

2010 Alabama A&M University and Auburn University Combined Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

The FY2010 Annual Report for the Alabama Cooperative Extension System has been reviewed and approved by the 1862 Extension Director - Auburn University and the 1890 Extension Administrator - Alabama A&M University.

The Planned Programs contained in the FY2010 Alabama Cooperative Extension System Annual Report provide fiscal accountability for all Federal Cooperative Extension formula funds and the required matching funds for both Alabama A&M University and Auburn University. In addition, it should be noted that many of the programs in the Annual Report are subject to the benefits of fiscal inputs leveraged from other sources, to include additional state appropriations, county funds, and extramural dollars. For additional information on Alabama Cooperative Extension System programs, please reference the ACES website: <http://www.aces.edu/>

Fiscal constraints continue to challenge the Alabama Cooperative Extension System. Fiscal year 2011 will be the third consecutive year of serious budget reductions for the Alabama Cooperative Extension System as illustrated by a cumulative 29 percent reduction in state funding since FY 2008. In addition to the inability to offer salary increases to ACES employees, the System has also enacted reductions in program supports, reductions in ACES state support to community-based programs, and holding most vacant positions for the foreseeable future.

Alabama Cooperative Extension System Administrative and Program Leadership Teams continue to make organizational adjustments and refinements that will respect our past heritage, accept and adjust to the current situation, and position the System to prosper in future years. These changes include ensuring that ACES programs prepare constituents to thrive in challenging economic and social times and to generate adequate resources to support critical System programs.

Sustainability Plus: Sustainability involves living and working in ways that address present-day needs without eroding the ability of future generations to meet their own needs. In 2010, Extension emphasized the theme of "sustainability-plus" through wide-ranging efforts in areas including economic recovery for communities suffering from natural disasters, factory closures, and dwindling rural populations; developing seed sources and promoting cultivation of crops that protect wetlands and waterways; helping small farmers with rainwater recycling systems and major crop farmers and landowners with global positioning systems; providing youth with hands-on experiences that increase respect for the natural world; food safety and security training; an expo highlighting ways to live greener and more sustainably; and many, many more efforts. The 2010 annual report for stakeholders emphasizes this theme and may be found in video, PDF, and ----flip-book versions at www.aces.edu/2010.

FY 2010 Program Highlights

Gulf Oil Spill Response: The Deepwater Horizon oil spill in the Gulf of Mexico created a serious potential for ongoing environmental damage, continued erosion of personal income, and loss of coastal livelihoods. Extension's long-established and respected relationship with the seafood industry,

environmental interests, governments, and leaders in the coastal areas enabled the System to respond quickly. Four multistate task forces began immediately to address issues related to damage and assistance, family and community, food safety and quality, and communications. The coalition provided wide-ranging assistance including hazardous materials training for volunteers; reliable information on fish in Mobile Bay, impacts of oil and dispersants, oyster samples, aquatic ecology of the Mobile-Tensaw Delta; workshops dealing with debt management, resume preparation, and internet job search skills; peer listening training to help residents cope with psychological issues resulting from the oil spill; assistance in developing a regional response and recovery strategy; and numerous other areas.

Precision Agriculture: The goal of the PA program is to facilitate the adoption of geospatial technologies and site-specific management strategies to help farmers reduce application overlap and target crop inputs to where they are needed. This approach allows farmers to increase their efficiency in the field, maximize crop yields, improve environmental stewardship, and compete more effectively in global markets. These new practices have also permitted the investigation of growing alternative bioenergy crops and their long-term impact on production to improve overall efficiency and profitability. In 2010 the www.AlabamaPrecisionAgOnline.com website and social media sites disseminated information and allowed interaction among stakeholders, educators, and the general public. Use of PA technologies on Alabama farms provided annual savings in 2010 of some \$15,000,000 in farm inputs and a 10% average reduction in applied nutrients and pesticides, thereby reducing environmental risks at the farm level. Use of PA technologies resulted in returns of \$2 to \$8 per acre for producers.

Beginning Farmers and Ranchers: Extension leaders in Alabama pioneered an effort that led to the first joint Extension program involving the state's three land-grant institutions--Auburn, Alabama A&M, and Tuskegee universities. With funding from a NIFA grant, they formed the Consortium for Agricultural Newcomers Access to Learning (CANAL), which will train beginning farmers to run viable and sustainable programs. Using proven methods, the program will enhance the ability of Extension to provide beginning farmers and ranchers (those with experience up to 10 years) guidance in sound decision making including financial investments, wise choices of enterprises to begin or transition into, selection of equipment, and labor needs. Another key area is mentoring beyond the initial startup phase, pairing new producers with seasoned, successful producers.

PROSPER: The PROMoting School-community-university Partnership to Enhance Resilience (or PROSPER) Project is an effort to delay or prevent adolescent substance use by addressing issues of peer pressure, aggression levels among youth ages 10-14, and promoting stronger relationships between parents/caregivers and youth. Parents and youth will learn together. This program, which will be implemented in both rural and urban settings, has been scientifically evaluated for effectiveness. Benefits valued at \$9.60 are expected for every dollar spent to implement the "Strengthening Families Program 10-14," a major component of PROSPER. In 2010, Extension conducted three statewide trainings for participants who will work with the project for the next two years.

Body Quest: A youth obesity prevention curriculum using an iPad application (app) with six modules to reinforce learning, Body Quest was developed in 2010 and is currently being pilot tested in 36 of Alabama's 67 counties. The four areas targeted in the curriculum are vegetable and fruit consumption, physical activity, sleep hygiene, and family involvement. A joint effort of 4-H and NEP educators, Body Quest is a hands-on, minds-on curriculum. Educators plan to offer Body Quest in every county Alabama, with a goal of adoption nationwide.

Rapid Response: Each year, row crop producers across the state experience pests, weather extremes, and other obstacles to production. Additionally, private industry bombards producers with marketing based on their profit objectives and sales goals. Producers working with Extension professionals were able to make educated, science-based decisions. The overall economic impact of the program for 2010 is an estimated \$4.5 million.

Boosting Broadband: Extension, through its Economic and Community Development Institute (ECDI), was funded by the U.S. Department of Commerce in 2010 to administer a \$1.2 million Sustainable Broadband Adoption project. "Connecting Alabama: Boosting Broadband to Bridge the Digital Divide" will use interactive, computer-based programs to educate and train Alabama community leaders in the social and economic benefits of broadband technology. Targeted statewide and regional media campaigns promote broadband's practical applications. The target audience includes business, education, government stakeholders, and entrepreneurs, as well as parents and current and potential workers. The project will be conducted in all 67 Alabama counties over the next two years and is a partnership among ECDI, the Alabama Department of Economic and Community Affairs, the Alabama Post-Secondary Education System, and the Alabama Institute for Deaf and Blind.

Rural Alabama Initiative: Among many additional ECDI projects, the institute has administered 39 Extension-funded mini-grants to support local workforce development initiatives over the past five years in counties throughout Alabama (2007-2011). The Rural Alabama Initiative (RAI) grants have also established or supported 35 youth leadership programs throughout the state. In all, 122 RAI grants have supported local economic and community development projects in 59 counties. Each of the projects is conducted by Extension staff or as a partnership project with Extension staff.

ServSafe: According to CDC data, 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths occur in the United States each year due to food borne illnesses and more than 200 known illnesses are transmitted to people from the food they eat. Through the ServSafe program, Extension taught food permit holders how to safely handle food during storage, cooking, and serving. In 2010, uncertified food permit holders were penalized 5 points on their inspection reports, but in 2011, certification will be required. To date, 76% percent of the individuals taking the ServSafe classes have met the criteria for certification. The ServSafe program has resulted in a reduction in the numbers of food borne illnesses from restaurants in the state of Alabama. Inspection scores and food safety standards have risen in those facilities that have completed the ServSafe courses.

Master Gardener: The Master Gardener Program had more than 2,000 volunteers who provided some 190,000 hours to their communities in 2010, valued at \$3.4 million in service through Extension to the citizens of Alabama. Volunteer efforts included public education seminars; information booths and demonstrations at local and county fairs, festivals, plant clinics and farmers markets; a food bank garden that produced more than 10,000 pounds of food; Junior Master Gardener school gardens; community beautification and Adopt-a-Mile participation; landscaping a senior center; plant sales benefitting many projects such as outdoor classrooms and beautification projects; continuation of a 6-year horticulture therapy program at an adult day care center; a sensory garden at an autism center; and many other services including answering home landscape questions through 14 Master Gardener Helpline offices. Volunteers worked almost 12,000 hours on the Helpline, serving more than 6,000 clients.

Alabama Smart Yards: Through a new horticulture program begun in 2010, Extension taught homeowners environmentally friendly gardening. Conservation and efficient, responsible use of our natural resources is the educational goal of the Alabama Smart Yards (ASY) program. Participating in this process saves homeowners time, energy, and money while preserving the unique, natural beauty of Alabama for everyone. ASY is a cooperative alliance developed by the Alabama Cooperative Extension System, the Alabama Department of Environmental Management, the Alabama Nursery and Landscape Association, the Alabama Master Gardeners Association, and the Auburn University Department of Horticulture.

High Tunnel: Extension responded to an NRCS initiative in 2010 to help growers with high tunnel greenhouse production for commercial fruits and vegetables. Although most Alabama growers are new to the system and the level of management is much higher than for traditional methods, high tunnel

production extends the growing season by allowing growers to start earlier and continue later than would be possible in an uncontrolled climate, thereby increasing profitability for their operations.

Successful Aging: The elderly population is growing, having doubled three times since 1900. It is expected to double again within 50 years. A growing generation of older adults means a greater demand for policies, programs, and services to meet their needs. Already evident are increased needs for programs that address home care, the law, health, and financial security for America's senior population. In its Successful Aging Initiative, Extension partnered with Alabama's Bureau of Geriatric Psychiatry to offer courses, screenings, and programs in these areas to people in urban areas of the state. The value of the information for those who participated in programs and screenings is nearly \$300,000. For participants who act on all the information provided, the direct personal savings and their potential savings in legal costs including Probate Court will total at least \$850,000.

Outreach to a Multicultural Alabama: 2010 Census figures revealed that Alabama had the highest rise in Hispanic population of any state in the Southeast, a 145% increase from 2000. Alabama's Asian population rose 71%; its Native Hawaiian and Pacific Islander population 117%. Other racial and ethnic populations also showed growth of 26% (American Indian and Native Alaskan), 234% (other race), and 61% (two or more races). Meanwhile, in 2010 Extension renewed its commitment to serving the state's growing multicultural population by designating a State Leader for Diversity and Multicultural Affairs and focusing on outreach efforts and materials geared to the needs and preferences of these groups, beginning with Spanish-speaking and American Indian populations. Other groups targeted for outreach include Korean, Japanese, and other populations working in automobile plants across the state and in a Georgia plant with workers residing in Alabama.

Have a Healthy Baby--in Spanish! One of many programs offered to Hispanics in 2010, as well as to English-speaking clients, was "Have a Healthy Baby." In this program expectant mothers learn what they need to do both during pregnancy and after the baby is born including how much weight they should gain, how bad habits can affect unborn babies how to use My Pyramid, safe and nutritious food preparation, and breast and bottle feeding safety. By translating materials into Spanish and refreshing language skills, an Extension agent helped Spanish-speaking women ensure that their babies will have a healthier start in life. Plans are to expand the Spanish resources for this program throughout the state.

Teaching More Diverse Audiences about Nutrition: Nutrition education was provided Hispanic, African, Asian, Jamaican, and Russian as well as traditional English-speaking EFNEP clients, eliciting such comments as these: "Lessons in this class have changed my life, because I changed from an unhealthy diet to a healthy one and do at least 30 minutes of exercise daily"; "I now read labels and ingredients, and I now think about how the food I prepare will help my family" and "I now eat healthy--not just for taste or because I'm hungry."

Teens and Tweens Empowerment Conference: Extension's Urban Youth program hosted its third annual conference for teens and tweens. Youth explored topics ranging from health and fitness to science, engineering, and technology (SET) including forensic science, while adult volunteers learned about such topics as estate planning, money management, and cyber bullying.

Beef Cattle Program: Beef cattle producers must be able to document and interpret their production information for economically important traits in order to make sound genetic selection decisions to enhance profitability and marketing. By using information obtained through the Alabama Beef Cattle Improvement and Pasture to Rail programs, producers gained knowledge of the genetic characterizations of their herds. The estimated economic impact for 2010 to Alabama beef cattle producers was nearly \$1 million.

Master Meat Goat Herdsman Program: Goat meat is the most consumed red meat throughout the

world. As the immigrant population continues to rise in America, meat goat production remains one of the fastest growing agricultural enterprises in the livestock industry. Alabama is especially well suited for meat goat production because of climate conditions and a growing number of ethnic and faith-based populations who prefer goat meat. Through its Master Meat Goat Herdsman Program, Extension educated goat farmers about goat meat production including best management practices to produce healthy and productive animals and human health risk factors. Almost 70% of participants said they expected to increase their farm income by 25% or more as a result of their participation in the program.

Alabama Saves: In 2010 the Alabama Saves program educated consumers to help them set financial goals, pay down debt, and save for the future. Participants reported they became better informed and able to make better financial decisions. Most participants reported a gain in financial knowledge and expressed the intent to adopt the recommended practices. Additionally, participants reported an increased ability to avoid fraud, identity theft, and scams. A total of 1,187 Alabamians enrolled in Alabama Saves, exceeding the goal of signing up 1,000 savers in 2010. Youth made up 73% of the new savers and adults accounted for 27%.

4-H Health Rocks!: The 4-H Health Rocks! Program is designed to help teens make wiser health choices and to reduce smoking and substance abuse. Pre- and post-assessment instruments for this program were developed by the University of Nebraska and are to be administered to all Health Rocks! participants on a voluntary basis. The instruments help to determine the knowledge base of participants in drug education before and after the Health Rocks! modules are taught. More than 80 percent of surveys returned indicated that the students are engaged in the learning process and had increased knowledge of illicit drugs and drug abuse in other substances.

Rain Catchment Systems: Alabama residents use more than 100 gallons of water a day for indoor and outdoor purposes, while more than 50% of that consumption is from outdoor activities. The Rainwater Catchment program educates citizens on the environmental, economic, and social impacts of water conservation. In 2010, more than 1.3 million gallons of rainwater was collected and used by program participants, which resulted in a financial saving of \$23,000. Since the collection systems are expected to last for 20 years, the anticipated value is \$462,782 over the next 20 years.

Small Ruminants: As consumer demand for lamb and goat meat continues to rise in the United States, Alabama farmers and ranchers have tremendous potential to diversify, expand, and supply small ruminant meat products. In 2010, 692 goat and sheep producers attended educational activities on marketing, breed selection and criteria, and herd health management to improve the profitability of their operations. As a result, post surveys indicated that 100% of participants gained valuable knowledge about best animal management practices, 100% of participants reported improvements in herd health and production efficiency, and 80% reported increases in profitability ranging from 5 to 15%.

Green Living Expo: The Green Living Expo, formerly the Urban-Rural Interface Conference, is a relatively new program that allows Extension and its partners such as the Huntsville Operation Green Team, the United States Environmental Protection Agency, Walmart, and Legacy to disseminate environmental information to the public. Expo participants are also asked to bring electronic waste, paper, and glass items to recycle. As a result of the information shared at the Expo, most participants indicated they were able to make better-informed decisions about the environment in relation to the products and services they use daily. In addition, the Green Living Expo 2010 chairs and marketing team won a program innovation award and/or the Alabama Cooperative Extension System's 2010 Superior Service Team Award.

Forestry, Wildlife, and Natural Resources: Forestry, Wildlife, and Natural Resources (FWNR) continue to be major issues and activities in Alabama. As such, FWNR activities through ACES are critical for helping ensure that Alabamians practice sound conservation principles. Several success stories in the

area of FWNR involved youth education. For example, this year over two hundred youth went through a Student Field Day, planned by the Chambers County Extension Office and the Chambers County Forestry Planning Committee. In Winston County, 335 sixth graders attended the outdoor field days at the Houston Recreation Area in the Bankhead National Forest; activities included eight learning stations on a variety of natural resource and safety topics. Programming for adult clientele focused on a variety of natural resources issues ranging from water quality to managing wild pigs in Alabama.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	292.6	30.0	0.0	0.0
Actual	264.1	32.1	0.0	0.0

II. Merit Review Process

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

- Combined External and Internal University External Non-University Panel

2. Brief Explanation

THE MERIT REVIEW PROCESS CONTINUES UNCHANGED.

The review process for the Alabama Cooperative Extension System's 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). Each of PPA Co-Chairs reviewed their respective programs to ensure that they accurately represented and addressed critical needs of Alabama residents. In addition, each PPA team completed a thorough reexamination of the Extension Team Projects (ETP) associated with each of PPAs.

A second phase of review was conducted by the Assistant Directors. Working with the PPA Co-Chairs the Assistant Directors checked each program area and related ETPs for: relevancy, ability of Extension to adequately address the issues, duplication with other Extension Team Projects, 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, CFO, HRO) 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 FY2007-2011 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) ensure 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. Stakeholder Input

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

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

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 was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Needs Assessments
- Other (Interagency Directories)

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 was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey of the general public
- Meeting specifically with non-traditional groups
- Meeting with invited selected individuals from the general public

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 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.

