamians to take a closer look at financial resources and information to improve their knowledge, understanding and response to financial challenges and opportunities. The overall unemployment rate for the state has been consistently high. Natural and man-made disasters have escalated financial situations for families in a number of Alabama regions. And, economic well-being was severely impacted when the mortgage foreclosure crisis hit. Financial well-being is a continuous concern across the lifespan. It is becoming increasingly important as we look at a growing aging population and a future generation of your adults facing unprecedented health challenges and associated costs. No doubt financial literacy is a high priority. Families and individuals are compelled to build financial skills to better prepare to manage spending, credit, investments, saving and to transfer assets to meet short and long term goals. This integrative priority program area addresses systemic problems families face in their economic and financial lives. Team members will provide programs designed to teach youth, adults, and seniors how to manage financial resources wisely and make wise consumer decisions regarding purchases, budgeting, managing money, credit and debt management, saving, investing, retirement planning, estate management, career development and entrepreneurship.

**3. Program existence :** Mature (More than five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes



**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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

1. Situation and priorities

As a nation, we entered the 21<sup>st</sup> century with the highest national debt level in history, a staggering consumer debt load, and runaway health care costs--three major problems affecting all Americans. Also of great concern are low per capita incomes, overextended credit, limited savings and financial plans for retirement, limited life skills, inadequate job skills, high unemployment and underemployment, and public policy issues for urban and rural families including minorities, individuals, youth, elderly, farmers and displaced farmers. Americans today are setting financial records. Savings as a percent of disposable income are at a record low. The percentage of disposable income allocated to pay mortgage and consumer debt has reached a record high. Personal bankruptcy filings have also hit a new record with approximately one million cases. Recent studies indicate a growing need for families to become more sophisticated in their financial decision making skills. The management of personal finance has become very complex with intricate tax laws, fluctuating interest rates, and increase in the use of electronic technology by the financial industry and a proliferation of insurance products. With a proliferation of and technology in the marketplace and in the home limited resource families, individuals, homemakers and youth lack consumer education and life-long skills such as a decision-making, financial management, time management and care and maintenance of textile items, equipment and other resources. Public Issues Education Programs are more important than ever if Alabama Citizens are to make informed decisions or have an impact on the public decision making process. Extension's "public issues education" programs help people understand and use the "public issues education" process to address problems that impact the common good of a community such as environment, education, and health care. By the year 2025 the 65 and older age group will comprise 1/5 of the Alabama's population. Increased life expectancy is resulting in record numbers of people age 65 and older. One out of every six Alabamians is aged 60 or older. Of that number 24% live below the poverty level, and women constitute 71% of the elderly poor. The issues concerning older Alabamians today include outliving retirement benefits, threats to social security, asset transfer and estate management, elder care cost, affordable health insurance, and elder abuse. Increasingly new innovations in technology are finding their way into everyday life and transactions of all Alabamians. Telephone/television/internet shopping is becoming more accessible to Alabamians and is being used. "Pay at the Pump" with credit/debit cards is quite common today. These new innovations create a need for educational programs relevant to how to use the innovations, decisions to use or not to use, purchase selections and recourse, protection against unlawful use and abuse of family's resources tapped by these innovations.

**2. Scope of the Program**

- In-State Extension
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

**V(D). Planned Program (Assumptions and Goals)**

**1. Assumptions made for the Program**

Assumptions for this program area are:

1. Consumer Science and Personal Financial Management will continue to be an important sub-component of the Family and Consumer Sciences area within NIFA.

