V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Global Food Security and Hunger

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>1862 Extension</th>
<th>1890 Extension</th>
<th>1862 Research</th>
<th>1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>Reproductive Performance of Animals</td>
<td>10%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>302</td>
<td>Nutrient Utilization in Animals</td>
<td>20%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>303</td>
<td>Genetic Improvement of Animals</td>
<td>20%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>307</td>
<td>Animal Management Systems</td>
<td>20%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>311</td>
<td>Animal Diseases</td>
<td>20%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>315</td>
<td>Animal Welfare/Well-Being and Protection</td>
<td>10%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V(C). Planned Program (Inputs)

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

<table>
<thead>
<tr>
<th>Year: 2009</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>Plan</td>
<td>22.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Actual</td>
<td>22.4</td>
<td>4.1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith-Lever 3b &amp; 3c</td>
<td>345308</td>
<td>201407</td>
</tr>
<tr>
<td>Hatch</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Evans-Allen</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1862 Matching</td>
<td>522623</td>
<td>260912</td>
</tr>
<tr>
<td>1890 Matching</td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>1862 All Other</td>
<td>3516711</td>
<td>325115</td>
</tr>
<tr>
<td>1890 All Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(D). Planned Program (Activity)

1. Brief description of the Activity

    ETP 11A - Dogs as Companion Animals
    One (1) dog obedience training camp was conducted in 2009. This outreach education activity consisted of obedience training, talent and costume show, followed by fun and games. The obedience training session began by sitting down and talking to youth about their dog's breed, societal role, and behavioral tendencies. Other events involving Extension educators included the annual "Bark in the Park" fund raiser. The event, which was held at Spring Park in Tuscumbia, Alabama, served as a venue to learn about responsible dog ownership and dog adoption.

    ETP 11B - Goat, Sheep and Rabbit Production Systems
    Four (4) county workshops, two (2) regional field days, one (1) statewide symposium and one (1) statewide conference were conducted in 2009. These outreach activities placed emphasis on sheep and goat production systems and focused on areas
such as sustainable production, multispecies grazing, forage quality, reproductive management, selection of dairy goats, structure and healthcare of the doe's mammary gland, use of FAMACHA chart, and marketing aspects. Other activities conducted by Extension educators included a producer tour to Tennessee State University's Research Farm in Nashville. Besides carrying out a range of outreach activities, Extension specialists conducted gastrointestinal parasite trainings in Sullivan County, Tennessee and Greene County, Mississippi.

ETP 11C - Beef Cattle Performance Programs to Enhance Profitability

Beef cattle producers must be able to document and interpret production information for economically important traits. This is the basis for sound genetic selection decisions. Two major educational programs were conducted primarily for seedstock producers in 2009. Additionally, 3 bull sales and 4 heifer sales were organized, offering superior genetics to all producers. Commercial producers received assistance in analyzing production records, a commercial heifer development program was established and carcass data collected on 500 hd of AL born feeder calves.

ETP 11H - Forage based Livestock Production

A statewide forage conference was held attracting 300 people from 8 states. Emphasis was placed on proper management of forages to decrease fertilized and stored feed needs. Additional regional forage meetings were held including grazing schools and incorporation of legumes. Over 60 articles were written, along with 6 timely information sheets.

ETP 11M - Master Meat Goat Herdsman Program

Three (3) Master Meat Goat Herdsman Programs, averaging 3 days in duration each, were conducted. These comprehensive training activities addressed topics such as feeding and 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, financial management, and marketing. The programs included presentations and demonstrations by in- and out-of-state experts from academia and state and federal government.

2. Brief description of the target audience

The primary target audience was livestock and forage producers and youth interested in learning more about animal agriculture. Attention was also given to equine owners, especially in forage management. 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 and the general public interested in the adoption of companion dogs and learning the positive training methods to improve the human-dog relationship.