Brief Explanation of what you learned from your Stakeholders

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

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

***What were the primary directions stakeholders want you to take? What recommendations did they make?

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

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
6918191	2115511	0	0

2. Totalled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	4554801	1701630	0	0
Actual Matching	6918191	2115511	0	0
Actual All Other	23250868	2375012	0	0
Total Actual Expended	34723860	6192153	0	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous				
Carryover	4554801	630401	0	0

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	4-H and Youth Development
2	Childhood Obesity (Human Nutrition, Diet, and Health)
3	Home Grounds, Gardening, and Home Pests
4	Forestry, Wildlife, and Natural Resources
5	Food Safety (Food Safety, Preparation, and Preservation)
6	Family and Child Development
7	Economic and Community Development
8	Consumer Science and Personal Financial Management
9	Commercial Horticulture
10	Global Food Security and Hunger (Animal Sciences and Forages)
11	Agronomic Crops
12	Farm Management and Agricultural Enterprise Analysis
13	Aquaculture, freshwater, and marine resources
14	Poultry Production and Processing
15	Climate Change
16	Sustainable Energy

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

4-H and Youth Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
704	Nutrition and Hunger in the Population	10%	10%		
724	Healthy Lifestyle	20%	20%		
802	Human Development and Family Well-Being	10%	10%		
806	Youth Development	60%	60%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	77.9	4.4	0.0	0.0
Actual	68.7	5.7	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
1255433	303480	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1800079	377294	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
3883841	423575	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Activities planned for Alabama 4-H Youth Development:

Youth Leadership and Community Service Learning is an educational program established to provide a framework for youth to learn and demonstrate leadership skills through the organization and implementation of community service projects. Health Rocks!, a drug prevention/awareness program, was implemented to provide education in the prevention of drug usage among youth.

Teen Making Impact is an informational and life skill building program that prepares teens with information that supports the development of skills for making sound career decisions, engaging in effective communication, pursuing of healthier lifestyles, and understanding of issues that contribute to productive citizenship.

Volunteer In Urban Programs is designed to recruit, enroll and train volunteers for programming targeting urban audiences.

"Ready? Get S.E.T. to Explore Forensics!" program is designed to offer educational opportunities for youth and adults (as partners) to engage in science, engineering, and technology programs in an effort to encourage interest in these areas

4-H Volunteerism: Volunteers are vital to thousands of nonprofits and governmental agencies nationwide. As demands on organizations such as Extension have increased and the financial resources available to them have declined, the use of and resources provided to volunteers has become even more critical. Volunteerism through 4-H includes management, recruiting, training, supporting, evaluating, rewarding, retaining, and utilizing volunteers to reach a more diverse youth population with greater programmatic variety and social impact. Volunteerism and youth and adult partnerships foster a sense of BELONGING, one of the key essential elements of youth development. Volunteers provide caring relationships with youth as they learn to set goals, develop critical thinking skills, learn to communicate in a complex world and provide many opportunities for self efficacy. Successes will be measured by volunteer contacts, hours served, clubs chartered, qualitative and quantitative measures such as surveys and focus groups of both youth and adult participants.

4-H Science Explorations: To help youth improve literacy, knowledge, skills, and abilities in the sciences and technological applications:

Science & Technology - Improves understanding of and appreciation for science and technology and the capacity and ability to utilize related knowledge and skills. Resource Kits and "Challenges" allow youth to learn subject matter and showcase knowledge and skills.

Natural Resources & Environment - Offers various learning experiences in the areas of land and water management, outdoor recreation, and the urban environment. Youth critically examine information and make decisions by exploring their options, setting goals, and working together.

Biological Sciences - Includes **animal sciences**, providing opportunities for youth to develop leadership and life skills through learning about and caring for animals, animal health, behavior, nutrition, reproduction, breeds, and uses. It also includes **Plant & Soil Sciences**, which engages youth in study of plant growth, nutrients, water and soil in plant growth, and the importance of plants to society.

4-H Healthy Lifestyles: 4-H is committed to the physical, mental and emotional health of youth and is a leader in health-related educational issues including chemical health, mental and emotional health, foods and nutrition, physical health and safety. Four-H activities increase youth knowledge and/or cause action in: healthy lifestyle practices, valuing healthy relationships, improving mental health and managing stress, valuing service and effective consumer practices, adopting risk reducing behaviors to prevent substance abuse, adopting behaviors to maintain personal health and safety and developing appropriate strategies to resolve conflict. The ultimate goal is an increased number of youth that are at a lower risk of serious disease and illnesses - physical/mental/emotional - leading to a reduction in medical costs and greater economic productivity. Programming at the local, regional, and state level through 4-H projects, clubs, school enrichment and other special events and activities supports anticipated outcomes. Success will be measured by qualitative and quantitative measures.

4-H TGIF (Teens Getting Involved for the Future): This ETP is designed to address teen health issues since teen pregnancies across Alabama have increased as have STDs and HIV/AIDS. 4-H T.G.I.F.

be delivered as an Extension 4-H community and school-based teen abstinence until marriage program funded by the Alabama Abstinence Until Marriage Education Program (AAEP) of the Alabama Department of Public Health. *Managing Pressures before Marriage* will be taught by Teen Leaders to sixth graders in seven target counties, (see H) during the school year. The goal is to teach and promote abstinence until marriage from sexual activity and to reduce the occurrence of out-of-wedlock sexual activity among adolescents 10-19 years of age, thereby, reduce the occurrence of pregnancy and sexually transmitted disease and the consequent social, psychological and physical problems. Pre/post evaluation instruments designed by AAEP will be used with all program participants. Participants will increase their knowledge, abilities, and commitment to abstain from sexual activity.

4-H Citizenship & Leadership: Youth gangs and guerilla movements recognize the capabilities of young people for leadership and sacrificial service. Citizenship must provide equally challenging, but constructive, opportunities to engage and extend youth capabilities in partnership with adults. Specific issues identified by local advisory councils to be addressed include: lack of communication between adults & youth, lack of opportunities for youth to lead, youth's lack of goals, citizen apathy, loss of work ethic, and insufficient parental involvement. 4-H has a long history of community service (club projects, conference activity, and contest requirements), youth experiences in governance and leadership (club officers, county/regional/state councils, national conference) and youth-adult partnerships (pervasive throughout the 4-H program). Extending these opportunities to more youth is critical. Programming at the local, regional, and state level through 4-H projects, clubs, school enrichment and other special events and activities supports anticipated outcomes. Success will be measured by qualitative and quantitative measures.

4-H Communication and Expressive Arts: The arts are widely recognized as a means of providing not only self expression and emotional well-being, but also as an aid to academic, economic, and personal success. Through this project, youth and adult advisors will be introduced to music, theater, public speaking, and/or the visual arts, with appropriate opportunities to build and demonstrate their artistic growth. Programming at the local, regional, and state level through 4-H project, club, school enrichment and special events and activities supports anticipated outcomes. Success will be measured by qualitative and quantitative measures.

2. Brief description of the target audience

The primary target audience is youth between the ages of 5 and 18 years old and adult volunteer leaders who work with these youth.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	126512	2491026	451757	6931677

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Recruit, screen, orient, train, and support volunteers

Year	Actual
2010	1199

Output #2

Output Measure

- Club and group organization, management, and reporting

Year	Actual
2010	1711

Output #3

Output Measure

- After School 4-H

Year	Actual
2010	55

Output #4

Output Measure

- In-school enrichment programs

Year	Actual
2010	1250

Output #5

Output Measure

- Operation Military Kids and Military Clubs

Year	Actual
2010	10

Output #6

Output Measure

- Technology Support and Development (people hours of distance education and training per year)

Year	Actual
2010	1200

Output #7

Output Measure

- Grant Development (percent of prorata budget)

Year	Actual
2010	6

Output #8

Output Measure

- Marketing and Public Relations (media counts, presentations, enews, and newsletters)

Year	Actual
2010	350

Output #9

Output Measure

- Activity/Event Development and Management

Year	Actual
2010	450

Output #10

Output Measure

- 4-H Camping and Environmental Education

Year	Actual
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2010 3379

Output #11

Output Measure

- Staff professional development

Year	Actual
2010	22

Output #12

Output Measure

- Positive Youth Development Knowledge and Research (articles, curriculum development, teaching kits)

Year	Actual
2010	5

Output #13

Output Measure

- Leadership and community service programs/institutes

Year	Actual
2010	8

Output #14

Output Measure

- Teens Making Impact Annual Statewide Conference

Year	Actual
2010	165

Output #15

Output Measure

- Volunteers In Urban Programs' Annual Statewide Recognition

Year	Actual
2010	3022

Output #16

Output Measure

- Teens Making Impact enrichment groups (after and in-school sessions)

Year	Actual
2010	15

Output #17

Output Measure

- Statewide Health Rocks Training Groups

Year	Actual
2010	14

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Youth
2	Youth (random sampling)

Outcome #1

1. Outcome Measures

Youth

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	81200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

- Nationwide crisis in under age drug and alcohol usage among youth.
- Youth are lacking in various life skills to ensure positive and productive lives.
- volunteers needed in support of programming.
- Health and youth obesity are at critical levels.
- Science and technology and workforce development education are critical needs.
- Citizenship and leadership life skills are needed for long term economic viability

What has been done

- Health Rocks program implemented across the state targeting youth in the urban center areas.
- Series of life skills, including, coping, career, communication, citizenry, and health and well being was provided through Teens Making Impact program (TMI).
- Healthy living programming
- Science and technology programming.
- Citizenship and leadership programming.

- VIP served to capture number of volunteers in each program area.

Results

- Contacted over 3200 youth and taught a minimum of 10 hrs of educational modules using the Health Rocks curriculum.
- Significant improvement in knowledge and behavior modified in TMI program.
- value of volunteer service, \$2,550,476.20 through VIP volunteerism efforts with Alabama 4-H.
- Self-reported perceived positive effects on knowledge, ability, and actions: youth eat more fruits and vegetables, understand the need and importance of clean water, improved problem solving skills, worked well with others, understand food production processes, exercise more, make better

choices about health and nutrition.

4. Associated Knowledge Areas

KA Code	Knowledge Area
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle
802	Human Development and Family Well-Being
806	Youth Development

Outcome #2

1. Outcome Measures

Youth (random sampling)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	25000	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

802 Human Development and Family Well-Being
806 Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

- Teens Making Impact:
85% of youth improved in decision making skills;
75% of youth improved in public speaking skills;
71% of youth improved skills in interviewing and collection of data;
90% of youth improved skills in practicing acceptable social behavior.

- Health Rocks data for 2010 was submitted to the University of Nebraska, evaluating agent, for analysis, results pending.

- Over 80% improved problem-solving and reasoning skills
- 95.7% exercise more
- 87.5% will be more active
- 81.3% will avoid risky behaviors
- 95.7% will eat more fruits and vegetables
- 89.8% will make better decisions about using the internet
- 92.9% of youth know nicotine causes health problems
- 96.6% learned something about water safety

Key Items of Evaluation

All youth development work either directly or indirectly impacts workforce development -- science, technology, staying healthy so one doesn't miss work, sleep hygiene so one is more productive at work, leadership and citizenship so one makes good decisions concerning self-management and work habits, etc.

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Childhood Obesity (Human Nutrition, Diet, and Health)

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	5%	5%		
702	Requirements and Function of Nutrients and Other Food Components	5%	5%		
703	Nutrition Education and Behavior	45%	45%		
704	Nutrition and Hunger in the Population	5%	5%		
723	Hazards to Human Health and Safety	5%	5%		
724	Healthy Lifestyle	20%	20%		
805	Community Institutions, Health, and Social Services	15%	15%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	20.4	3.0	0.0	0.0
Actual	19.0	3.6	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
320098	188712	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
497114	234611	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1228407	263390	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

ETP 21H: Summary of activities for CHAMPION Program: This program was designed to improve the overall health of the targeted audience through lifestyle changes including eating practices and daily physical activity to improve behavioral habits. Pre and post measures were used to assess conditions prior to and subsequent to training using a curriculum developed by the lead specialist. A series of nutrition education lessons were provided to participants including instructional fitness activities.

2. Brief description of the target audience

ETP 21H: The target for the CHAMPION project was youth (10-18) and adults with limited resources living in the metropolitan inner cities that are at highest health risks.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	8833	162644	3974	0

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	0

Output #2

Output Measure

- Increased the number of youth participating in nutrition education programs Conducted lesson series to improve educational knowledge of youth and adult participants Collaborated with BET to conduct youth health camp for girls Marketed program using flyers, radio, television, health fairs, newsletters, advisory board meetings and success stories Developed 4 grant proposals for funding

Year	Actual
2010	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

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. 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. Therefore, one very significant outcome measure is the number of success stories generated.</p>
2	<p>Major outcome measures in Human Nutrition, Diet, and Health will be the decrease in diseases which are directly related to nutrition, and the decrease in the percent of obese adults and children. The yearly targets below are percentage decreases in diseases.</p>

Outcome #1

1. Outcome Measures

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

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	18	0

3c. Qualitative Outcome or Impact Statement

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

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
723	Hazards to Human Health and Safety
724	Healthy Lifestyle
805	Community Institutions, Health, and Social Services

Outcome #2

1. Outcome Measures

Major outcome measures in Human Nutrition, Diet, and Health will be the decrease in diseases which are directly related to nutrition, and the decrease in the percent of obese adults and children. The yearly targets below are percentage decreases in diseases.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	12	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

- Results for the CHAMPION Program 2010 were as follows:
- Program attendance increased by 62% from 2009
 - Nutrition, physical activity and chronic disease knowledge of participants increased from pre to post test by 58%
 - Total weight loss for participants in the weight mgt program was 202.6 pounds
 - Nutrition knowledge increased from pre to post test by 44%

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
723	Hazards to Human Health and Safety
724	Healthy Lifestyle
805	Community Institutions, Health, and Social Services

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Evaluation results for CHAMPION 2010 were as follows:

- Youth participation increased by 62%
- Knowledge gain increased by 58%
- Weight loss = 202.6 pounds
- Knowledge for BET youth audiences increased by 61%

Key Items of Evaluation

CHAMPION program evaluations indicated more youth were engaged in nutrition education, increased their knowledge of nutrition, used of the Food Guide Pyramid, and loss weight as a result of camp program activities which included a reduced caloric intake diet of healthy food.

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Home Grounds, Gardening, and Home Pests

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	20%	23%		
111	Conservation and Efficient Use of Water	20%	31%		
125	Agroforestry	0%	12%		
205	Plant Management Systems	40%	3%		
216	Integrated Pest Management Systems	20%	0%		
604	Marketing and Distribution Practices	0%	3%		
608	Community Resource Planning and Development	0%	14%		
806	Youth Development	0%	14%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	25.7	4.3	0.0	0.0
Actual	23.2	3.4	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
393823	179378	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
608794	223008	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2473055	250363	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

A. Master Gardener (MG) is designed to recruit & train volunteer leaders to assist county offices of the ACES in disseminating knowledge and info relative to landscaping and gardening applicable to their area of Alabama.

1. Volunteer training consists of 10 to 14 wks of training in garden related subjects: soil nutrition, pest ID and management, plant ID and management, water management, etc. Classes are a coord. effort between the REA's, CEC's, County Agents, and various MG associations

2. MG Interns are expected to participate in the state-wide activity, Master Gardener Helpline (13 MG offices in Alabama); and assist other ACES outreach

a. ACES staff build and sustain partnerships with the local MG volunteer associations to maintain their support programs

b. Printed training materials are provided

c. A webpage is provided as support for the MG Helpline

d. A web available database is provided for volunteer service records

B. The Alabama Smart Yard (ASY) program is created to provide current, research-based instruction through subject-matter workshops. The objective is to provide in-depth instruction related to best management practices; managing pests, water, and soil, plant selection, and other resource inputs that affect both gardening success and surrounding environments. Master Gardeners conduct demonstrations on the same topics for the public.

1. Under the direction of HGGHP REAs, workshop/demo planning and implementation is a collaborative effort with CECs, Certified MG's, state Extension Specialists and possibly local professional horticultural experts.

C. Rainwater Collection, Water Conservation and Irrigation Methods (RWC) program provided rainwater collection and irrigation training to extension educators and leaders in the community. Trained educators then conducted homeowner and commercial agriculture producer workshops on rainwater collection and used for irrigation.

D. The Urban Horticulture Initiatives (UHI) program provided horticulture therapy activities and educational programs to youth and adults to increase: student grades, participant and family health and well-being through local fruit and vegetable production and increased consumption.

E. The New Nontraditional Horticulture Enterprises (NNHE) program provided training for small-scale producers interested in alternative, nontraditional crops or markets. Small scale, specialized producers can increase their income by diversifying crops, finding alternative water resources, and adopting alternative markets.

1. Education, training, publications, field days for producers interested in alternative small-scale production.

2. Education and demonstrations about rainwater collection and use for small-scale crop irrigation, high tunnels, beekeeping organic production, small fruit and shiitake mushrooms.

3. Farmers' Market Education Series

2. Brief description of the target audience

MG - The program is specifically designed to train community volunteers who will disseminate research-based information. Master Gardeners are essential to the mission of the ACES

ASY - the target audience is non-commercial gardeners

UHI - the target audience will primarily be directed toward troubled youth and adults, elderly (nursing homes), and homeowners.

NNHE - the target audience is small scale and/or limited-resource farmers.