2. There will continue to be new research-based information in the area of Consumer Science and Personal Financial Management from Auburn University, Alabama A&M University and other land-grant universities that will be beneficial to individuals and to society as a whole if it is implemented. Alabama Cooperative Extension System will continue to receive adequate Federal and state matching funds to support work in this priority program area, and will continue to fund state and regional specialist positions and regional extension agents who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

The ultimate goal of this program is to strengthen the capacity of families to obtain economic stability and financial security. Economic stability refers to the acquisition and effective use of material resources to manage a household and provide for the daily (short-term) needs of the family. Financial security refers to the ability to meet future needs (long-term) through income generation and appropriate money management practices. Economic stability depends on achieving financial security and financial security cannot be experienced fully without economic stability. Consumer Science and Personal Financial Management subject matter will include workforce development, entrepreneurship, family financial management, and consumer education. This priority program area is integrative in order to address systemic problems families face in their economic and financial lives.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	5.9	1.9	0.0	0.0
2014	5.9	1.9	0.0	0.0
2015	5.9	1.9	0.0	0.0
2016	5.9	1.9	0.0	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2017	5.9	1.9	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

The primary activities in this area are 6 major SPI focuses. These are:

- SPI 404 UANNP-A- Promoting Readiness for Employment Possibilities
- SPI 404 UANNP-B- Family Advocacy through Caring Engagement Strategies
- SPI 404 UANNP-C- Smart Home Buying and Foreclosure Prevention
- SPI 404 FCS-A- Retirement Planning
- SPI 404 FCS-B- Financial Education for Youths
- SPI 404 FCS-C- Small Business Startup

**2. Type(s) of methods to be used to reach direct and indirect contacts**

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> <li>● Other 1 (Web Conferencing)</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Newsletters</li> <li>● TV Media Programs</li> <li>● Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The primary target audience is the general public.

## V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## V(H). State Defined Outputs

### 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.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

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.

## **Outcome # 1**

### **1. Outcome Target**

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. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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

### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

## **Outcome # 2**

### **1. Outcome Target**

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.

### **2. Outcome Type : Change in Knowledge Outcome Measure**

### **3. Associated Knowledge Area(s)**

- 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

#### **4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

### **V(J). Planned Program (External Factors)**

#### **1. External Factors which may affect 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.)

#### **Description**

Programs in Financial Literacy Across the Lifespan are largely affected by all the areas checked above.

### **V(K). Planned Program - Planned Evaluation Studies**

#### **Description of Planned Evaluation Studies**

Financial Literacy Across the Lifespan includes many different activities and program focuses. Each has its own specific evaluation methods. The evaluation methods for Strategic Program Initiatives (SPI) within Financial Literacy Across the Lifespan is explained in detail within the data-collection and evaluation sections of the Strategic Program Initiatives description sections on the ACES program planning, evaluation and reporting section of our intranet.

**V(A). Planned Program (Summary)**

**Program # 11**

**1. Name of the Planned Program**

Human Nutrition, Diet and Health

**2. Brief summary about Planned Program**

The Alabama Cooperative Extension System (ACES) the outreach mission is to education and movitabe citizens throughout the state to make better health decisions. Health disparities/equities are influenced by the level of knowledge, access to healthcare, and the ability to self-manage. Chronic disease, health disparities/equities, and healthcare access are major concerns.

The objectives are:

1. Improve the health of Alabamians, targeting limited resouce families, through chronic disease awarenes.
2. Improve the health of Alabamians through physical activity, nutrition education, and health literacy.
3. Empower families to improve health and well-being of families and individuals.
4. Increase access to and consumption of fresh fruits and vegetables, especially to limited resource families.

**3. Program existence :** Mature (More then five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

**1. Situation and priorities**



Activities to meet the objectives of Human Nutrition, Diet and Health include:

- Workshop and Conferences
- Seminars and Health Fairs
- Radio
- Newsletters
- Health Fairs
- Internet Research
- Social Media
- eXtension

**2. Scope of the Program**

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

**V(D). Planned Program (Assumptions and Goals)**

**1. Assumptions made for the Program**

Assumptions for this program area are:

1. Human Nutrition, Diet, and Health will continue to be an important sub-component of the Family and Consumer Sciences area within NIFA.

2. There will continue to be new research-based information in the area of Human Nutrition, Diet, and Health from the land-grant universities that will be beneficial to individuals and to society as a whole if it is implemented. Alabama Cooperative Extension System will continue to receive Federal and state matching funds to support work in this priority program area, and will continue to fund state specialist positions and regional extension agents who work exclusively in this priority area.

