

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
Plan	92000	320000	12000	40000
Actual	65095	2489995	10937	408038

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	0	
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	Target	Actual
2010	8	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
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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)

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)

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.