RWC - the target audience is Agents and extension trainers and ultimately home gardeners and farmers.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	111823	26972034	12397	0

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	6	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- a. MG = 8. 1) Increase public awareness of resource management related to home gardens, grounds and pests for 1,500 Helpline clients. 2) 500 new volunteers for the ACES (sign the MOA, complete training, report minimum of 50 volunteer hours) 3) 20 volunteer training classes 4) Maintain 14 MG offices to support state-wide Helpline 5) Maintain web based resources for volunteer records (service hours and Helpline call data) 6) Volunteers conduct surveys of Helpline clients 7) Maintain 1,300 partnerships with Certified MG's 8) Encourage 140,000 volunteer service hours with the ACES and in local communities b. SY = 7. 1) 25 Public workshops and demonstrations 2) 1,000 workshop participants 3) 6 Master Gardener volunteer trainings in subjects related to Smart Yards (water management, sustainable practices, IPM) 4) 3 Agent trainings in Smart Yards material 5) Media stories for increased public awareness 6) Printed materials for participants 7) Evaluate workshops & trainings with a pre/post tests c. UHI = 7. 1) 6 Success stories 2) Training materials for employers on the benefits of hiring ex-offenders 3) 1,085 participants 4) Income from plant sales = \$6,000 5) 2 Community gardens 6) 1 Rainwater catchment demo 7) Increased income of producers \$1,000 d. NNHE = 6. 1) 4

Demonstrations 2) 5 Tours 3) 4 workshops 4) 5 news articles 5) 3 field days 6) 6 newsletters e. RWC = 7. 1) Training Document for Rainwater Collection to include handouts, PowerPoint Presentations and training materials 2) One PowerPoint training 3) Rainwater collection publication 1 4) Thirty clientele training sessions 5) Three rainwater collection demonstrations 6) One Rainwater collection website 7) One online publication

Year	Actual
2010	35

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	knowledge gain for MG Intern pre/post tests
2	volunteer support for local ACES programs from Certified MG's
3	volunteers change a resource management habit or start a new management technique in their home landscape
4	Helpline clients try a new management technique in their home landscape
5	knowledge gain for SY wksp/demo participants
6	knowledge gain for SY trainers
7	knowledge gain for UHI participants
8	adoption of rainwater collection system for non commercial garden
9	gallons of community water saved
10	increase UHI's perceived value up 10% from \$41,000
11	new jobs for homeless, ex-offenders, and troubled youth
12	reduce recidivism of criminal ex-offenders %/each/30
13	reduce incarceration costs
14	intermediate behavior change improvement in UHI youth, %/each/175
15	long term behavior change and adoption of water conservation methods by homeowners, %/each/800
16	increase tourism \$ as a result of UHI programs at visitor sites
17	pounds weight loss/person in UHI participants, lb/each/25

18	increase in vegetable consumption in UHI participants, %/each/25
19	increase activity levels in UHI participants, %/each/25
20	expand crop diversity for producers selling at Moulton and Guntersville markets (NNHE program, #crops/each/40
21	increase the acreage of irrigated land in NNHE participants
22	increase sales and profits of vendors at the Guntersville and Moulton markets, \$/yr/30
23	extend market season by 4 weeks for a profit increase, \$/4 wks
24	increase registered honeybee colonies in Morgan and Lawrence Counties
25	increase number of beekeepers
26	increase acreage pollinated, # A/all demonstrators
27	increase honey production by demonstrators, # lb/demonstrator
28	increase income for 7 NNHE demonstrators, \$/all demonstrators
29	improve knowledge and skills of NNHE participants, %/each/225
30	increase the production of crops irrigated with rainwater catchment (long range by 2014), \$/all 20 producers
31	increase the production of high value and organic crops for 20 NNHE producers, %increase or \$1,000
32	gallons of water collected (saved) and used on crops
33	knowledge gain by RWC Trainers (year 1)
34	trainees will conduct workshops throughout Alabama during 2009 and 2010.
35	citizens' knowledge gain about rainwater collection, %/all 500
36	citizen adoption rate of rainwater collection systems
37	gallons of water collected/saved

38	citizens expand or start new edible garden
39	commercial crop production increases in lb/year as a result of catchment water system installation
40	volunteers extend outreach of ACES via Helpline for consumers
41	MG vol's remained active due to staff inputs
42	workshop/demo participants learn value of crop rotation
43	participants learned concepts of organic/natural vegetable gardening
44	workshop participants share research based info from workshop with others

Outcome #1

1. Outcome Measures

knowledge gain for MG Intern pre/post tests

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30	27

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

gardeners use and affect natural & economic resources while caring for home landscapes; they need to know and appreciate how to conserve these resources for their own landscape success and that of surrounding environments

What has been done

teach residential gardeners best management for residential landscapes - and recruit them to volunteer time teaching same to others

Results

knowledge gain per class ranged from 22% to 36%

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #2

1. Outcome Measures

volunteer support for local ACES programs from Certified MG's

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

volunteers change a resource management habit or start a new management technique in their home landscape

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	500	523

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #4

1. Outcome Measures

Helpline clients try a new management technique in their home landscape

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

knowledge gain for SY wksp/demo participants

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	51

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

residential gardeners need an understanding of resources used in managing home landscapes

What has been done

workshops and demo's statewide

Results

knowledge gain ranged from 22 - 111% per event

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #6

1. Outcome Measures

knowledge gain for SY trainers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30	19

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

MG vol's were trained to assist & conduct their own workshops

What has been done

ACES offered training to vol's

Results

knowledge gain of 19%

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships

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

Outcome #7

1. Outcome Measures

knowledge gain for UHI participants

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	78

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
608	Community Resource Planning and Development
806	Youth Development

Outcome #8

1. Outcome Measures

adoption of rainwater collection system for non commercial garden

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1	6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #9

1. Outcome Measures

gallons of community water saved

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10000	1300000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #10

1. Outcome Measures

increase UHI's perceived value up 10% from \$41,000

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	4100	1768

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
608	Community Resource Planning and Development
806	Youth Development

Outcome #11

1. Outcome Measures

new jobs for homeless, ex-offenders, and troubled youth

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	27	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships

- 111 Conservation and Efficient Use of Water
- 608 Community Resource Planning and Development
- 806 Youth Development

Outcome #12

1. Outcome Measures

reduce recidivism of criminal ex-offenders %/each/30

Not Reporting on this Outcome Measure

Outcome #13

1. Outcome Measures

reduce incarceration costs

Not Reporting on this Outcome Measure

Outcome #14

1. Outcome Measures

intermediate behavior change improvement in UHI youth, %/each/175

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	33	72

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
608	Community Resource Planning and Development
806	Youth Development

Outcome #15

1. Outcome Measures

long term behavior change and adoption of water conservation methods by homeowners, %/each/800

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	38

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

Outcome #16

1. Outcome Measures

increase tourism \$ as a result of UHI programs at visitor sites

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	25000	660

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #17

1. Outcome Measures

pounds weight loss/person in UHI participants, lb/each/25

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	16	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #18

1. Outcome Measures

increase in vegetable consumption in UHI participants, %/each/25

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	43

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #19

1. Outcome Measures

increase activity levels in UHI participants, %/each/25

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	10

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #20

1. Outcome Measures

expand crop diversity for producers selling at Moulton and Guntersville markets (NNHE program, #crops/each/40)

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	4	14

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #21

1. Outcome Measures

increase the acreage of irrigated land in NNHE participants

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	13

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #22

1. Outcome Measures

increase sales and profits of vendors at the Guntersville and Moulton markets, \$/yr/30

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30000	2000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
604	Marketing and Distribution Practices

Outcome #23

1. Outcome Measures

extend market season by 4 weeks for a profit increase, \$/4 wks

Not Reporting on this Outcome Measure

Outcome #24

1. Outcome Measures

increase registered honeybee colonies in Morgan and Lawrence Counties

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10	43

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #25

1. Outcome Measures

increase number of beekeepers

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	22

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #26

1. Outcome Measures

increase acreage pollinated, # A/all demonstrators

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	114

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #27

1. Outcome Measures

increase honey production by demonstrators, # lb/demonstrator

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	106

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #28

1. Outcome Measures

increase income for 7 NNHE demonstrators, \$/all demonstrators

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2975	1500

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #29

1. Outcome Measures

improve knowledge and skills of NNHE participants, %/each/225

Not Reporting on this Outcome Measure

Outcome #30

1. Outcome Measures

increase the production of crops irrigated with rainwater catchment (long range by 2014), \$/all 20 producers

Not Reporting on this Outcome Measure

Outcome #31

1. Outcome Measures

increase the production of high value and organic crops for 20 NNHE producers, %increase or \$1,000

Not Reporting on this Outcome Measure

Outcome #32

1. Outcome Measures

gallons of water collected (saved) and used on crops

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	20000	1300000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #33

1. Outcome Measures

knowledge gain by RWC Trainers (year 1)

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30	85

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #34

1. Outcome Measures

trainees will conduct workshops throughout Alabama during 2009 and 2010.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30	8

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #35

1. Outcome Measures

citizens' knowledge gain about rainwater collection, %/all 500

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	60	82

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
608	Community Resource Planning and Development

Outcome #36

1. Outcome Measures

citizen adoption rate of rainwater collection systems

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
------	---------------------	--------

2010

5

6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #37

1. Outcome Measures

gallons of water collected/saved

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2000000	1300000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #38

1. Outcome Measures

citizens expand or start new edible garden

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	250	382

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

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

Outcome #39

1. Outcome Measures

commercial crop production increases in lb/year as a result of catchment water system installation

Not Reporting on this Outcome Measure

Outcome #40

1. Outcome Measures

volunteers extend outreach of ACES via Helpline for consumers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	6315

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

MG vol's answer residential garden related questions from 13 MG office around state

What has been done

13 offices are networked via "call center" IP phones

Results

assisted 6,315 clients; 83% said info helped them make better decision; 70% said info save time, effort or money of client; 79% very satisfied with service

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #41

1. Outcome Measures

MG vol's remained active due to staff inputs

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	1693

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

vol's need a respected leader to remain focused on the mission of Extension

What has been done

training new Interns; supporting local vol associations; contributing additional and advanced training to vol's; encouraging and recruiting them for various activities

Results

36 staff shared their time from other commitments (total 6.3 FTE's) to retain 1,693 vol's and train 538 new vol's

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems
806	Youth Development

Outcome #42

1. Outcome Measures

workshop/demo participants learn value of crop rotation

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	85

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

home food production is increasing; participants need knowledge; crop rotation can prevent/reduce pest pressures

What has been done

demonstration garden created in 2009; used again as teach location

Results

participants learned how to apply crop rotation and its importance for home vegetable garden

4. Associated Knowledge Areas

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

Outcome #43

1. Outcome Measures

participants learned concepts of organic/natural vegetable gardening

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	88

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

increased interest in home vegetable gardens; request info on "organic" production; but are not clear how to accomplish or what it means

What has been done

workshop series

Results

88% learned about low input methods for home vegetable production

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #44

1. Outcome Measures

workshop participants share research based info from workshop with others

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	80

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extension time and resources can never reach the entire population needing info for a specific topic

What has been done

workshop participants are encouraged to share their new knowledge with others

Results

80% of participants said they would share their new information learned

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

1. Reduction in volunteers due to poor economy.
2. Reduced clientele response to workshops due to economic situation
3. Increased privacy conflicts with need to do more surveys and evaluations to meet federal and state reporting requirements
4. Limited resources, proration, and distribution timing reduced quality and quantity of workshops.
5. Staff changes
6. Size of programming area per Agent prevents hosting face to face programming in every county every year; clients still prefer this in our rural state
7. Developing and delivering quality evaluation instruments is a challenge; need a dedicated staff at state level
8. Diseases destroyed one entire on-farm demonstration.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Key Items of Evaluation

Over all **Urban Horticulture** programs participants averaged 78% knowledge gain. Learn and Serve youth participants increased their math and science scores by 1.5 grades or D to C in math and F to C in science, a 27% increase. 322 Alabamians expanded or started an edible garden and increased fruit and vegetable consumption by 43%. volunteers contributed 19 FTEs valued at \$84,094.

Six small fruit, vegetable and organic production, rainwater collection, shiitake mushroom, farmers' market and beekeeping meetings, classes and field days/tours were conducted for 1,061 clientele. six proposals were written and four were funded at \$38,500. Producers have increased income/profits by 75,643 as a result of programs conducted by UREAs.

Rain Water Collection - residents collected and used 1,300,000 gallons of rainwater for irrigation of commercial crops. The impact in 2010 was \$23,139 and the continued benefits over the next 20 years will exceed \$460,000 without future inputs. Rainwater collection reduced the nitrogen entering creeks and streams by 150 pounds and reduced

potable water use by 1.3 million gallons. Grants for \$321,000 were obtained in 2010 to improve knowledge of and encourage water conservation by residents.

Master Gardener total impact = \$3, 437,424 and vol time = 102 FTE's. MG's gave 11,716 vol hrs to the Helpline; assisted 6,315 callers. Added support directly to ACES assisting various program delivery.

b) Other notable MG projects: public educ seminars; info booths/demo's at local, county & state events in many locations; a food bank garden produced over 10,000 pounds of food; rain garden installation at Jr High School; community beautification and Adopt-a-Mile; numerous school gardens; a Horticulture Therapy program at Adult Day Care; a sensory garden at Autism Health Ctr; demo gardens across state; c) callers to the SW Helpline: 83% of clients said the information they were given helped them make a better decision relative to the question they had, 79% would recommend the Helpline to someone else.

Alabama Smart Yards a) collected rain water instead of potable for irrigation = \$ saving and reduced prob's in watersheds resulting from runoff; 58% understood how to install rain barrel & 53% planned to install one; 56% planned to irrigate from harvested rain water; 50% learned how to calculate volume of roof runoff. b) Soil management and cover crops = healthy soil leads to fewer added fertility inputs, increased yields, and has a positive effect on water quality; excess siltation from bare soils contributes to NPS in waterways; 134% learned about soil and cover crop mgt c) Crop rotation is one strategy reducing pest prob's in veg production; fewer pest prob's often results in fewer pesticides applied; 85% of participants learned more about crop rotation in home veg garden; 75% learned how to apply IPM strategies; 118% learned more about insect pest ID d) Farmers Mkt Nutrition Prog, DeKalb - fresh fruit/veg for low income citizens; 65 farmers sold produce; \$13,134 in proceeds; 437 low-income seniors received/used \$30 voucher booklets

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Forestry, Wildlife, and Natural Resources

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	5%	0%		
123	Management and Sustainability of Forest Resources	20%	0%		
124	Urban Forestry	10%	0%		
125	Agroforestry	5%	0%		
131	Alternative Uses of Land	5%	0%		
134	Outdoor Recreation	10%	0%		
135	Aquatic and Terrestrial Wildlife	5%	0%		
136	Conservation of Biological Diversity	5%	0%		
216	Integrated Pest Management Systems	5%	0%		
605	Natural Resource and Environmental Economics	15%	0%		
608	Community Resource Planning and Development	5%	20%		
805	Community Institutions, Health, and Social Services	5%	40%		
806	Youth Development	5%	40%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	20.4	3.8	0.0	0.0
Actual	14.0	3.8	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
237577	199183	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
367259	247630	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2198362	278005	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

A primary program in this area is the ETP 18A (Saving Towns Through Asset Revitalization--STAR)-U&NNTP

One of the primary goals of the STAR program is to create educational opportunities outdoors that encourage children and adults to appreciate the environment. It offers ways to bring people and plants together for positive individual, family and community development. STAR fosters personal growth through relevant involvement in environmental awareness and nature appreciation. Program initiatives represent the latest in cutting-edge research-based interventions for family and community well-being using Forestry, Natural Resources and Wildlife Management. It is an important aspect of the urban and new and nontraditional unit of the Alabama Cooperative Extension System.

ETP 18B (Invasive Plant Ecology and Control in Alabama)

Invasive plants continue to be an increasing problem across Alabama and the Southeastern United states. Numerous species such as cogongrass, Chinese privet, Chinese tallowtree, silktree, water hyacinth, and tropical soda apple pose a severe threat to forests, pastures, ROWs, natural areas, urban green spaces, lakes and rivers. Alabama Cooperative Extension System personnel across multiple PPTs dealt with numerous invasive plant related issues on a daily basis and many expressed the desire for more intensive invasive plant training. Our goal was to increase understanding among ACES personnel, State and Federal agencies, and the general public on identification, impacts, and control of invasive plants.

ETP 18C (Integrated natural resource management)

This project was an outreach program that reflected innovative forest management practices that integrated timber, wildlife, tourism and other activities in a sustainable management approach, and added value to the land and forest operations. The program allowed private forest landowners in rural areas of Alabama, such as the Black Belt region, to develop multiple income streams from a greater number of products from their forests and maintained long-term forest sustainability.

ETP 18D (Natural Resource Program)

This ETP provided natural resources education to the general public. It focused on the non-timber, non-game aspects of natural resources management. Programming provided information on emerging

environmental policy issues, trends in management, conservation and preservation, and Community-Based Water Monitoring. Information was organized using the major watersheds of the state as a template. A multi-disciplinary team of resource specialists developed web-based and printed materials. A quarterly Natural Resources web-based newsletter was developed. Involvement in the Alabama Water Watch Program included promotion of AWW, serving as a resource center for water testing kits, coordination of workshops, and training as AWW monitors and trainers.

ETP 18F (Urban & Community Forestry)

Proper urban tree care and management contribute to making communities more livable by providing healthy and safe urban trees that are functional and aesthetically pleasing. This ETP served as an outreach to Alabama communities and citizens interested in developing and/or strengthening an organized approach to city tree management through educational programs, including tours, seminars, workshops and trainings in urban forestry. It targeted diverse audiences of professionals, laymen, volunteers and youth, as well as encouraged participation in the Tree City, USA program, Arbor Day Contests and observances, Tree & Beautification Board Academy, and other continuing education and professional development offerings.

More information can be obtained on the ACES intranet.

2. Brief description of the target audience

ETP A18 18A (Saving Towns Through Asset Revitalization--STAR)- U&NNTP):

The STAR program was open to limited resource farmers, homeowners, youth, adults, students, and elderly in urban and nontraditional settings (i.e., staff professionals, city, county and state personnel, neighborhood association members, public and private school system educators/teachers, recreational therapists and residents of public housing). Target areas included long-term care/nursing home facilities, after school youth programs, colleges/ universities, community center day program participants, and child and adolescent group homes.

ETP 18B (Invasive Plant Ecology and Control in Alabama):

Invasive plants have the potential to impact anyone; therefore, this ETP was applicable to the entire population of the state, but was geared to natural resource professionals, as well.