**2. Ultimate goal(s) of this Program**

The ultimate goals of this program is to teach people how to apply research-generated information and knowledge to ensure healthy lifestyles based on sound nutritional information and adequate exercise.

**V(E). Planned Program (Inputs)**

**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2013	6.4	1.0	0.0	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2014	6.4	1.0	0.0	0.0
2015	6.4	1.0	0.0	0.0
2016	6.4	1.0	0.0	0.0
2017	6.4	1.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

The primary activities in this area are:

- Arthritis Prevention and Control
- Cancer Awareness
- Environmental Health (Lead, asthma and sun safety)
- General health and physical activity

Each project includes a variety of educational activities. Detailed descriptions of the activities of these project are available on ACES intranet.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Newsletters</li> <li>● eXtension web sites</li> <li>● Web sites other than eXtension</li> </ul>

**3. Description of targeted audience**

The primary targeted audience is the general public, targeting limited resources families.

## **V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

## **V(H). State Defined Outputs**

### **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.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

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

**Outcome # 1**

**1. Outcome Target**

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

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 701 - Nutrient Composition of Food
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 2**

**1. Outcome Target**

CHAMPION Pre and Post Tests and Weight Management Observation

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**V(J). Planned Program (External Factors)**

**1. External Factors which may affect 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.)

**Description**

Programs in Human Nutrition, Diet, and Health are largely affected by all the areas checked above.

**V(K). Planned Program - Planned Evaluation Studies**

**Description of Planned Evaluation Studies**

Human Nutrition, Diet, and Health includes many different activities and projects. Each of these has its own specific evaluation methods. The evaluation method within Human Nutrition, Diet and Health is explained in detail within the data-collection and evaluation sections on the ACES program planning, evaluation and reporting section of ACES intranet.

**V(A). Planned Program (Summary)**

**Program # 12**

**1. Name of the Planned Program**

Workforce Development

**2. Brief summary about Planned Program**

The focus of this Strategic Initiative is to assist in preparing an Alabama workforce comprised of motivated individuals who can successfully navigate employment transitions throughout their lifespan. Alabama Cooperative Extension's contribution to workforce preparation is to connect local, state, and federal agencies, schools, community groups, labor, employers, and others, to further the workforce development of youth and adults. 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. This strategic initiative strives to improve workforce awareness, knowledge, and skills throughout Alabama, with particular emphasis on Entrepreneurship, Broadband Adoption, STEM, career education and planning, and technology applications that support workforce development.

**3. Program existence :** Intermediate (One to five years)

**4. Program duration :** Long-Term (More than five years)

**5. Expending formula funds or state-matching funds :** Yes

**6. Expending other than formula funds or state-matching funds :** Yes

**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%		
	<b>Total</b>	100%	100%		

**V(C). Planned Program (Situation and Scope)**

**1. Situation and priorities**

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. Today's work environment requires that workers receive continuous training and embrace lifelong learning to survive. In this new era, workers can no longer rely on the same skills or knowledge throughout their working lifetime. The best preparation for many workers 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 ability to use information and technology. Indeed, maintaining communications technology skills is now a requisite for most jobs in the New Economy.

Objectives are:

1. Education and Training: Improve workforce awareness, knowledge, and skills throughout Alabama, with particular emphasis on Entrepreneurship, Broadband Adoption, STEM, career education and planning, and technology applications that support workforce development.

2. Stakeholder Connections: Build connections among workforce development stakeholders; create networks (education, business, government) to ensure that existing resources are fully utilized and that stakeholder groups are informed, engaged, and working together.

3. Citizen Engagement: Foster active engagement of all citizens for issues related to education, workforce development, and entrepreneurship.

## **2. Scope of the Program**

- In-State Extension

## **V(D). Planned Program (Assumptions and Goals)**

### **1. Assumptions made for the Program**

Assumptions for this program are:

1. A well prepared workforce is critical to the future of Alabama.
2. Broadband education, STEM education, and career education and planning can have a positive impact on workforce readiness in Alabama.
3. Will require ECDI professional staff time and the staff time of Extension educators throughout Alabama.
4. This Initiative will continue to be supported by a federal Sustainable Broadband Adoption grant of over just over \$1 million.
5. 4-H youth development staff have the ability to recognize and understand the needs of individuals in communities, and to facilitate educational opportunities in response to those needs.

