

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Global Food Security and Hunger

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%	10%		
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%	10%		
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 FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	23.0	4.5	0.0	0.0
Actual Paid Professional	19.6	2.3	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
535139	170548	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
683356	170548	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2824767	241278	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

In 2011, a comprehensive programming effort was established for both traditional and non-traditional agricultural sectors. Programs were implemented for all animal species and forages for the people of Alabama.

Alabama Ethnic Food Security Network

In 2011, nine (9) county workshops, two (2) county forums, three (3) out-of-state farm tours, one (1) statewide symposium and two (2) multistate conferences were conducted in the State of Alabama. These outreach activities placed emphasis on meat goat and sheep production systems and focused on areas such as reproductive and genetic evaluations, nutrition, forage management, use of FAMACHA chart, fecal-egg counts, integrated gastrointestinal parasite management, and predators and predation. Other topics of focus included pasture-raised chickens, grass-fed beef cattle, specialty vegetable production, and food safety. The programs included presentations and demonstrations by in- and out-of-state experts from academia and state and federal government while sponsors included the Alabama Cooperative Extension System, Resource Conservation and Development (RC&D) Council, USDA Food Safety Inspection Service and Alabama Agricultural A+ Marketing Association Inc.

Livestock and Forage Programming

With rising feed, fertilizer and fuel prices, many producers are focused on improving forage output, options and opportunities. In 2011, one (1) statewide forage conference, four (4) regional field days and 15 regional meetings were conducted. Three new programs were developed to meet needs including an equine forage field day, a silage and balage workshop and GrassMasters (multi-session training program). Producers were introduced to mob grazing techniques along with meetings addressing weed control, soil fertility, forage varieties, pest control and economics.

A comprehensive state-wide program (sweep net availability, youtube video, written material, web-based detection map) was established to minimize armyworm damage in hayfields and pastures. Sweep nets were placed in all counties, both with extension personnel and farmers. First reports of fall armyworm outbreaks came on July 6 from 3 counties. By September 7 they had been found in 44 counties. The sweep net program helped producers save 11360 acres of forage in 2011, worth approximately \$817,920. Each producer who used a sweep net saved an average 60 acres of forage on his farm by finding fall armyworms early, and helped an average 1.3 other producers find fall armyworms, resulting in 138 acres saved per sweep net.

Through programming efforts of Alabama Beef Cattle Improvement Association (BCIA) and ACES personnel, producers organized several cattle marketing opportunities with improved genetics. Four feeder calf sales grossed over \$10 million marketing 11,000 head, a premium of almost \$88/hd. Bull breeders sold 159 bulls to 95 different producers for an average price of \$3,302/hd. These bulls should generate an additional \$198,200 more farm income via increased weaning weights of calves over the next

3 years. Producers also sold 44 open and 269 bred replacement heifers netting an additional \$50 to 300/hd over market price.

2. Brief description of the target audience

Alabama Ethnic Food Security Network

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

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 is horse owners wanting to manage their resources more wisely.

3. How was eXtension used?

eXtension was not used in the Alabama Ethnic Food Security Network.

However, eXtension is used significantly in traditional animal science and forages programming as additional sources of information. In the traditional animal sciences programming area, the equine and small meat processor eXtension resources are utilized heavily. Another widely utilized resource is the imported fire ant area.

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	6403	270306	1250	45051

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

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	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
2011	17

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	Actual
2011	570

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Alabama Ethnic Food Security Network:

The dynamic population change that has taken place in Alabama represents new opportunities for food producers and marketers. Because consumer demand for ethnic foods is rising, farmers in Alabama have tremendous opportunities to diversify, expand, and supply the growing demand for a number of multicultural foods. In order to remain competitive in today's market, Alabama farmers and marketers must keep pace with increasingly market segment needs. Meats such as goat and lamb are not only popular among Hispanics, but also among Caribbean Islanders and Middle Easterners. Vegetables such as peppers and eggplants are very popular among Hispanics as well as Asians. Furthermore, research data indicates that more and more Americans are changing their tastes in favor of new multicultural flavors and foods. Despite this increasing interest in multicultural dining, the public is unable to experience more of a variety of ethnic meals at home because of limited availability of high quality, authentic multicultural foods. However, to

ensure that farmers increase availability of a number of safe ethnic food ingredients, educational resources in alternative animal and vegetable production and technological advances were needed.