ETP 18C (Integrated natural resource management):

General population and, more specifically, natural resource managers

ETP 18D (Natural Resource Program)

General population and, more specifically, natural resource managers

ETP 18F (Urban & Community Forestry):

General population and, more specifically, natural resource managers

ETP 18B (Invasive Plant Ecology and Control in Alabama):

Invasive plants have the potential to impact anyone; therefore, this ETP was applicable to the entire population of the state, but was geared to natural resource professionals, as well.

ETP 18C (Integrated natural resource management):

General population and, more specifically, natural resource managers

ETP 18D (Natural Resource Program)

General population and, more specifically, natural resource managers

ETP 18F (Urban & Community Forestry):

General population and, more specifically, natural resource managers

The STAR program was open to limited resource farmers, homeowners, youth, adults, students, and elderly in urban and nontraditional settings (i.e., staff professionals, city, county and state personnel, neighborhood association members, public and private school system educators/teachers, recreational therapists and residents of public housing). Target areas included long-term care/nursing home facilities, after school youth programs, colleges/ universities, community center day program participants, and child and adolescent group homes.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	14738	1963002	1624	5917

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- The goal of S.T.A.R. is to promote nature-based opportunities for intergenerational families in urban and community forest settings through outreach efforts with a variety of collaborators and partners. Through the provision of knowledge on the human dimensions of greenspace development, audiences will gain information that will allow them to become more environmentally aware citizens and will enhance their capacity to support organizations and community services that reconnect people to built and natural outdoor forestry and wildlife resources. The following toolkit programs will be used to achieve a greater synergy between curative effects of the social forest on the emotional, economic, psychological, spiritual and social well-being of Alabama residents in nine target counties: * Using GPS & STAR Geocaching to Promote Physical Activity and Tree Education * Building Exposure to Nature with Intergenerational Families through Traditional Street Games * Faith Gardens: A Green Pathway to Community Revitalization * Promoting Songbird Recovery Project in Under-served Neighborhoods * Honey Bee Preservation in the Urban Forest * Monitoring Impact of Human Activity on the Greater Mobile Bay * Portable SOD Toolkit: Environmental Education for Congested Urban Settings * Tree City USA: Strengthening Economic Development Efforts in Depressed Communities
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- When Babe Turns to Beast: These workshops are designed to help farmers and landowners manage wild pigs. These feral pigs threaten crops and the ecological balance of Alabama forestland. In Alabama, wild pigs were once limited only to the southwest region of the state; however, they have expanded into virtually all of Alabama's 67 counties. ACES has planned, coordinated, and conducted workshops on feral pig management statewide. The first workshop was in what is considered ground zero--southwest Alabama. The workshop attracted some 50 participants, including farmers. Workshops are planned for next year. These new workshops are designed to show farmers and landowners the best ways to reduce pig numbers.
Not reporting on this Output for this Annual Report

Output #3

Output Measure

- a). UREAs attended a Legacy Environmental Partners Teacher Training Workshop to support program delivery. b). Several planning meetings were held to discuss Tree City USA and the projected benefits: of greater emphasis on management of existing green-space and adding new green-space. c). Several partnerships/ collaborations were formed or continued including those with Landmark Park, Wiregrass Beekeepers Association and Wiregrass Master Gardeners. d). Fourteen individuals were trained and became new beekeepers; with two being youth. e). Over 30 volunteer trainings, workshops, demonstrations, extension activities, and field days (i.e., different street game events, honey bee preservation demonstrations, gardens/tranquility gardens workshops, songbird field trips, neighborhood development consultations, and youth and nature events) were conducted by UREAs. f). Educational information was shared via radio shows, TV shows, websites, online publications, and newspaper articles, several are listed below: 1. Landmark Park to Conduct Beekeeping Programs 2. Science on Saturday at Landmark Park: The Amazing Honey Bee 3. Youth Adventure Day Conducted at Landmark Park
Not reporting on this Output for this Annual Report

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	A major outcome will be the increase in active, viable county forestry and wildlife committees.
2	Desired outcomes are improved knowledge in the human dimensions of green space development among intergenerational families, enhanced neighborhood participation in urban forestry activities, increased use of environmental stewardship practices and greater engagement with the urban forest as a recreational asset, health and wellness resource and a source of emotional and physical well-being. Knowledge Gained - 90% gain in knowledge of human dimensions of green space development and the importance of the urban forest in post-survey results from workshop/training programs in one or more of the 8 toolkit areas. Change in Behavior - 25% change in behaviors based on application of knowledge gained from S.T.A.R. workshops and training programs in one or more of the 8 toolkit areas. Change in Culture - 15% change in organizational and community functions based on one or more of the toolkit areas.
3	Each ACES employee is required to provide a success story on the specific program activity that they are implementing. The success story elements include: What, Why, When, Where and Who the program targeted. It showcases changes in habit, lifestyles or attitudes. The most significant outcome is the number of success stories generated.

Outcome #1

1. Outcome Measures

A major outcome will be the increase in active, viable county forestry and wildlife committees.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
131	Alternative Uses of Land
134	Outdoor Recreation
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity
216	Integrated Pest Management Systems
605	Natural Resource and Environmental Economics
608	Community Resource Planning and Development
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #2

1. Outcome Measures

Desired outcomes are improved knowledge in the human dimensions of green space development among intergenerational families, enhanced neighborhood participation in urban forestry activities, increased use of environmental stewardship practices and greater engagement with the urban forest as a recreational asset, health and wellness resource and a source of emotional and physical well-being. Knowledge Gained - 90% gain in knowledge of human dimensions of green space development and the importance of the urban forest in post-survey results from workshop/training programs in one or more of the 8 toolkit areas. Change in Behavior - 25% change in behaviors based on application of knowledge gained from S.T.A.R. workshops and training programs in one or more of the 8 toolkit areas. Change in Culture - 15% change in organizational and community functions based on one or more of the toolkit areas.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
131	Alternative Uses of Land
134	Outdoor Recreation
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

- 216 Integrated Pest Management Systems
- 605 Natural Resource and Environmental Economics
- 608 Community Resource Planning and Development
- 805 Community Institutions, Health, and Social Services
- 806 Youth Development

Outcome #3

1. Outcome Measures

Each ACES employee is required to provide a success story on the specific program activity that they are implementing. The success story elements include: What, Why, When, Where and Who the program targeted. It showcases changes in habit, lifestyles or attitudes. The most significant outcome is the number of success stories generated.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

- | KA Code | Knowledge Area |
|---------|---|
| 608 | Community Resource Planning and Development |
| 805 | Community Institutions, Health, and Social Services |
| 806 | Youth Development |

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

A large number of manmade nest boxes were tampered with throughout the nesting season. This affected the bird populations. There was also increased competition for nest boxes from invasive species.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Evaluation Results for ETP 18 (Saving Towns Through Revitalization - STAR) were:
-Knowledge retention, self-esteem, school achievement, conflict management, and parental relationships were factors assessed through surveys and questionnaires.

The impact value of the STAR Program was estimated to be over \$9,000. Specifics of the evaluation results include:

- Over 60% of adult participants retained knowledge in the targeted areas
- Over 30% of adults indicated an interest in organizing neighborhood-based outdoor activities
- Over 70% of the students indicated that they planned to incorporate their environmental activities into school science projects.
- There was a significant increase in the number of hits to the STAR website
- There were over 1336 visits to the Faith Based Garden website
- Street game volunteers contributed over \$2,500 in hours
- Over \$600 in grant funds were generated

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Food Safety (Food Safety, Preparation, and Preservation)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
501	New and Improved Food Processing Technologies	10%	10%		
503	Quality Maintenance in Storing and Marketing Food Products	10%	10%		
504	Home and Commercial Food Service	10%	10%		
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	35%	35%		
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	35%	35%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	23.6	4.3	0.0	0.0
Actual	11.3	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
190092	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
295213	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
753030	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

At the end of 2010 the Food Safety, Preservation and Preparation PPT trained nearly 2112 Food Service workers across the state. Over 125 classes have been taught by 9 REA's. This training course has a very tough exam at the end of the course and once the individual has passed the test they become certified for 5 years. Also in 2010, 103 food processors were assisted through the Food Testing and Assistance Program. A Better Process Control School was conducted in the spring and fall in 2010. The spring class taught in Clanton, Alabama had 25 participants and the fall class had 10 participants. All 35 successfully completed the course of study which certified them by the Food and Drug Administration to process acidified foods. Participants in the course came from all over the United States.

2. Brief description of the target audience

Food Service Workers, general public and food processors.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	18527	1980650	17629	248011

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	2

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	A major outcome will be the number of food service workers who participate in Extension sponsored Food Safety Training.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different 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 Measures

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

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	400	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
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

Outcome #2

1. Outcome Measures

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

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	18	2147

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

General Public about food Safety issues as well as the food service organizations and the food processors. Food Safety is a concern to everyone.

What has been done

Trained food processor and food service directors in safe food handling practices.

Results

2112 Food Service Workers were trained and 35 food processors were trained.

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
503	Quality Maintenance in Storing and Marketing Food Products
504	Home and Commercial Food Service
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

2112 Food Service Workers were trained and 35 Food Processors were trained and evaluated.

Key Items of Evaluation

At the end of 2010 the Food Safety, Preservation and Preparation PPT trained nearly 2112 Food Service workers across the state. Over 125 classes have been taught by 9 REA's. This training course has a very tough exam at the end of the course and once the individual has passed the test they become certified for 5 years. Of the 2112 individuals completing the class, 76% of the individuals were able to pass the class and become certified.

Thirty -five processors successfully completed the Better Process Control School.

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Family and Child Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	70%	70%		
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	10%	10%		
806	Youth Development	20%	20%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	23.6	4.3	0.0	0.0
Actual	25.3	5.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
425862	262466	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
661365	326305	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1616428	366331	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The primary activities in this area are 9 statewide Extension Team Projects. These are:

ETP13A - BEE/Sponsored Parent Home Visitation

ETP13B - Child Care Provider Education

ETP13C - Family Development Credential Training

ETP13D - Grande RAPP Grandparents and Relatives as Parents Program - U&NNTP - Continues to serve as a statewide entity that coordinates programming efforts to address concerns of grandparents and relatives parenting children. The primary delivery mode is through support groups and services. During 2010 eight support groups were established servicing 16 Alabama Counties through outreach efforts of 7 urban regional agents and 2 regional agents.

ETP13F - Successful Aging Initiative - U&NNTP - The Alabama Cooperative Extension System has partnered with the state of Alabama's Bureau of Geriatric Psychiatry to deliver educational and training programs designed to address issues relevant to aging/dementia and associated health, financial and legal education. During 2010, three conferences were held, lesson series were conducted, "Records and Important Papers" publications were designed and distributed, and health screenings were provided.

ETP13G - Building Parent and Youth Assets

ETP13H - Strengthening Relationships and Marriages

ETP13I - Parenting in Nontraditional and Under Served Urban Families Program - U&NNTP

ETP13J - Parenting Children and Adolescents

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

2. Brief description of the target audience

ETP 13D - The primary target audiences For the Grande RAPP Grandparents and Relatives as Parents Program are parents and grandparents and the children for whom they provide care.

ETP 13F - The primary target audience for Successful Aging Initiative are Seniors citizens and senior caregivers

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	22671	564629	0	2933

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	9

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	A major outcome will be the number of parents who participate in Extension sponsored parenting training.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different 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 Measures

A major outcome will be the number of parents who participate in Extension sponsored parenting training.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	400	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #2

1. Outcome Measures

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

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

A growing generation of older adults means a greater demand for programs and services. ACES' Urban Affairs unit has put in place the "Successful Aging" and "Relatives as Parents- RAPP" to address home care,law,health and financial security for Alabama's seniors.

What has been done

Successful Aging and RAPP programs offered conferences, quarterly lesson series, wills,published resources for recordkeeping and RAPP support groups were established in 16 metro regions.

Results

Summary of State Defined Outcomes for the RAPP and the SAI Program were: 38 wills were drawn, over 1100 free health screenings conducted, 2500 trained in recordkeeping. As kinship caregivers, 50% understood their legal rights and knew what to expect in terms of ages and stages of the child dev. 70% felt confident to speak on behalf of the children (with teachers, doc., etc).

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Economic downturn, increased cost of living and less mobility due to increase in gas prices.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Post follow up indicated 50% of participants in the RAPP program were better prepared to function as kinship caregivers (including communicating with children, understanding ages and stages of development, communicating on behalf of the child with teachers, doctors, etc., asking for help when needed and managing stress). Successful Aging participants were better able to manage their resources through record keeping, a small percentage established wills, and 100% increased their health care and financial literacy,

Key Items of Evaluation

More than 4,000 citizens are better prepared physically and fiscally to manage resources, maintain records and pursue healthy lifestyles in later life through Alabama's Successful Aging and Relatives as Parents program offerings in 2010.

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Economic and Community Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
605	Natural Resource and Environmental Economics	15%	15%		
608	Community Resource Planning and Development	60%	70%		
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	13%	5%		
805	Community Institutions, Health, and Social Services	12%	10%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	23.7	3.9	0.0	0.0
Actual	18.8	4.6	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
312770	243572	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
493239	302815	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1765836	339961	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The primary activities in this area were individualized community, county and regional economic and community development programs plus 5 statewide Urban Extension Team Projects (ETPs) including:

- ETP 14A Welcome To The Real World: Career Exploration and Educational Planning - UANNP
- ETP 14H Hispanic/Latino Outreach and Programming - UANNP
- ETP 14I Smart Home Buying & Foreclosure Prevention - UANNP
- ETP 14J Virtual Minority Business Development and Marketing - UANNP
- ETP 14K Partnership for Community Economic Development - UANNP

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

The Urban Affairs and New Nontraditional Programs (UANNP) targeted urban audiences in Alabama's Metropolitan Statistical Areas (MSA) with programs focused to enhance outreach in the areas of: 1) career development, 2) first home buying and foreclosure prevention, 3) community partnerships and 4) virtual businesses development and marketing.

- Welcome to the Real World "a Real Life Simulation Program" provided career exploration and career planning for youth and youth adults and promoted expanded youth and adult community partnerships to explore career development needs of youth in inner city areas. Over 14 simulation programs were conducted with 652 youth being served through the program in 2010.

-The ACES Smart Home Buying program (in partnership with Neighborworks of America and the Alabama Community Development Corporation) prepared 5 certified Extension agents in the Alabama's MSAs to train in first time home buying and foreclosure prevention to address the national crisis in the housing market. 130 adults were trained in budgeting, home buying basics, credit and loans, and loss mitigation.

-The Virtual Business program was developed in 2010 to work with minority business owners to enhance their capacity through online marketing and technical assistance.

-The Partnerships for Economic Development program sought to form effective partnerships to stimulate economic development, focusing on nonprofits and government entities.

Activities of the individualized programs included:

- Connections and Partnership
 - o Administration of the Alabama Community Leadership Network
 - o Providing leadership and support for Alabama Communities of Excellence program
 - o Publication of quarterly ACTION newsletter
 - o Providing administrative support for I-85 Corridor Alliance
 - o Participate on economic and community development advisory boards throughout the state
- Education and Training
 - o Conducting the Intensive Economic Development Training Course
 - o Created new executive economic development training program for Alabama's top economic leaders (Impact Alabama)
 - o Conducting three Prosperity Forums educational workshops
 - o Administers inter-disciplinary Graduate Minor in Economic Development
 - o Conducting Alabama-Mississippi Rural Tourism Conference
 - o Conducting statewide County Extension Coordinator Training
- Research and Communications
 - o Developed economic impact/forecast models for local communities using software from EMSI

(Economic Modeling Specialists)

- o Developed instrument to be used in multiple community settings to stimulate citizen and stakeholder engagement
 - o Created a blog and using Facebook, Plaxo, Linked-in and Twitter to communicate with target audiences
 - o Developed and maintains comprehensive statewide economic development resource directory
- Consulting, Community Support & Engagement
- o Administration of Extension funded Rural Alabama Initiative grant program
 - o Received and administering \$1.2 million grant to increase broadband adoption
 - o Developed economic development strategy for Lee and Russell counties
 - o Administration of RC&D Councils grant program
 - o Provides consultation services to communities throughout Alabama on rural and agritourism projects
 - o Participated in Turning the tide on Poverty project in association with Southern Rural Development Center
- o Working with City of Hartselle to create a strategic plan
 - o Designed and manages the Old Federal Road Rural Development Project

2. Brief description of the target audience

The primary target audiences are current and future community leaders and local governmental officials in all communities across the state. The programs also target citizens interested in entrepreneurship and developing their economic capacity.

Programs also targeted inner city youth and young adults who are exploring their careers and/or seeking employment as new hires or as displaced workers affected by the economic downturn, and families impacted by the housing crisis.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	60149	2333596	49375	1555730

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	5	0	5

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Outcomes from this program area include: a) Number of community and economic development programs conducted, b) Community and economic development training resources developed, c) Number of community and economic development projects conducted
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.
3	The initial extension team project set as a goal significant improvement in each area where a learning objective was set by 30% of program participants.

Outcome #1

1. Outcome Measures

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

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	350

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is no shortage of ideas about what we should be doing for rural communities. Leaders in every community already have good ideas for local projects. What they often lack are the financial resources to support the strategies and projects that they have identified.

What has been done

The Rural Alabama Initiative (RAI) grant program was created to provide seed money for some of these worthwhile community initiatives. Priority was given to projects featuring collaborations among organizations and jurisdictions in rural Alabama. The Extension-funded RC&D grant program was also administered.

Results

ECDI funded 12 Rural Alabama Initiative projects for 2010 at a total of over \$60,000. The RAI grant application process was very competitive. The 12 RAI projects addressed a range of community and economic development issues throughout the state. Approximately \$1,003,300 dollars of Extension-funded RC&D grants were administered that funded over 100 projects.