### **2. Ultimate goal(s) of this Program**

As a result of this initiative, Alabama will have a more knowledgeable, skilled, and adaptable workforce that meets the needs of 21st century employers.

## **V(E). Planned Program (Inputs)**

### **1. Estimated Number of professional FTE/SYs to be budgeted for this Program**



Year	Extension		Research	
	1862	1890	1862	1890
2013	4.6	1.7	0.0	0.0
2014	4.6	1.7	0.0	0.0
2015	4.6	1.7	0.0	0.0
2016	4.6	1.7	0.0	0.0
2017	4.6	1.7	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

**Education and Training**

1. The following training modules will be developed: Introduction to Broadband 101, eCommerce, ePublic Safety, eHome, eWorkforce, eCommunity, eLearning, eHealth, eGovernment, eGlobal, and Website Basics: A Primer for Hispanic Small Businesses. The target audience is current and potential workers and entrepreneurs, especially within rural areas and vulnerable populations.

2. Soft-skills training classes will be conducted, as requested. The target audience is current and potential workers.

3. Extension educators will contribute to the development of targeted regional awareness campaigns to educate local residents of the social and economic benefits and practical applications of broadband technology - to support workforce, community, and economic development.

4. Extension and ECDI financial and staff resources will support youth and 4-H programs aimed at high school dropout prevention, skills assessment, career awareness, career planning, and youth entrepreneurship.

5. Provide 4-H and youth development programming that targets reduction in youth risk behaviors that impact earnings and future employability.

**Stakeholder Connections**

1. Extension participation in Regional Workforce Development Boards. The target audience includes CECs and regional agents.

2. Connected Communities Forums that establish connections among representatives from: government, public safety services, citizens, health providers, youth groups, education, businesses, parents, nonprofits, economic developers, telephone and cable companies, electrical utilities, and Internet service providers (ISPs).

**Citizen Engagement**

1. Study circles and/or deliberative forums focusing on education and workforce development. Target audience is county parents, students, workers, and other citizens and stakeholders.

2. Public Workforce and Education Forum (annual). The target audience is county parents, students, workers, and other citizens and stakeholders.

**2. Type(s) of methods to be used to reach direct and indirect contacts**

<b>Extension</b>	
<b>Direct Methods</b>	<b>Indirect Methods</b>
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Other 1 (Simulations)</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Newsletters</li> <li>● Other 1 (Direct marketing)</li> <li>● Other 2 (Mass media)</li> </ul>

**3. Description of targeted audience**

Elementary school aged youth through all adult age groups in Alabama.

**V(G). Planned Program (Outputs)**

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
  - Direct Adult Contacts
  - Indirect Adult Contacts
  - Direct Youth Contacts
  - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(H). State Defined Outputs**

**1. Output Measure**

- 1. Broadband modules created, broadband workshops conducted, and broadband community forums conducted.
- 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.
- 3. Employment simulations, career awareness, skills assessment, and career planning conducted throughout urban and rural Alabama.

- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

**V(I). State Defined Outcome**

O. No	Outcome Name
1	<p>Short-Term Outcomes</p> <ul style="list-style-type: none"> <li>&amp;#61559;Increased awareness among citizens and stakeholders of the social and economic benefits and practical applications of broadband technology.</li> <li>&amp;#61559;Increased awareness of available workforce development resources.</li> <li>&amp;#61559;Increased awareness among young people about the negative impacts of early exit from high school, the rewards available through technical careers, and entrepreneurship opportunities.</li> <li>&amp;#61559;Increased Extension capacity for meeting facilitation, public deliberation, and strategic planning.</li> </ul> <p>Medium-Term Outcomes</p> <ul style="list-style-type: none"> <li>&amp;#61559;Increased knowledge, skills, usage, adoption, and application of broadband technologies by local residents.</li> <li>&amp;#61559;Changed youth behavior related to staying in high school and taking advantage of technical career and entrepreneurship opportunities.</li> <li>&amp;#61559;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.</li> </ul> <p>Long-Term Outcomes</p> <ul style="list-style-type: none"> <li>&amp;#61559;Workforce knowledge and skills are elevated; increased number of entrepreneurs; increased utilization of broadband to support individual and community economic prosperity.</li> <li>&amp;#61559;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.</li> <li>&amp;#61559;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.</li> <li>&amp;#61559;A culture of engagement characterizes each county in Alabama.</li> </ul>
2	<p>Youth will:</p> <ol style="list-style-type: none"> <li>1. Learn how to take control of and make healthy choices.</li> <li>2. Make decisions based on accurate information</li> <li>3. Learn importance of youth/adult partnerships</li> <li>4. Understand consequences of risk behavior</li> <li>5. Make a difference</li> <li>6. Do the right thing</li> </ol>
3	<p>Participants will:</p> <ol style="list-style-type: none"> <li>1. Complete a career plan.</li> <li>2. Complete a skills assessment.</li> <li>3. Complete an education plan.</li> </ol>

**Outcome # 1**

**1. Outcome Target**

Short-Term Outcomes

&#61559;Increased awareness among citizens and stakeholders of the social and economic benefits and practical applications of broadband technology.

&#61559;Increased awareness of available workforce development resources.

&#61559;Increased awareness among young people about the negative impacts of early exit from high school, the rewards available through technical careers, and entrepreneurship opportunities.

&#61559;Increased Extension capacity for meeting facilitation, public deliberation, and strategic planning.

Medium-Term Outcomes

&#61559;Increased knowledge, skills, usage, adoption, and application of broadband technologies by local residents.

&#61559;Changed youth behavior related to staying in high school and taking advantage of technical career and entrepreneurship opportunities.

&#61559;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

&#61559;Workforce knowledge and skills are elevated; increased number of entrepreneurs; increased utilization of broadband to support individual and community economic prosperity.

&#61559;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.

&#61559;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.

&#61559;A culture of engagement characterizes each county in Alabama.

**2. Outcome Type : Change in Knowledge Outcome Measure**

**3. Associated Knowledge Area(s)**

- 608 - Community Resource Planning and Development
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

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. Outcome Type** : Change in Knowledge Outcome Measure

**3. Associated Knowledge Area(s)**

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension
- 1890 Extension

**Outcome # 3**

**1. Outcome Target**

Participants will:

1. Complete a career plan.
2. Complete a skills assessment.
3. Complete an education plan.

**2. Outcome Type** : Change in Action Outcome Measure

**3. Associated Knowledge Area(s)**

- 608 - Community Resource Planning and Development

**4. Associated Institute Type(s)**

- 1890 Extension

**V(J). Planned Program (External Factors)**

**1. External Factors which may affect Outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Populations changes (immigration, new cultural groupings, etc.)

**Description**

Natural disasters that occur would impact priorities of all state organizations including ACES. The economy and appropriation changes could impact funding and workforce availability. Continued immigration issues could impact workforce availability.

## **V(K). Planned Program - Planned Evaluation Studies**

### **Description of Planned Evaluation Studies**

Broadband evaluation will include:

- Course-specific evaluation of training courses; later follow-up survey of participants using Survey Monkey to assess impact of course on knowledge and behavior.
- Survey of students and teachers involved in youth workforce/entrepreneurship programs. Externally administered pre- and post- broadband awareness and application surveys among target populations.
- Survey of Extension educators to assess success in establishing Workforce Alliances and deliberative practices; after 3-5 years, survey county Alliance members to determine impact of Alliance on county workforce issues and relationships.

Evaluation results will be shared to Extension audiences through reports, news releases, direct electronic communication, and PPT and CEC meeting presentations. Results of surveys will be shared directly with all survey participants.

### **4-H and Youth Development evaluation will include:**

- Survey of perceived impact
- Observation
- Participation/enrollment data from 4HPLUS
- Stakeholder perceptions

### **Career Countdown evaluation will include:**

- Pre, intermediate and post testing
- Review of skills assessment, career plans, and education plans