What has been done

Alabama Ethnic Food Security Network:

In an effort to help Alabama farmers increase the availability of a number of ethnic food ingredients in an efficient and profitable way, the Alabama Cooperative Extension System provided broadly-based and objective information about small ruminants and, to some extent, specialty vegetables and their impact on Alabama's economy and natural resources. Besides carrying out an array of outreach activities (See Planned Program Activity), Extension Animal Science specialists published a book titled "Meat Goats: Reproduction, Nutrition, and Health" to help farmers who are raising meat goats to become knowledgeable and successful in this particular enterprise. During 2011, over 100 copies of this book, which is only available in print, were sold to farmers in the North Alabama region. Extension Animal Science specialists also published a manual titled "Small-Scale Commercial Rabbit Production" which enjoyed a great popularity among growers in the state and overseas.

Results

Alabama Ethnic Food Security Network:

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 570 goat and sheep producers attended educational activities carried out and/or sponsored by the Alabama Cooperative Extension System. Post surveys indicated that 100% of participants gained knowledge as a result of the educational activities. Moreover, 82% of participants reported increases in production efficiency, 76% reported improvements in herd health, and 69% reported increases in profitability ranging from 5 to 18%.

Additionally, Animal Science specialists with the Alabama Cooperative Extension System performed services at an estimated value of \$220, and provided merchandise at an estimated value of \$1,040.

The Alabama Ethnic Food Security Network at Alabama A&M University 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 meat goat, sheep, and specialty vegetable production.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
303	Genetic Improvement of Animals
307	Animal Management Systems
311	Animal Diseases

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Alabama Ethnic Food Security Network

Similar to other commercial agricultural enterprises, meat goat and sheep producers as well as small-scale producers of all natural chickens, beef, and specialty vegetables are also locally impacted by Extension through 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, pasture-raised chickens, grass-fed beef cattle, and specialty vegetable production must be made available to all interested individuals across Alabama. Therefore, future plans include encouraging participation of other Extension professionals and increasing the number of integrated outreach educational activities.

For traditional animal science and forages work especially in the northern portion of Alabama, significant programming was delayed or cancelled because of the April outbreak of tornados. Agents responded to this emergency and assisted livestock, equine and poultry growers affected by the storms. Producers hardest hit were forced to liquidate herds and flocks. Agents coordinated many of the livestock emergencies that arose and provided pertinent information to those in need.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Alabama Ethnic Food Security Network

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

Traditional Animal Sciences and Forages

- Over 800 producers increased knowledge of key forage production practices. Some also implemented new forage harvesting techniques not traditionally seen for beef cattle in AL (silage).
 - Over 200 producers attended the Statewide Forage Conference in December. Participants indicated it was the most comprehensive conference to date and that they planned to implement knowledge learned at the conference.
 - Utilizing a multi-faceted approach, over \$800,000 was saved by early detection and elimination of fall army worms in hay fields and pastures

- Horse owners increased their knowledge and implementation rates when forages programming was made specific for their needs
- With increased genetic and marketing knowledge, producers were able to market livestock realizing more net returns (\$975,000+) over traditional marketing methods. Indirectly, producers purchasing bulls with increased genetic potential should realize \$20 more per calf through increased market weights over each of the next 3 years (\$198,200 additional farm income).

Key Items of Evaluation

Alabama Ethnic Food Security Network

- As a result of the activities, 570 goat and sheep producers gained knowledge of key production management practices.
- As a result of the activities, 77 small-scale and limited-resource farmers gained knowledge of pasture-raised chickens, grass-fed beef cattle, and specialty vegetable production.
- As a result of the activities, 467 goat and sheep producers observed improved production efficiency.
- As a result of the activities, 433 goat and sheep producers observed improved animal health and well-being.
- As a result of the activities, 393 goat and sheep producers reported increased profitability rates ranging from 5 to 18 percent.

Traditional Animal Sciences and Forages

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- Utilizing a multi-faceted approach, over \$800,000 was saved by early detection and elimination of fall army worms in hay fields and pastures
- Horse owners increased their knowledge and implementation rates when forages programming was made specific for their needs
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