4. Associated Knowledge Areas

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

Outcome #2**1. Outcome Measures**

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

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	35	24

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

The Success Stories for 2010 specific to the Economic and Community Development PPT are available online on the ACES intranet.

What has been done

The Success Stories for 2010 specific to the Economic and Community Development PPT are available online on the ACES intranet.

Results

The Success Stories for 2010 specific to the Economic and Community Development PPT are available online on the ACES intranet.

4. Associated Knowledge Areas

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

Outcome #3

1. Outcome Measures

The initial extension team project set as a goal significant improvement in each area where a learning objective was set by 30% of program participants.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The programs in this area served over 1000 of the states residents. The programs provided training on budgeting, financial management, home ownership, entrepreneurship, business start-up and a host of other topics. Program participants recieved vital information to help them achieve their economic goals.

What has been done

In order to gage the effectiveness of the programs and how it directly impacted the target population a pretest, posttest, and delayed posttest were conducted. These test were conducted for each program in this area. The responses will not only be use to gage the success of the program for the 2010 program year, but to also help improve the program for 2011

Results

Smart Homebuying-Of the program participants 60% increased their knowledge on home buying. Of the respondents 95% increased their knowledge in one or more of the program target areas (manage money, manage credit, create home buying plan, get a good mortgage loan, shop a home). After the programs conclusion 52% of the respondents reviewed their credit, 72% increased savings, and 90% completed one or more of the program action items (budget, home

buying plan, savings plan, credit plan, loss mitigation plan). Welcome to the real world - Of the program participants who responded to the post survey: 30% created an education plan, 26% created a career plan, 18% reported improvement in school, and 24% reported improvement in academic performance. A total of 27 businesses signed up to participate in the Minority business development program.

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes

Brief Explanation

The poor national and state economies and the lingering drought conditions were the two largest external factors that had an impact on outcomes. The economy resulted in less than expected state and federal revenues which resulted in appropriation changes. One of the largest impacts was on the RAI grant program, which was cut by over 90%. The drought also added financial pressures to many small and large communities.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Economic and Community Development included 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.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 8

1. Name of the Planned Program

Consumer Science and Personal Financial Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
602	Business Management, Finance, and Taxation	10%	10%		
607	Consumer Economics	20%	20%		
801	Individual and Family Resource Management	50%	50%		
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	20%	20%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	12.3	2.8	0.0	0.0
Actual	11.1	2.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
186907	107673	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
290267	133861	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
730393	150282	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The primary activities in this area are 4 statewide Extension Team Projects. These are:

- 1. ETP 15A - Employment and Entrepreneurship
- 2. ETP 15B - Consumers Score with Credit in Check through Responsible Spending

During the 2010 program year, more than 3,500 face-to-face contacts were made through the Consumers Score with Credit in Check program. Participants developed designas dewresource management skills and received information and resources to build credit scores to improve financial standings. Workshops, seminars and resource management conferences were conducted; and news articles brochures, and publications were distributed. The program focused on checking, credit, spending, investing and avoiding scams through a 6 lesson series with pre, post, and delayed post assessments.

Web-page Update

Web-page Update

- 3. ETP 15C - Family Financial Security and Consumer Education
- 4. ETP 15D - Financial and Consumer Literacy

2. Brief description of the target audience

The primary target audience is the general public.

ETP 15B, Consumers Score with Credit in Check programs targeted limited resource, underserved youth and adult audiences in Alabama's metropolitan statistical areas.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	2882	713891	624	0

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Total number of people completing financial management education programs who actually adopted one or more recommended practices to decrease consumer credit debt, or increase investing and savings, and plan for retirement within six months after completing one or more of these programs.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. 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. Therefore, one very significant outcome measure is the number of success stories generated.

Outcome #1

1. Outcome Measures

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

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	500	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

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

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	18	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

During 2010, evidence of the impact of the state's economic downturn reflected in spending, investing and ongoing struggles related to foreclosure and homeownership. The economic recession was particularly impactful on young professionals who were job searching, and the elderly on fixed incomes. Services focused on budgeting, credit management, saving and investing to build credit scores and improve financial standings.

What has been done

Programs and services were offered in 2010 through the Consumers Score with Credit in Check program to facilitate responsible management of resources to avoid financial risks, indebtedness and bankruptcy, and to improve consumer's financial status with credit and lending.

Results

- Increased knowledge on spending and how to develop a spending plan
- Improved management of spending
- Increased saving and investing

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Outcomes of the Consumers Score with Credit in Check program were affected by:

- Economic Recession
- Accelerated un-employment
- Increased cost of living
- Short-term assessment of outcomes (more time is needed between actual training and delayed post-assessments to assess clients' behavior and to determine long term outcomes)

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

For participants in the Consumers Score with Credit in Check program, at the completion of post and delayed post evaluations:

- 88% knew how to obtain information on their credit score
- 81% understood the steps in the buying process
- 47% increased their savings
- 52% developed a family spending plan
- 58% began keeping records of spending

Key Items of Evaluation

At the completion of the Consumers Score with Credit in Check program, one of the priority programs for Consumer Sciences in Alabama, more than 90% of the participants knew the advantages of planned spending, understood credit cards - their advantages and disadvantages and how they should be used - and their overall effects on credit scores.

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Commercial Horticulture

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%	0%		
111	Conservation and Efficient Use of Water	5%	0%		
205	Plant Management Systems	50%	0%		
215	Biological Control of Pests Affecting Plants	5%	0%		
216	Integrated Pest Management Systems	30%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	11.7	0.0	0.0	0.0
Actual	11.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
186169	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
287790	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1190077	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Non ETP Commercial horticulture activities will include commodity update meetings, field visits, office visits, and problem solving as well as on-going programming/research in support of Alabama's commercial horticulture industries.

Planned program activities in this area will be multi faceted to meet the needs of this diverse program area.ETP's (Extension Team Projects) will be developed based on stakeholder input include:

ETP19A Commercial fruit and Vegetable Horticulture

ETP19B Vegetable IPM Educational Campaign

ETP 19C Promotion of Sustainable Blueberry Production

ETP 19D Fire Ant Management Education and utilization of Broadcast Bait Spreaders

ETP 19G Trap Crop Utilization in Stink Bug Management

Grower commodity meetings covering nursery, greenhouse, turf, fruits, and vegetables.

Horticulture training for Extension faculty and Master Gardeners, ex. Home Grounds Team, Master Gardener Lectures.

On-farm demonstrations related to pest management, cultural practices, and new cultivars

State conference and workshops for traditional and non-traditional clientele.

Commercial horticulture integrated pest management thrust - Web Conference IPM strategies,

Monitoring and management of fruits and vegetables pest education

Asian Citrus Pysllid and Citrus Greening Disease education and management

2. Brief description of the target audience

The primary target audience is commercial horticulture producers of fruits, vegetables, nuts, turfgrass, greenhouse and nursery.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	26108	730014	1742	4500

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	12	3	15

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	1

Output #2

Output Measure

- Asian Citrus Psyllid and Citrus Greening Disease Management
Not reporting on this Output for this Annual Report

Output #3

Output Measure

- Water conservation through irrigation design and technology
Not reporting on this Output for this Annual Report

Output #4

Output Measure

- In-state educational meetings

Year	Actual
2010	0

Output #5

Output Measure

- On-farm demonstrations in pest management, new cultivar evaluations, and cultural practices

Year	Actual
2010	6

Output #6

Output Measure

- Horticulture training for Extension faculty and Master Gardeners in fruits, vegetables, turf, and ornamentals

Year	Actual
2010	15

Output #7

Output Measure

- Multi-state planning and implementation of commodity meetings for experienced and novice producers

Year	Actual
2010	1

Output #8

Output Measure

- On farm consulting

Year	Actual
2010	525

Output #9

Output Measure

- High tunnel workshop and Extension Timely Information publications

Year	Actual
2010	6

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program.
2	Water conservation and proper irrigation design and scheduling
3	Commodity educational meetings
4	Extension faculty and master gardener training
5	On-farm demonstrations
6	Multi-state commodity meetings
7	Asian citrus psyllid and citrus greening disease education and management

Outcome #1

1. Outcome Measures

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

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Commercial horticulture industries have a huge economic impact on Alabama. The Green Industry alone has a 2.9 billion dollar impact (Economic Impact of Alabama's Green Industry, Special Report Series No.7,2009, Alabama Agricultural Experiment Station). While not as great the fruit and vegetable sectors in reporting, account for over 61 million dollars market value (2007 Census of Agriculture State Profile). There are over 48,500 farms in Alabama and many of these are horticultural producing operations.

What has been done

8,129 face-to-face adult contacts, over 1,100 youth contacts, over 183,000 non face-to-face,16 regional education meetings, 6 workshops (3 hands-on), 1 state-wide fruit and vegetable conference, 1 turfgrass field day, 3 sports turf workshops, nursery and landscape meetings

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

Outcome #2

1. Outcome Measures

Water conservation and proper irrigation design and scheduling

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

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

Outcome #3

1. Outcome Measures

Commodity educational meetings

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2500	875

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Growers have available numerous means of commodity information however only one major source for unbiased research based educational information. Winter/Spring meetings, workshops, and conferences are a major means of updates and latest research as well as grower to grower learning.

What has been done

33 commodity meetings were held across Alabama covering fruit, vegetable, citrus, and other commodities. Regional agents and specialists/researchers provided valuable updates to experienced growers and critical basics to novice and less experienced growers.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

Outcome #4

1. Outcome Measures

Extension faculty and master gardener training

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

On-farm demonstrations

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

Outcome #6

1. Outcome Measures

Multi-state commodity meetings

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2500	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

Outcome #7

1. Outcome Measures

Asian citrus psyllid and citrus greening disease education and management

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

{No Data Entered}

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)

Program # 10

1. Name of the Planned Program

Global Food Security and Hunger (Animal Sciences and Forages)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
204	Plant Product Quality and Utility (Preharvest)	10%	0%		
205	Plant Management Systems	10%	0%		
213	Weeds Affecting Plants	15%	0%		
301	Reproductive Performance of Animals	5%	10%		
302	Nutrient Utilization in Animals	15%	20%		
303	Genetic Improvement of Animals	10%	20%		
307	Animal Management Systems	15%	20%		
311	Animal Diseases	5%	20%		
315	Animal Welfare/Well-Being and Protection	15%	10%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	23.5	3.5	0.0	0.0
Actual	21.9	4.1	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
371644	217166	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
574507	269987	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
3134696	303105	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

A comprehensive programming effort was established and implemented for all animal species along with substantive forage programming since forages impact animal nutrition and production of meat of most livestock species.

Alabama A&M University was lead institution on all goat, sheep and rabbit training. Outreach activities with emphasis on sheep and goat production systems included five (5) county workshops, one (1) regional field day, one (1) statewide symposium, one (1) multistate conference and one (1) promotional cookout (**ETP11B**). Additionally, two (2) Master Meat Goat Herdsman Programs, averaging 3 days in duration each, were conducted. These comprehensive training activities addressed topics such as reproduction, nutrition, forage and pasture management, health management, meat quality assurance, FAMACHA and parasite control, individual body condition and scoring, facilities and fencing, predators and predation, and marketing (**ETP11M**).

Significant efforts were spent teaching beef cattle producers about marketing options of feeder calves and replacement bulls and heifers. Alabama Beef cattle Improvement Association (BCIA) in conjunction with ACES personnel held several programs demonstrating the importance of proper recording of performance and health information. This knowledge provided feeder calf producers opportunities with organized cattle sales which grossed over \$800,000 marketing 10,000 head. For sellers of 468 bulls (BCIA purebred producers), an economic impact of \$312,850 was calculated for 2010. For commercial BCIA producers, 117 open heifers were sold for an average selling price of \$784/heifer which totals to an impact of \$91,670. Commercial BCIA producers also sold 210 bred heifers for an average selling price of \$1273/heifer to make an impact of \$267,265 (**ETP11C**).

Several educational programs focused on utilizing technology to become more energy efficient in raising forages. GPS technology in applying fertilizers, pesticides and herbicides and ensuring producers know when the optimal time to cut forages all increases the energy production of the plants (**ETP11H**).

Many consumers are asking to buy locally raised food. A series of programs were established to educate producers on how to raise and market locally raised livestock for meat. All marketing options were explored and rapport with local small processors were established. This program will continue in 2011 to raise consumer awareness of where and how their food is produced (**ETP11N**). Additionally youth programs, such as B.E.E.F. U and DAIRY U were conducted for over 150 youth, which emphasizes food production.

Companion animals are also an important part of many families. In 2010, one (1) dog obedience training camp was initiated and conducted by Alabama A&M extension personnel. This outreach education activity consisted of obedience training, costume and talent show, followed by a series of educational videos on dog care and grooming. Another event was the annual Dogs in the Park festival. The event served as a venue to learn about dog nutrition, reproduction, health, management, behavior, and obedience training. **(ETP 11A).**

2. Brief description of the target audience

For Alabama A&M University, the primary target audience was meat goat and sheep producers developing profitable, sustainable animal production systems. Secondary target audience was consumers of lamb and goat meat products concerned with dietary cholesterol and other health issues. Tertiary target audience was dog fanciers, 4-Hers and the general public interested in learning the positive training methods to improve the human-dog relationship and adopting companion dogs.

In traditional animal science and forages programming conducted by agents and specialists affiliated with Auburn University, the target audience is any livestock or forage producer or youth asking for knowledge-based assistance. Much of the time is spent targeting producers with sustainable animal systems in mind. Another large target area are horse owners wanting to manage their resources more wisely.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	65095	2489995	10937	408038

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	4	0	4

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in 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 ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2010	10

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

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. 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. Therefore, one very significant outcome measure is the number of success stories generated.</p>

Outcome #1

1. Outcome Measures

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

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	731

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

ETP 11A - Dogs as Companion Animals

Dogs as companion animals cannot be matched in their loyalty, devotion and friendship to humankind. However, the decision to own a dog comes with responsibility and a long-term commitment. Someone with unrealistic expectations of the time, effort, and money required to sustain a lifelong relationship with a dog will aggravate the problem of unwanted pets. To ensure that people are prepared to provide a home for the lifespan of the dog and to prevent the dog from becoming a nuisance or a menace to the community, educational resources in dog science(nutrition, health, behavior, breeding, etc.) and dog obedience training were needed.

ETP 11B - Goat, Sheep and Rabbit Production Systems

Consumer demand for lamb and goat meat is rising and many farmers are raising small ruminants as a way to diversify their products and bring additional income to their operations. Given that

there are not enough sheep and goats produced in the U.S., farmers in Alabama have a tremendous potential to expand and supply some of the growing demand for lamb and goat meat. However, to ensure that farmers improve the efficiency of lamb and goat production and enhance their profitability and competitiveness in the national and world markets, educational resources in alternative animal production and technological advances were needed.

ETP 11M - Master Meat Goat Herdsman Program

Goat meat is the most consumed red meat throughout the world. As the immigrant population continues to rise in America, meat goat production remains one of the most popular agricultural enterprises within the livestock industry. Due to its forage abundance and large concentrations of populations who have a preference and demand for goat meat, the Southeast has a competitive advantage on meat goat production. These factors also provide economic opportunities for pre-existing and limited-resource farmers, while "peaking the interest" of potential goat producers. However, to ensure their operations are sustainable and profitable for years to come, producers needed a comprehensive educational training program.

What has been done

ETP 11A - Dogs as Companion Animals

In 2010, the Alabama Cooperative Extension System continued its commitment to help existing and future dog owners raise happy, healthy, safe, well-behaved dogs; to promote the adoption of companion dogs into stable, loving homes; to promote dog ownership as a long-term commitment; to partner with dog-related organizations for the purpose of reducing the population of unwanted dogs through adoption, spay/neuter surgery and educational programs; and to further educate the general public regarding the physical, physiological and psychological benefits of the human-dog relationship. For a brief description of the events carried out, go to Planned Program Activity.

ETP 11B - Goat, Sheep and Rabbit Production Systems

In an effort to help Alabama small ruminant producers manage their animals and improve the profitability of their operations, the Alabama Cooperative Extension System provided broadly-based and objective information about small ruminants and their impact on Alabama's economy and natural resources. Besides carrying out an array of outreach activities (See Planned Program Activity), Extension specialists developed four (4) new numbered publications on goats. These publications, which are available in print and on our ACES website (www.aces.edu) under Urban Affairs and New Nontraditional Programs (Urban and Nontraditional Animal Science), are listed below:

UNP-0095 Artificial Insemination in Goats

UNP-0108 Puberty in Goats

UNP-0111 The Estrous Cycle in Does

UNP-0117 Controlled Breeding Season Management for Meat Goats

ETP 11M - Master Meat Goat Herdsman Program

In an effort to help Alabama small-scale farmers and pre-existing and potential goat producers manage their animals and improve the profitability of their operations, the Alabama Cooperative Extension System (ACES) provided broadly-based and objective information about meat goats and their impact on Alabama's economy and natural resources. Besides carrying out a series of training activities (See Planned Program Activity), Extension specialists distributed to audiences a training manual and its accompanying CD containing all of ACES numbered publications on goats and Power Point Presentations of expert speakers.

Results

ETP 11A - Dogs as Companion Animals

Eight (8) 4-Hers, who attended the dog obedience training camp in Lauderdale County, learned how to teach their dogs to walk on a leash, sit, lie down, and stay. Over 200 adults and youth, plus service organizations, agencies, and an abundance of dogs were present at the annual Dogs in the Park festival. There were a variety of categories the dogs competed in for "top dog" honors, including the smallest, largest, best bark, and best trick categories. All contestants received ribbons while the winners received rosettes. However, the Pooch Parade of Adoptable Dogs took center stage during the event. To the satisfaction of animal rescue organizations in attendance, seven dogs found new homes during the festival.

Although there are still millions of companion dogs surrendered to U.S. shelters and euthanized each year due to irresponsible ownership and breeding, towns and cities that have planned and implemented sterilization, adoption and education programs have seen a significant decline in the number of unwanted companion animals euthanized.

ETP 11B - Goat, Sheep and Rabbit Production Systems

Alabama small ruminant producers have become more knowledgeable and stayed open to new and different management practices that allowed their operations to be more productive and profitable. Sign-in sheets showed that a total of 692 goat and sheep producers attended educational activities carried out and/or sponsored by ACES. Post surveys indicated that 100% of participants gained knowledge as a result of the educational activities. Moreover, 100% of participants reported improvements in herd health and production efficiency, and 80% reported increases in profitability ranging from 5 to 15%.

In 2010, thirty-seven (37) small ruminant publications available online at www.aces.edu/pubs saw up to 70,286 distinct visits averaging 79 seconds in visit duration. According to Nielsen Wire 2010, the average user spends 56 seconds on a web page.

The Small Ruminant Program of ACES plans to continue to provide leadership in this particular program area and to be the premier lifelong education network that helps Alabama farmers improve the efficiency of lamb and goat production.

ETP 11M - Master Meat Goat Herdsman Program

Alabama meat goat farmers have become more knowledgeable and stayed open to new and different management practices that allowed their operations to be more productive and profitable. Sign-in sheets showed that a total of 39 meat goat farmers attended the comprehensive training program carried out by ACES. Post surveys indicated that 22% of the participants felt they had moderately increased their knowledge, 50% of the participants felt they had considerably increased their knowledge, and 12 % of the participants felt they had significantly increased their knowledge. Moreover, 69% of the participants expect to significantly increase their farm income by 25% or more.

The positive feedback from the evaluations reveals the entire success of this comprehensive educational program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals

302	Nutrient Utilization in Animals
303	Genetic Improvement of Animals
307	Animal Management Systems
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Competing Programmatic Challenges

Brief Explanation

Given the current economic and drought situation, it was very difficult to entice farmers to attend meetings in 2010. Many cattle farmers have cut numbers of animals dramatically or sold out all together. It is our challenge in all species to encourage farmers that do not traditionally participate in Extension programming to do so.

Similar to commercial cattle and pork producers, sheep and goat farmers are also locally impacted by Extension via its' Regional Extension Agents, who handle questions, supply information, and conduct training in a wide variety of subject matter areas. To have a statewide comprehensive program, additional training activities focusing on small ruminant biology and production must be made available to all interested individuals across Alabama. Therefore, future plans include promoting participation of other Extension professionals and increasing the number of integrated outreach educational activities, particularly in South Alabama.

One particularly bright spot however is participation in a series of horse owner 101 type meetings in the northern region of the state. The regional agent has participants coming from the middle portion of the state northward. He is concentrating on simple tips and strategies every horse owner should know. Forage production is also a key component.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

ETP 11A - Dogs as Companion Animals

- Increased knowledge of dog obedience training and responsible ownership.
- Declined euthanasia of unwanted dogs.

ETP 11B - Goat, Sheep and Rabbit Production Systems

- Increased knowledge of key production management practices.
- Improved animal health and well-being.
- Improved efficiency of production.

- Increased marketing and profitability.

ETP 11C - Beef Cattle Performance Programs to Enhance Profitability

- Increased knowledge of purebred and commercial beef producers through seedstock programming efforts and newsletter articles
- Provided opportunity for commercial producers to track performance in herds
- Provided purebred and commercial beef farmers marketing opportunities
- Provided beef farmers opportunities to develop heifers off-farm and utilize AI technology

ETP 11M - Master Meat Goat Herdsman Program

- Increased knowledge of meat goat science and production.

Key Items of Evaluation

ETP 11A - Dogs as Companion Animals

- As a result of the activities, 8 program participants (youth) gained knowledge of dog obedience training and responsible ownership.
- Seven shelter dogs were adopted.

ETP 11B - Goat, Sheep and Rabbit Production Systems

- As a result of the activities, 692 program participants gained knowledge of key production management practices.
- As a result of the activities, 692 program participants observed improved animal health and well-being.
- As a result of the activities, 692 program participants observed improved production efficiency.
- As a result of the activities, 554 program participants reported increased profitability rates ranging from 5 to 15 percent.

ETP 11C - Beef Cattle Performance Programs to Enhance Profitability

- the 2010 BCIA Sales totaled 468 head sold to 139 different buyers all over the state of Alabama and into Florida, Georgia, and Tennessee resulting in \$667,265 in producer sales
- Most beef producers want educational programming to be in the form of on-farm/university result demonstrations, regional field days or via pertinent newsletter articles. Most prefer meetings/demonstrations to be held on Saturday mornings.
- A total of 42 commercial cattle herds were processed for weaning weight information. An average weaning weight of 562 lbs from 4,309 calves and an average weaning frame score of 5.68 (n=223) was generated from this data. This puts the entire commercial database with more than 121,000 calf records over 30 years.
- 40 heifers were enrolled in a heifer development program managed at the Upper Coastal Plain Experiment Station. All heifers were bred using AI to bulls of the owners choice. 62% of heifers were bred using AI. The remainder were bred with the clean up bull.

ETP 11M - Master Meat Goat Herdsman Program

- As a result of the activities, 39 program participants gained knowledge of meat goat science and production.

V(A). Planned Program (Summary)

Program # 11

1. Name of the Planned Program

Agronomic Crops

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	15%	0%		
111	Conservation and Efficient Use of Water	10%	0%		
205	Plant Management Systems	15%	0%		
211	Insects, Mites, and Other Arthropods Affecting Plants	15%	0%		
212	Pathogens and Nematodes Affecting Plants	10%	0%		
213	Weeds Affecting Plants	15%	0%		
215	Biological Control of Pests Affecting Plants	5%	0%		
216	Integrated Pest Management Systems	15%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	22.7	0.0	0.0	0.0
Actual	20.2	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
343019	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
530259	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2183515	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

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Throughout the course of the past 7 years, Extension Team Projects (ETPs) served as specific programs that targeted specific areas of relevance and interest to the agronomic crops community. Efforts that are not devoted specifically to an ETP were reported under the Agronomic Crops Program Priority Area (PPA). In the future, State Program Initiatives (SPIs) will serve to broaden the clientele base.

Asian Soybean Rust ETP: This project was a season-long monitoring program that provided an early warning system for soybean growers in Alabama, the Southeast, and the north-central region of the United States. The project consisted of team members monitoring soybean and kudzu sentinel sites located throughout the state. When soybean rust was detected in a sentinel plot, soybean growers were alerted to its presence via the Auburn University Soybean Rust Hotline and through the "ipmPIPE" Soybean Rust Website.

Rapid Response ETP: Each year, row crop producers across the state experience pests, weather extremes, and other obstacles to production. Extension professionals are often able to help them make educated, science-based decisions that are not biased by profit objectives or product sales goals. This project served to provide a venue for highlighting some of the work that goes on each day in the professional course of agents, regional agents, and specialists.

Precision Agriculture ETP: The goal of the Alabama Cooperative Extension System's Precision Agriculture Program is to facilitate the adoption of geospatial technologies and site-specific management strategies. The use of these technologies positively impacts agriculture by helping farmers reduce application overlap and target crop inputs to where they are needed. This approach allows farmers to increase their efficiency in the field, maximize crop yields, and improve environmental stewardship.

Peanut IPM ETP: This report focuses on the peanut entomology program and more information from peanut variety and plant pathology programs are forthcoming. One Regionals Extension Agent (REA) received training in pheromone-based pest scouting system as well as in field scouting techniques, and the REA also assisted in season-long monitoring of peanut insect pests (above and below ground insects).

Geospatial Education ETP: The goal of the Extension Team Project (ETP10B), "Geospatial Technologies for Land Owners", is to educate participants on GPS and GIS and on how these technologies can assist in land management. The project will promote the use of geospatial tools and applications, and integrate geospatial concepts. The project will consist of a series of introductory-level workshops to be held around the state between January and

November of 2010. The target audience for the project is landowners who are interested in incorporating geospatial technologies into their management strategies. The project outcomes and impacts will be measured using evaluations and surveys to determine what participants actually learned and whether it changed their land management behaviors.

Herbicide Resistance Management ETP: This project is designed to educate farmers about the threat of herbicide resistant weeds in their row crops and also act as an early detection system to try and limit the spread of herbicide resistant weeds in Alabama. The proper use of herbicides, sprayer calibration, and crop rotation benefits will be the focus of the project. It will provide a method for farmers to report weeds in their fields that they think are resistant to foliar herbicides such as glyphosate (Roundup, etc.).

2. Brief description of the target audience

Target audience: The activities of the Agronomic Crops Program Priority Team will target the following groups of stakeholders: 1) row crop producers and their representative groups that include, but are not limited to, the Alabama Cotton Commission, Alabama Peanut Commission, Alabama Soybean Producers, and the Alabama Wheat and Feed Grains Committee; 2) row crop advisors including ACES agents and specialists, public and private crop advisors; 3) governmental agency personnel including USDA, NRCS, and federal crop insurance and risk managers, 4) public policy makers requesting information that impacts Alabama's agricultural community, 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(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	56000	210000	4500	16500

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

Patent Applications Submitted

Year: 2010
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	2	2	4

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Several outputs will be generated by this project including distribution of state and region-wide information on the occurrence of Asian soybean rust, insect pest management, field crop diseases, and potential herbicide resistance in crops around the state. Alternative control measures will be developed to reduce the impact of the problem pests on the current crop. Recommendations for a management plan for agronomic row crops will be developed. Several methods of notification (e-mail, Timely Information Sheets, articles in the popular press, etc.) will be used to disseminate information. Meetings, conferences, and trainings throughout the year will include resistant weed management, geospatial and precision agriculture information, soil fertility and fertilizer management, and in-season tours and field days will be used to provide local information on the problem. Other methods such as printed articles and web-site information will be distributed through e-mail and website publications to inform the farming community. Specific outputs will include: 1- In-service training meetings for target audiences and on-farm visits for cotton, soybean, Asian soybean rust, peanuts, field corn, and small grains production; precision agriculture techniques including geospatial technologies, herbicide resistance as well as integrated management of insect pests; 2- Response via phone, e-mail, internet, and on-farm visits at the request of the producer to diagnose and deliver agronomic crop production recommendations; 3- Information posted on the agronomic crops and the national Asian soybean rust website (i.e., www.alabamacrops.com) and through the Auburn University Soybean Rust telephone hotline; 4- Publications like the 2009 IPM Guides and demonstration results reports for use by clientele groups; 5- Hard copy publications for use in production meetings and trainings where deemed appropriate; 6- Establishment of disaster responses when a natural environmental disaster occurs.

Year	Actual
2010	5

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Members of the ACES Agronomic Crops team is 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: 1) why the program was conducted or the situation/problem that was addressed; 2) specifically what and how it was done; 3) the time period involved; 4) the specific locations involved; 5) who was impacted; 6) how many people were served; and 7) the final impacts.
2	Short-term outcomes: The most immediate outcomes are: 1) to document the direct positive financial impact that our agents and specialists have on our clientele and their farming operations. For example, advice that leads a producer to consider a higher-yielding crop variety, use of available animal manures for fertilizer, or increased efficiency from prescription site-specific management of agricultural chemicals, seeding or fertilizers can result in increased income totaling millions of dollars across the state; and 2) to provide research information and recommendations that allow producers to control pests only when needed and save them money on unnecessary treatments or save their crop from destruction. In addition, directing producers to sustainable IPM for weeds, insects, and diseases can have a major positive impact on lessening the costs associated with herbicide resistant weeds, insecticide resistant insect pests, and devastating crop diseases such as Asian soybean rust.
3	Long-term outcomes: The long-term outcomes of the Agronomic Crops Extension program are: 1) to ensure the long-term economic viability of Alabama row crop producers; 2) to ensure that there is a stable, domestic source of food and fiber for the citizens of Alabama and their future generations; 3) to ensure that there will continue to be row crop farms operating in the state for many generations to come; 4) to ensure that the recommendations and resulting decisions that are made by the row crop industry in the state is environmentally and economically sustainable; 5) to ensure that the activities and outputs generated by the practices investigated and recommended by this team will benefit and serve to conserve natural resources for all agricultural and general citizen audiences

Outcome #1

1. Outcome Measures

Members of the ACES Agronomic Crops team is 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: 1) why the program was conducted or the situation/problem that was addressed; 2) specifically what and how it was done; 3) the time period involved; 4) the specific locations involved; 5) who was impacted; 6) how many people were served; and 7) the final impacts.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Agronomic Crops Team was able to deliver timely, accurate unbiased research-based information and programs to the citizens of Alabama. The communities of learning included producers, private citizens, industry representatives, educators, and interested individuals. The areas that were addressed included Asian Soybean Rust, row crop production (wheat, canola, cotton, soybean, and field corn), herbicide resistance, and geospatial and precision agriculture technologies.

What has been done

Through on-farm demonstrations, intellectual interactions between extension and research faculty, agents, and specialists, field days, in-field training, formal trainings (i.e., insect scouting schools and geospatial trainings), precision agricultural meetings and on-farm testing, variety evaluations, and other practical solutions for solving immediate problems, the team was able to help secure a stronger economic base for the continued viability of row crop agriculture.

Results

Through the different facets of the program, millions of dollars were saved through application avoidance, improved application techniques (i.e., sprayer integration with site specific terrain and guidance technologies), utilization of varieties, cultivars, and hybrids of various crops that were suitable for specific areas of the state. While there was a fairly widespread drought across the state last year, many producers were still able to make reasonable yields as a result of management, a lot of which was based on extension interactions and recommendations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

Outcome #2

1. Outcome Measures

Short-term outcomes: The most immediate outcomes are: 1) to document the direct positive financial impact that our agents and specialists have on our clientele and their farming operations. For example, advice that leads a producer to consider a higher-yielding crop variety, use of available animal manures for fertilizer, or increased efficiency from prescription site-specific management of agricultural chemicals, seeding or fertilizers can result in increased income totaling millions of dollars across the state; and 2) to provide research information and recommendations that allow producers to control pests only when needed and save them money on unnecessary treatments or save their crop from destruction. In addition, directing producers to sustainable IPM for weeds, insects, and diseases can have a major positive impact on lessening the costs associated with herbicide resistant weeds, insecticide resistant insect pests, and devastating crop diseases such as Asian soybean rust.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100000000	0

3c. Qualitative Outcome or Impact Statement

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

What has been done
 {No Data Entered}

Results
 {No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

Outcome #3

1. Outcome Measures

Long-term outcomes: The long-term outcomes of the Agronomic Crops Extension program are: 1) to ensure the long-term economic viability of Alabama row crop producers; 2) to ensure that there is a stable, domestic source of food and fiber for the citizens of Alabama and their future generations; 3) to ensure that there will continue to be row crop farms operating in the state for many generations to come; 4) to ensure that the recommendations and resulting decisions that are made by the row crop industry in the state is environmentally and economically sustainable; 5) to ensure that the activities and outputs generated by the practices investigated and recommended by this team will benefit and serve to conserve natural resources for all agricultural and general citizen audiences

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200000000	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Most goals were met or adapted to fit changing situations that included a widespread drought during the summer months. Public policy did not change to a great extent but will be a major contributor over the next two years with the discussion and passage of a new Farm Bill.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

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Canola farmers were visited by extension REAs and area specialists to assist growers in proper application and timing of a dessicant for harvest. Use of this product resulted in an earlier harvest and less shatter loss at harvest. With average yields of 55 bushels and a 10% gain due to less shatter loss, this resulted in a 5.5 bu increase in harvested canola yields. This resulted in 5.5 bu @ \$9.00/bu = \$49.50/A saving; \$49.50 X 1,500A= \$74,250 increase to farmers. Final results through informal discussions with local producers in the Tennessee Valley indicate that acreage may increase and increase the number of options available for cash crop planting in that area.

Where herbicide resistance management was considered, after much discussion, evaluation, and consideration, the program was considered success in getting producers to switch to a fall burn-down program following corn and early bean harvest could be the first step used to keep resistant weeds from producing seed. Although not a normal practice for area farmers, industry and extension worked together to spread this recommendation across the northern Alabama area. If it is estimated that 10,000 acres were treated following corn and bean harvest saving an estimated \$15.00 per acre. Decreased costs per acre directly translated into higher profit as long as the pest does not overwhelm in the absence of control.

Where wildlife damage occurred, there was a direct conflict between hunters and producers from the standpoint of ultimate goals. Through the farmers' and our efforts, some of the damage fields were allowed to survive and worked through until harvest. These fields did very well in relation to yield. Other fields were determined to be complete losses and production practices were then curtailed. In this way we were able to prevent undue losses from poor crop stands while saving the crop insurance company money for fields that were still viable.

Asian soybean rust detection efforts have been an extreme success where producers and federal sources provided direct support for extension efforts. Through the efforts of the team, producers throughout the southeastern and central US were able to manage the treatment of their soybeans such that \$3 million was saved by Alabama producers alone. Further evaluation of the producer-elected commission indicated that this program had allowed them to stay in business and enhance their lives by these efforts.

A total of nine peanut Extension IPM presentations were delivered to over 300 producers that primarily focused on the timely detection and management of below ground insect pests of peanuts. A new IPM newsletter called 'The IPM Communicator' was started in 2010 featuring over 200 articles written by over 22 authors including REAs, Specialists, and out-of-state collaborators. The newsletter was sent to over 430 subscribers via email every week, starting in May 2010. Growers saved thousands of dollars by using university recommendations, as detailed in the evaluation report later in this document. The peanut IPM program also participates in multiple tradeshows to provide additional contact with peanut farmers. Publications in 2010 included Extension bulletins (1), trade magazine (3) and newspaper publications (2). The Peanut IPM program has also integrated the use of Internet and social media via pages on Facebook, YouTube, Slideshare, Extension Entomology website and blogs that are easily searchable on the World Wide Web and get thousands of hits per year.

Key Items of Evaluation

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ALABAMA EXTENSION EVALUATIONS (2008-current)

Reporting website for IPM evaluations in Alabama:

<https://sites.aces.edu/group/evaltoolkit/Pages/EvaluationArchive.aspx>

EXTERNAL EVALUATION ON THE Quality of Evaluation Reports:

- From Dr. Marty Draper, National Program Leader, Extension IPM Grant, USDA-NIFA (per email received in December 2010): *"Nice job on the impacts. Yours is a very strong report. Outcomes/impacts are king!"*

Continuous Needs Assessment Surveys:

- Peanut Growers IPM Needs Assessment Survey, 2010 (n=57): Reporting acres = 48,870 acres; 84% had access to high-speed Internet and 58% respondents have used ACES website; 65% were confident in IPM practices and 35% needed more IPM information or training; 85% growers use the Peanut IPM Guide and average cost for insect pest control was \$24 per acre; 44% growers indicated benefit from IPM to be \$5,000-10,000 per year and 24% saved \$10,000-15,000 per year; 44% growers were aware of the IPM newsletter and 23% had used the website. 33% growers had never heard of the program but wanted to get familiar with the publication. 23 peanut growers signed up to receive the email pest alerts for 2010.

Process Evaluation Surveys:

- Each year, several IPM program quality assessment surveys are conducted at numerous Peanut and Vegetable Crop Production Workshops, Master Gardener Training Sessions, Community Food Production Meetings, and Certified Crop Advisor Annual Meetings to assess quality of IPM programs, satisfaction rating, learning preferences, and nature of target audience.
 - Feedback received = 400+ per year approximately; respondents include crop producers, certified crop advisors, industry research and sales representatives, university researchers, gardeners, home owners, members from nonprofit organizations, federal and state employees. Feedback details under Outcome Evaluations (see below).
 - ACES Peanut Production Workshops (winter meetings) attracts large and medium-sized farmers.

Outcome Evaluations (done along with Process Evaluations):

- 2010 Peanut Production Meetings (n=50): Stimulated critical thinking from workshop participants = 55% agree; Workshop was well organized = 57%; Interaction level was appropriate = 54% agree; Overall satisfaction = 55%. Some participant comments: *"You are doing a good job improving the IPM recommendations and information. Very progressive, new ideas"*, *"Keep doing scouting schools"*, *"Very informative, comprehensive and organized"*.
- 2010 American Peanut Shellers Association Spring IPM Training, Albany, GA (paper-based quality assessment, n=20): Satisfaction from the interaction with participants = 84%; Stimulated audience to think critically = 79% participants agreed. Overall quality of Peanut IPM workshop = 90%. Some participant comments: *"Very well presented, Thank You!"*, *"Have more educational classes"*, *"Enjoyed class"*, *"The best part of the workshop was to see insect specimens under the microscope, would like to see more"*, *"The interaction with participants was the best part"*, *"The handouts were very informative and everything was easy"*.

to understand".

Impact Assessment Surveys for IPM Projects (to measure program success):

- Impact of the IPM COMMUNICATOR newsletter, 2010 (n=58):
 - 34% respondents to the survey were farmers and 28% were company representatives
 - 44% respondents read the newsletter to its entirety while 17% readers read about half of the publication
 - 53% respondents read the newsletter for 15 minutes and 22% read for 30+ minutes
 - 30% respondents visited the newsletter archive at least once a week during peak cropping season for IPM info
 - Readers ranked Entomology articles as most useful followed by articles on weed control, plant pathology, fruit production, and home garden IPM
 - 53% respondents indicated that they used an IPM recommendation after reading the articles
 - Six cases of economic benefit reported = \$500-1000
 - 94% respondents support continuation of the newsletter in 2011 as a weekly publication.
 - E-subscriptions growth rate in 2010 = 12% (current subscriptions = 430)

V(A). Planned Program (Summary)

Program # 12

1. Name of the Planned Program

Farm Management and Agricultural Enterprise Analysis

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	25%	0%		
602	Business Management, Finance, and Taxation	25%	0%		
605	Natural Resource and Environmental Economics	25%	0%		
801	Individual and Family Resource Management	25%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	8.2	0.0	0.0	0.0
Actual	6.3	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
106759	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
165033	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
685897	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The primary activities in this area are conducted relative to one Extension Team Project:ETP16D, Agricultural Business Management and Profitability. Detailed descriptions of the activities of this project are available on the ACES Intranet. In summary, Economists work with the Farm Analysis cooperators to assemble and maintain accurate farm records. They compile and analyze these records and develop standard financial and business statements. They advise cooperators relative to their operations in areas such as feasibility of alternative enterprise mixes, alternative technologies, alternative markets and methods, and alternative resource mixes. Consideration is given to impacts on efficiency, finance, taxation, income, and estate planning. Individual farm level data are compiled into Association and State Summaries which focus on major farm enterprises in the State and major production areas. Analyses are provided for lower, middle, and upper thirds of farms so as to isolate practices and conditions that might relate to particular farms being better or worse than others. The better farms can potentially serve as benchmarks for other farms. Information and knowledge gained from working with participating farmers is used to advise others who might be interested in particular practices, technologies, or conditions that promote efficiency and profitability. Basically, the program involves much real world, one-on-one education and advisement.

2. Brief description of the target audience

Primary focus and interaction is on cooperators in the State's four Farm Analysis Associations. However, data and information from these contacts will be used in conjunction with knowledge and expertise of Economists to guide and advise numerous other clientele, including but not limited to: other farmers; lenders; governmental authorities; tax consultants and accountants; research, teaching, and extension faculty; and leadership of agricultural commodity organizations. This program involves much education and training in farm management in the most broad terms, including decision making related to feasibility of enterprises, enterprise mixes, technologies, and/or alternative markets and methods; resource allocations; financial considerations; tax issues and ramifications; estate tax issues and ramifications; and family living conditions.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	0	0

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

Patent Applications Submitted

Year: 2010

Actual: {No Data}

Patents listed

{No Data Entered}

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Direct advisement and counselling of roughly 275 association members.

Year	Actual
2010	0

Output #2

Output Measure

- Advise and counsel other, non-member, clientele

Year	Actual
2010	0

Output #3

Output Measure

- Publish Annual Summaries

Year	Actual
2010	0

Output #4

Output Measure

- Participate in tax and commodity meetings

Year	Actual
2010	0

Output #5

Output Measure

- Indirect impacts on decisions of those who attend meetings, read publications, and/or review blog listings or newsletters.

Year	Actual
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2010

0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Contacts will better understand the farm decision environment.
2	Direct and indirect contacts will make better, more informed, decisions.

Outcome #1

1. Outcome Measures

Contacts will better understand the farm decision environment.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	900	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation
605	Natural Resource and Environmental Economics
801	Individual and Family Resource Management

Outcome #2

1. Outcome Measures

Direct and indirect contacts will make better, more informed, decisions.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	6500	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation
605	Natural Resource and Environmental Economics
801	Individual and Family Resource Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Other (Participation of farmers in Asso)

Brief Explanation

{No Data Entered}

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)

Program # 13

1. Name of the Planned Program

Aquaculture, freshwater, and marine resources

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	5%	15%		
112	Watershed Protection and Management	10%	20%		
134	Outdoor Recreation	15%	20%		
135	Aquatic and Terrestrial Wildlife	10%	5%		
136	Conservation of Biological Diversity	5%	5%		
302	Nutrient Utilization in Animals	5%	0%		
303	Genetic Improvement of Animals	5%	0%		
307	Animal Management Systems	15%	0%		
311	Animal Diseases	10%	0%		
601	Economics of Agricultural Production and Farm Management	5%	0%		
605	Natural Resource and Environmental Economics	5%	5%		
806	Youth Development	10%	30%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	7.9	0.0	0.0	0.0
Actual	6.7	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
112742	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
174283	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
720104	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The primary activities for 2010 in this area are associated with 5 statewide focus areas and general activities of our Program Area. These are:

Aquaculture/Aquascience Education designed to support school teachers, administrators and others to establish and improve aquaculture/aquatic science programs within Alabama schools.

- Maintain education section of www.alearn.info web site
- Conduct school visits to train and support teachers
- Conduct field days and exhibitions of aquaculture and its potential as a career
- Provide intensive training for teachers from AL, GA, and CT on recirculating aquaculture systems as tool to teach math and science
- Conduct activities and camps for students interested in fisheries, aquaculture and aquatic ecology
- Support K-12 programs with fish, supplies and equipment with funded grants

Improving the Survival of Live Bait in Bait Shops designed to train bait dealers in the proper care of live bait (fish and shrimp) to the reduce mortality and increase profitability

- Provide training to bait dealers in water quality testing
- Train bait dealers in proper fish and shrimp handling techniques

Management of recreational sportfishing ponds designed to provide training and support to pond owners

- Organize and participate in public workshops and presentations involving pond management
- Generate newspaper articles, radio spots, and television appearances associated with pond management
- Maintain pond management section of www.alearn.info web site
- Conduct surveys of pond owners to provide feedback to extension
- Provide weed and water quality analyses and recommendations

Coastal resources program designed to address environmental and economic issues in the coastal zone.

- Support for the oyster gardening program
- Provide analysis of working waterfronts
- Provide support for the clean marina program
- Maintain the Auburn University Marine Extension and Research Center web site

Aquaculture extension to increase the viability and profitability of producers.

- Development of and multiple training sessions involving intensive aquaculture systems
- Maintain the aquaculture portion of the www.alearn.info web site
- Provide responses to fish kills in aquaculture
- Provide reactive services
- Provide economic analyses and projections to the industry

General Activities of this team:

- Training of agents in basic fish biology
- Cooperation and participation with other agencies concerning timely aquatic resource issues
- Provide angler education presentations
- Collaboration with Forestry and Natural Resources in support of the Alabama Water Watch volunteer water quality monitoring program

2. Brief description of the target audience

While our activities potentially impact everyone given the importance of water and water management, our focused audiences include: high school math and science teachers and students, fish bait producers and dealers, recreational anglers, commercial fishers, recreational fish pond owners, aquaculture producers, aquatic conservation organizations, 4Her's involved in aquatic programs.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	10276	2571122	4432	0

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	9	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- pond management workshops

Year	Actual
2010	9

Output #2

Output Measure

- Aquaculture workshops

Year	Actual
2010	11

Output #3

Output Measure

- Number of teacher trainings

Year	Actual
2010	18

Output #4

Output Measure

- Number of visits to our extension website www.ALEARN.info

Year	Actual
2010	167000

Output #5

Output Measure

- Youth fishing opportunities and casting training

Year	Actual
2010	4

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Aquaculture/Aquascience Education Short-term * Improve attendance and performance of students in school * Increase appreciation of both aquaculture and aquatic natural resources by students and teachers Long-term * Increase graduation rates * Produce better trained labor for aquaculture
2	Improving the Survival of Live Bait in Bait Shops Short-term * Train bait dealer in basic water quality and proper handling techniques * Increase profitability of bait dealers
3	Management of recreational sportfishing ponds Short-term * Increase the understanding of pond function and management by owners Long-term * Reduce improper management by consultants * Increase satisfaction and enjoyment of ponds by owners * Increase profitability of pay-to-fish operations
4	Coastal resources program Short-term * Increase public awareness of coastal environmental issues * Increase public awareness of loss of working waterfront Long-term * Establish a viable mariculture industry in Alabama
5	Aquaculture Short-term * Increase the knowledge of producers in more efficient practices * Expand the use of hybrid catfish in production Long-term * Diversify species produced in Alabama * Improve marketing of Alabama aquaculture products * Cause a shift in the industry to more efficient intensive production methods
6	General Activities * Increase the public understanding of water conservation * Increase public appreciation for watershed and wetland conservation and management * Improve angler education to increase understanding of fisheries management and increase enjoyment of angling

Outcome #1

1. Outcome Measures

Aquaculture/Aquascience Education Short-term * Improve attendance and performance of students in school * Increase appreciation of both aquaculture and aquatic natural resources by students and teachers Long-term * Increase graduation rates * Produce better trained labor for aquaculture

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Appropriate management and conservation of aquatic resources is critical to sustainable development and ecosystem health of Alabama. By reaching students via teachers we can inform the next generation in the importance of aquaculture, and aquatic resource management. This is also a tool that can be used to enrich science, math, and other K-12 curricula including vocational education.

What has been done

Numerous training activities including a 5-day teacher workshop have been held around the state. We have also conducted short field-day demonstrations, and provided support to high school aquaculture programs around the state. Our extension website also provides literature and materials.

Results

Pre vs post training testing of teachers participating in both 1-day and week long trainings demonstrated a significant increase in the understanding and knowledge of recirculating and pond aquaculture. One pre vs post test of knowledge increase from a 1 day training indicated an over 400% increase in understanding of aquaculture in the classroom information by participating teachers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

112	Watershed Protection and Management
136	Conservation of Biological Diversity
302	Nutrient Utilization in Animals
307	Animal Management Systems
311	Animal Diseases
601	Economics of Agricultural Production and Farm Management
806	Youth Development

Outcome #2

1. Outcome Measures

Improving the Survival of Live Bait in Bait Shops Short-term * Train bait dealer in basic water quality and proper handling techniques * Increase profitability of bait dealers

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Management of recreational sportfishing ponds Short-term * Increase the understanding of pond function and management by owners Long-term * Reduce improper management by consultants * Increase satisfaction and enjoyment of ponds by owners * Increase profitability of pay-to-fish operations

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

With more than 50,000 recreational fish ponds in Alabama, this aquatic resource is important to many private landowners. These ponds are often the first entree into outdoor recreation and therefore an understanding of the natural world for children. Many pond management issues arise that Extension provides information and reactive services for including construction, responding to fish kills, weed control, water quality control, ornamental plants, and pond

enhancements.

What has been done

Our team provides both proactive education and information as well as reactive services such weed control, liming, and fish management recommendations. We conduct pond management workshops and maintain literature and web-based information in pond management.

Results

Our pond management workshops are in demand across the state and the feedback either in the form of post workshop surveys or through feedback to our county extension offices has been positive. This is an area where numerical assessment is difficult. The ultimate impact is greater satisfaction of the pond owner.

4. Associated Knowledge Areas

KA Code	Knowledge Area
134	Outdoor Recreation
135	Aquatic and Terrestrial Wildlife
307	Animal Management Systems
605	Natural Resource and Environmental Economics

Outcome #4

1. Outcome Measures

Coastal resources program Short-term * Increase public awareness of coastal environmental issues
 * Increase public awareness of loss of working waterfront Long-term * Establish a viable mariculture industry in Alabama

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

While only 2 counties in Alabama, our coastal zone represents one of the most important economic engines for the state. Rapid population and accompanying development in coastal

areas can cause environmental declines, increase vulnerability to natural and man made disasters, and cause shifts in social systems that can lead to economic inequity.

What has been done

Our team is involved in education related to natural resource management, ecology, sustainable development, mariculture development, disaster response, and support of the coastal fishing industry. Specific efforts include the oyster gardening program, aquaculture in the classroom, working waterfronts initiative, and a demonstration of off bottom oyster farming. Efforts in 2010 were complicated by the Deep Water Horizon oil spill which required a shift in effort.

Results

Clearly 2010 was dominated by the Deep Water Horizon oil spill disaster. A shut down of critical fisheries and the social/economic impacts kept extension focused on appropriate responses. The threat of oil coming ashore limited the number of oysters that could be produced for the oyster gardening and production demonstration efforts. With these limitations these programs remained active and successful. More than 17,000 oysters were produced by 62 oyster gardeners for restoration purposes. The number of oyster gardening locations increased from 30 to 43. ACES and Sea Grant Extension collaborated to foster a large scale oyster reef restoration effort. The working waterfront initiative has identified a critical threat to a sustainable fishery and has provided that information to decision-makers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
134	Outdoor Recreation
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity
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
605	Natural Resource and Environmental Economics

Outcome #5

1. Outcome Measures

Aquaculture Short-term * Increase the knowledge of producers in more efficient practices * Expand the use of hybrid catfish in production Long-term * Diversify species produced in Alabama * Improve marketing of Alabama aquaculture products * Cause a shift in the industry to more efficient intensive production methods

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Aquaculture is an important sector of the agricultural economy in Alabama. Centered in some of the poorest counties, it is a critical industry supporting jobs and economic activity. Competition from other meat products and international sources of fish combined with increasing costs of production has compromised the profitability of aquaculture (particularly for catfish) in Alabama. Extension can help this industry transition to a more efficient system that produces a more marketable and, therefore, profitable product.

What has been done

In a series of workshops and demonstrations, in-pond raceway systems have been introduced to catfish producers. A demonstration project continues to operate and allow the producers to evaluate the economics of this system at the appropriate production scale. A series of meetings has introduced the concept of LEAN manufacturing and continuous improvement to all sectors of the aquaculture industry. Development and demonstration of aquaponics and mariculture approaches continue.

Results

The most significant results have come from the Pond-to-Plate effort to modernize the catfish production industry in Alabama. Extension working with Auburn University's Technical Assistance Center have motivated individuals involved in all sectors of the catfish industry to look at all parts of the production chain to reduce waste, improve quality, and increase marketability of farm raised catfish. Two Rapid Improvement Events have resulted in improved processing and harvest techniques that should significantly improve product quality. Critically these efforts have increased the collaboration among producers, processors, and buyers. Workshops have also led to 2 new in-pond raceways and

4. Associated Knowledge Areas

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

601 Economics of Agricultural Production and Farm Management

Outcome #6

1. Outcome Measures

General Activities * Increase the public understanding of water conservation * Increase public appreciation for watershed and wetland conservation and management * Improve angler education to increase understanding of fisheries management and increase enjoyment of angling

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As a broad team with responsibilities related to all aquatic systems, many of our activities do not fall within a single state defined initiative. In these areas we serve the entire population. Often the public takes water resources for granted until a serious problem arises. The 2010 Gulf of Mexico oil spill is an excellent example.

What has been done

We have contributed to public education through mass media releases, social media, and participation on boards and panels of experts. We have contributed to youth education around outdoor recreation and conservation via fishing events, youth field days, and fishing pole casting games at associated events.

Results

Results for these areas are less well defined. Post participation surveys of youth involved in our fishing events, casting, or career field days indicated that they enjoyed the event and came away with greater knowledge about the subjects covered.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
134	Outdoor Recreation

135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity
605	Natural Resource and Environmental Economics
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Other (BP Deep Water Horizon Oil Spill)

Brief Explanation

The downturn in the economy continues to strongly limit program delivery. Given the reductions in funding to higher education in general and Cooperative Extension in particular, we have not been able to replace personnel that are important throughout the state.

The BP oil spill in the Gulf of Mexico had a direct impact on one of our more visible and important programs, oyster gardening. The threat of oil caused the agents and specialists involved to reduce the number of oysters involved. The oil spill caused a shift in efforts to deal with this issue along the coast.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Pond management

Evaluations of pond management workshops have indicated that the participants valued the information they received. A pre vs post test at one of the workshops produced an increased score from 35% to 77% correct.

Aquaculture/ Aquascience in the classroom

A 1-day teacher workshop produced a 411% increase in correct score (21% increasing to 88%) in a pre vs post test of subject matter knowledge.

Youth development

Our youth fishing events featuring skills such as casting, tackle crafting, and actual angling as well presentations about aquaculture, natural resources, and associated career opportunities continue to be well received and requested by the agents and the youth groups involved.

Coastal programs

Despite the limitations imposed by the Deep Water Horizon oil spill, the Oyster Gardening program had significant success attracting 3 private sponsors, increasing the number of garden locations from 30 to 43, and deploying the produced oysters on new

areas of reef as part of a restoration effort.

Aquaculture

Our team has been involved in the Trade Adjustment Assistance for Farmers program for catfish and shrimp (producers and commercial fishermen) which was certified in late 2010. Thanks to the training provided 89 Alabama catfish farmers enrolled, met the requirements, and will receive \$4000 each from the Farm Service Agency to help offset the negative effects of international competition deemed unfair.

Key Items of Evaluation

Aquaculture/ Aquascience in the classroom

An intensive 5-day workshop was conducted to train K-12 teachers in the potential and techniques for using aquaculture and aquatic sciences in the classroom. Sixteen teachers participated in the training. A survey of the participants conducted after the program indicated an extremely high level of satisfaction. When asked to rank various measures of their satisfaction (1 as dissatisfied and 5 as completely satisfied) the average score was 4.8. The teachers all provided strong positive evaluations indicating that this training will help them be better teachers and incorporate new approaches into their classrooms. This training combined with shorter workshops and hands on help, and support by area specialists has helped maintain the aquaculture/aquascience in approximately 60 active aquaculture/aquascience programs in high schools or middle schools in Alabama. Some of the trained teachers have not developed production systems in their schools; however, the training has enhanced their curriculum.

Aquaculture

Participants in our attempt to help the Alabama catfish industry to modernize and remain competitive, the Pond-to-Plate program, include catfish producers, harvesters, transporters, processors and buyers. The Auburn Technical Assistance Center (ATAC) leads discussion and breakout sessions to discuss root causes of issues plaguing the industry and seek solutions from participants coming from each level of the industry. Participants have formed 5 teams to further address issue areas. Two Rapid Improvement Events (RIE) using LEAN manufacturing and continuous improvement practices have been conducted at a west Alabama catfish processing plant. In the first RIE workers representing the whole process, from line worker to plant manager, were involved in the process. Results from the root cause analysis identified defects on the processing line and innovative incentive programs were developed to reduce defects and increase the number of correctly cut fillets. The second RIE at the same west Alabama catfish processing plant identified issues that led to lower quality fish fillets during the harvesting and transportation of fish to the processing plant. Results from this RIE improved handling of fish, reduced stress on the fish, and led to higher quality fillet products (fewer coloration defects). Perhaps most importantly the Pond-to-Plate project has resulted in producers, processors and buyers working together toward efficiency gains, high product quality consistency, and market pull (not market push). This is the beginning of the catfish production system in Alabama becoming a modern livestock industry.

As a spin-off of the Pond-to-Plate program, a discussion group interested in intensive in-pond raceway production techniques formed. This group involved 20 catfish farmers who participated in 3 in-pond raceway discussion/training meetings to share results from experimental demonstration raceways. Thanks to this effort, 2 new raceway systems are under construction at commercial catfish farms and one processor company is planning to subsidize four other raceways at catfish operations.

V(A). Planned Program (Summary)

Program # 14

1. Name of the Planned Program

Poultry Production and Processing

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
307	Animal Management Systems	40%	0%		
311	Animal Diseases	10%	0%		
403	Waste Disposal, Recycling, and Reuse	30%	0%		
601	Economics of Agricultural Production and Farm Management	20%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	4.2	0.0	0.0	0.0
Actual	4.9	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
82252	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
127149	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
505123	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Our activities include state and regional training seminars organized by both our extension group, the Alabama Poultry and Egg Association and the U.S. Poultry and Egg Association. In addition, we produce popular press materials in the form of Extension publications, Timely Information Sheets and articles in trade journals to disseminate materials to producers. We also provide direct service to poultry companies when asked to do so. This takes the form of site visits and phone consultations. We also participate in result demonstrations to test field techniques of interest to poultry producers. Advising backyard flock owners and gamebird producers through seminars and publications also occupies a portion of our time.

2. Brief description of the target audience

Target audiences include;
 Poultry growers (farmers)
 Poultry industry technical personnel
 Allied industry support personnel
 backyard poultry flock owners
 Gamebird (quail, pheasant, chukor) producers

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	3961	9022	569	0

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	5	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Train poultry industry personnel through workshops

Year	Actual
2010	700

Output #2

Output Measure

- Produce popular press publications

Year	Actual
2010	70

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increase producer awareness of methods to reduce waste management issues on farm
2	Increase producer confidence in litter management techniques
3	Train poultry industry personnel in poultry house technology and management
4	initiate Master Poultryman Program for broiler growers

Outcome #1

1. Outcome Measures

Increase producer awareness of methods to reduce waste management issues on farm

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	20	350

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Many growers are adopting windrow composting for disease control.

What has been done

We have been training growers on the use of windrow composting as a management tool for years.

Results

Windrow composting is becoming widely used locally and nationally.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
311	Animal Diseases
403	Waste Disposal, Recycling, and Reuse

Outcome #2

1. Outcome Measures

Increase producer confidence in litter management techniques

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	5	200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Litter management is important to poultry health and to environmental concerns nationally.

What has been done

We have spoken to grower groups regarding litter management and have written popular press articles on the subject.

Results

Poultry growers have been reminded why litter management is important and how to improve their litter management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
403	Waste Disposal, Recycling, and Reuse
601	Economics of Agricultural Production and Farm Management

Outcome #3

1. Outcome Measures

Train poultry industry personnel in poultry house technology and management

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Broiler house maintenance and management are important to the profitability of the poultry growers and companies in Alabama

What has been done

Yearly housing schools and information posted to the National Poultry House Technology website.

Results

Training seminars have been well received and are an annual training event. The NPTC website is visited often for housing information.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

initiate Master Poultryman Program for broiler growers

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
311	Animal Diseases
403	Waste Disposal, Recycling, and Reuse
601	Economics of Agricultural Production and Farm Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Poor profitability of poultry operations over the last year (due to high grain prices) have made poultry companies reluctant to pay for training for their technical staff.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Seminar reviews are completed by all willing participants in Alabama Poultry and Egg Association Seminars, of which we are cosponsors. During the last year, participants rated our programs highly, with above average ratings for all the venues and good support for the programs as well.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 15

1. Name of the Planned Program

Climate Change

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	15%	0%		
111	Conservation and Efficient Use of Water	5%	0%		
132	Weather and Climate	50%	0%		
205	Plant Management Systems	25%	0%		
605	Natural Resource and Environmental Economics	5%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Actual	0.8	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
12710	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
19648	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
78049	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Basic information about climate variability was disseminated not only in Alabama but also throughout the Southeast US. The information shared was mainly related to the patterns of climate variability in the Southeast, the impact of ENSO on the climate in the Southeast, the sources of information available to stakeholders for assessing differences between ENSO phases respect to rainfall and temperature, climate forecast for the Southeast, the relationship between ENSO and wheat production, and the relation between climate variability and plant diseases. Information was disseminated through fact sheets, popular press articles, web publications, extension activities - field days- seminars-workshops, professional meetings, row crops production meetings.

2. Brief description of the target audience

The target audience was:

1) Row crop producers, 2) Row crop and fruit-vegetable advisors including ACES agents and specialists, public and private crops advisors, 3) University professors and graduate students from seven universities in the Southeast US.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	300	1500	0	0

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Publications. Information was disseminated through fact sheets, popular press articles, and web publications. Below is the list of this extension documents./ Fact Sheets Sharda, V., B. V. Ortiz, P. Srivastava, P. 2010. Impact of El Niño Southern Oscillation on Precipitation in Alabama. ACES Timely Information Sheet ? August 2010. <http://www.aces.edu/timelyinfo/BioSysEng/2010/August/august2010.pdf> Visits: 29 _ Views: 50/
 Popular press Ortiz, B. 2010. Climate information gaining importance. Southeast Farm Press magazine. April 5, 2010. <http://southeastfarmpress.com/management/climate-information-gaining-importance> (Southeast Farm Press magazine - Circulation: 50,000 in the Southeast)/
 Langcuster, J., Ortiz, B. 2010. Prepare for La Niña this fall, winter. Southeast Farm Press magazine. October 13, 2010. <http://southeastfarmpress.com/management/prepare-la-ni-fall-winter/> Langcuster, J., Ortiz, B. 2010. Climate Group Helps Farmers Manage Risks. AG illustrated magazine (AU magazine). April 2010./ Web Publications Langcuster, J., Ortiz, B. 2010. Using Climate Information to Farm Better. ACES Blog (Web article). February 17, 2010 <https://sites.aces.edu/group/comm/sustainability/Lists/Posts/Post.aspx?ID=23> Views: 125 /
 Langcuster, J., Ortiz, B. 2010. Using Climate to Farm Better, Part II. ACES Blog (Web article). March 03, 2010 <https://sites.aces.edu/group/comm/sustainability/Lists/Posts/Post.aspx?ID=27> Views: 42 /
 Langcuster, J., Ortiz, B. 2010. Climate Consortium Advising Farmers to Prepare for La Nina Effect This Fall and Winter. ACES Blog (Web article). October 5, 2010 <https://sites.aces.edu/group/comm/sustainability/Lists/Posts/Post.aspx?ID=83> Views: 641 /

Year	Actual
2010	100

Output #2

Output Measure

- The Climate Change educational program generated 9 in-state presentations, 3 out-state presentations, 1 workshop

Year	Actual
2010	14

Output #3

Output Measure

- Posters and other forms of written presentation. Three posters discussing the impact of climate variability on row crop production and diseases, and how farmers learn about climate variability were prepared. The posters were presented at the annual review meeting of the Southeast Climate Consortium.

Year	Actual
2010	3

Output #4

Output Measure

- The extension program in climate variability and climate change reached over 300 growers/crop

consultants through 9 grower and crop consultant meetings, 13 extension specialists participated of one workshop focused on the use of climate decision support tools, 3 posters, 7 extension articles, 1 professional meeting - A total of 1400 contacts - direct and indirect contacts.

Year	Actual
2010	1400

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	- Number of REAs (Regional Extension Agents), extension specialist, and crop advisors who incorporate weather and climate information and climate decision support tools into their own programming efforts. - Number and type of climate decision support tools used by stakeholders. - 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 trainings conducted as part of the climate change extension program. The benefit may come in the form of the adoption of information or in the assistance of its use.

Outcome #1

1. Outcome Measures

- Number of REAs (Regional Extension Agents), extension specialist, and crop advisors who incorporate weather and climate information and climate decision support tools into their own programming efforts. - Number and type of climate decision support tools used by stakeholders. - 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 trainings conducted as part of the climate change extension program. The benefit may come in the form of the adoption of information or in the assistance of its use.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

- Extension agents, extension specialists from the agronomic crops team and some producers understand the differences between ENSO phases and are aware of the impact ENSO has on climate variability./ Extension agents, extension specialists from the agronomic crops team and some producers have change the attitude about the use of climate information to support agronomic management./The increased request for climate information and ENSO forecast by extension agents and farmers indicates their interest in climate variability and impacts on agriculture.

What has been done

- Climate outlooks generated by NOAA and the Southeast Climate Consortium (SECC) are distributed to extension agents and extension specialists working on the areas of row crops production, animal science, and horticulture. The outlooks are distributed to farmers through email and blogs posted in the ACES web page./ A small row crop farmers group with participation of farmers from AL, GA and FL meets at least twice a year to discuss about climate forecasts, impact of climate variability on agriculture and potential adaptation strategies to reduce climate related risks. Farmers meetings, field days and workshops to disseminate climate information.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
132	Weather and Climate
205	Plant Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

There are numerous external factors that could impact the planned outcomes of Climate Change extension program. The external factors include but not limited: failure of climate variability forecast and climate change predictions could affect education programs as well as suggested adaptation and mitigation strategies. Resilience of farmers to climate variability and climate change might also reduce the success and impacts of the program. Unpredictable weather conditions (hurricanes, tropical storms, droughts, etc.) impacting the results from research studies necessary to identify adaptation and mitigation strategies to climate variability and climate change. Other external factors include but not limited: natural environmental disasters, 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.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Although a formal evaluation of the program has not been conducted (only one year program), the PI of this program has documented the increased interest by extension agents, extension specialist and farmers about climate variability and the impact of ENSO on agriculture. The number of calls and emails asking for the season climate forecast has considerably increased in one year. Farmers and extension agents have been very interested about climate forecast row crops are planted in Alabama.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 16

1. Name of the Planned Program

Sustainable Energy

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	5%	0%		
131	Alternative Uses of Land	5%	0%		
211	Insects, Mites, and Other Arthropods Affecting Plants	10%	0%		
212	Pathogens and Nematodes Affecting Plants	10%	0%		
216	Integrated Pest Management Systems	10%	0%		
402	Engineering Systems and Equipment	15%	0%		
603	Market Economics	45%	0%		
	Total	100%	0%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Actual	1.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
16944	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
26192	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
104055	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

1. Conducted feedstock disease control and insect control field test.
2. Conducted feedstock energy efficient irrigation demonstration.
3. Worked with Alabama municipalities to produce biodiesel from used cooking oil.
4. Updated "Alabama Home Energy Options" timely information sheet.
5. Produced two energy videos and Alabama Energy web page.

2. Brief description of the target audience

1. Feedstock producers.
2. Alabama municipal fleets.
3. Alabama homeowners.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1398	27000	0	0

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

Patent Applications Submitted

Year: 2010
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Total of the energy saved of the irrigation project was 9894 gallons of diesel fuel.

Year	Actual
2010	9894

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Over the projected 20 year life of the low pressure nozzles on the projects 809 acres, an estimated energy savings of 197,881 gallons of diesel fuel can be expected.

Outcome #1

1. Outcome Measures

Over the projected 20 year life of the low pressure nozzles on the projects 809 acres, an estimated energy savings of 197,881 gallons of diesel fuel can be expected.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	197881

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Six farmers in five North Alabama counties participated in this project with a total of 809 acres irrigated with low pressure nozzles. All the project farmers said they were satisfied with the energy savings and crop performance with the low pressure nozzles.

Over the projected 20 year life of the low pressure nozzles on the projects 809 acres, an estimated energy savings of 197,881 gallons of diesel fuel can be expected.

A presentation detailing this project was made at The Alabama Precision Agriculture Field Day and Tour, The Alabama Soybean and Corn Association Annual meeting and at The Alabama Precision Agriculture Conference.

A video was produced about the project that can be viewed online at <http://farmenergy.blogspot.com>.

What has been done

Six farmers in five North Alabama counties participated in this project with a total of 809 acres irrigated with low pressure nozzles. All the project farmers said they were satisfied with the energy savings and crop performance with the low pressure nozzles.

Results

Over the projected 20 year life of the low pressure nozzles on the projects 809 acres, an estimated energy savings of 197,881 gallons of diesel fuel can be expected.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
402	Engineering Systems and Equipment

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes

Brief Explanation

Drough limited feedstock production.

V(I). Planned Program (Evaluation Studies and Data Collection)

Evaluation Results

Estimated Energy Savings

Six farmers in five North Alabama counties participated in this project with a total of 809 acres irrigated with low pressure nozzles. All the project farmers said they were satisfied with the energy savings and crop performance with the low pressure nozzles.

Total energy savings for 2010 of the project was 9894 gallons of diesel fuel.

Over the projected 20 year life of the low pressure nozzles on the projects 809 acres, an estimated energy savings of 197,881 gallons of diesel fuel can be expected.

A presentation detailing this project was made at The Alabama Precision Agriculture Field Day and Tour, The Alabama Soybean and Corn Association Annual meeting and The Alabama Precision Agriculture Conference.

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Key Items of Evaluation

Estimated Energy Savings

Over the projected 20 year life of the low pressure nozzles on the projects 809 acres, an estimated energy savings of 197,881 gallons of diesel fuel can be expected.