V(E). Planned Program (Outputs)

1. Standard output measures

<table>
<thead>
<tr>
<th></th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>92000</td>
<td>320000</td>
<td>12000</td>
<td>40000</td>
</tr>
<tr>
<td>Actual</td>
<td>13258</td>
<td>431049</td>
<td>2261</td>
<td>74609</td>
</tr>
</tbody>
</table>

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

Patent Applications Submitted

Year: 2009
Plan: 0
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Research</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Actual</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>
### V(G). State Defined Outcomes

#### V. State Defined Outcomes Table of Content

<table>
<thead>
<tr>
<th>O. No.</th>
<th>OUTCOME NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>For ETP11J the National Animal Identification Educational Program, the outcome measure will be The number of premises numbers registered for the State of Alabama due to our educational efforts.</td>
</tr>
<tr>
<td>2</td>
<td>For ETP11G the Alabama Master Cattle Producer Training Program, the outcome measure will be the number of graduates.</td>
</tr>
<tr>
<td>3</td>
<td>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 &quot;who&quot; 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 &quot;success&quot;. The basic question to be answered in this part is &quot;what difference did this program make&quot;. 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.</td>
</tr>
</tbody>
</table>

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

For ETP11J the National Animal Identification Educational Program, the outcome measure will be The number of premises numbers registered for the State of Alabama due to our educational efforts.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

For ETP11G the Alabama Master Cattle Producer Training Program, the outcome measure will be the number of graduates.

Not Reporting on this Outcome Measure

Outcome #3

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantitative Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>12</td>
<td>549</td>
</tr>
</tbody>
</table>

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 fastest growing 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 2009, 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. Besides the events carried out (See Planned Program Activities),
Extension specialists developed one (1) new numbered publication on dogs. This publication, which is available in
print and on our ACES website (www.aces.edu) under Urban Affairs and New Nontraditional Programs (Urban and
Nontraditional Animal Science), is listed below:

UNP-0120 Fundamentals of Puppy Ownership

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
operation, 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 Activities), Extension specialists developed six (6) 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-0062 Basic Meat Goat Nutrition
UNP-0106 Pregnancy Toxemia (Ketosis) in Goats
UNP-0107 Biology of Reproduction of Goats
UNP-0109 Coccidiosis in Goats and Prevention
UNP-0110 Criteria to Select Goat Breeding Stock
UNP-0123 Goat Cuisine: A Culinary Delight

ETP 11M - Master Meat Goat Herdsman Program
In an effort to help Alabama limited-resource farmers and pre-existing and potential goat producers manage their
animals and improve the profitability of their operation, 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 Activities), Extension
specialists developed and 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
Nine (9) 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 come when called. A hundred plus participants, who attended the
annual "Bark in the Park" fund raiser, paid a twelve-dollar entry fee and received a packet containing educational
information for them and goodies for their dogs. Funds raised benefited the Northwest Herding Dog Rescue and
In 2009, ten (10) dog publications available online at www.aces.edu/pubs saw up to 47,771 distinct visits averaging 154 seconds in visit duration. According to Nielsen Online, the average user spends 57 seconds on a web page.

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.

As this project advances and Extension agent involvement increases, this ETP shall be able to capture greater impacts of responsible dog ownership and the benefits of dog companionship to both youth and adults.

**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 503 goat and sheep producers attended educational activities carried out and/or sponsored by ACES. Post surveys indicated that 92% of the participants gained knowledge as a result of the educational activities. Moreover, 83% of the participants reported improvements in herd health and production efficiency, and 75% reported increases in profitability ranging from 5 to 18%.

In 2009, forty (40) small ruminant publications available online at www.aces.edu/pubs saw up to 64,055 distinct visits averaging 99 seconds in visit duration. According to Nielsen Online, the average user spends 57 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 37 meat goat farmers attended the comprehensive training program carried out by ACES. Post surveys indicated that 100% of the participants agreed that the program was very helpful. Furthermore, 100% of the participants felt that, as a result of the program, their knowledge base regarding feeding and nutrition, facilities and fencing, and predators and predations had been significantly increased. Approximately 80% of the participants felt that, as a result of the program, their knowledge base regarding herd health and parasite management, forages and pasture management, and marketing had been somewhat increased.

A quote from the program sums up attitude and approach by saying "Sustainable meat goat production requires a comprehensive approach. The Alabama Cooperative Extension System recognizes this fact by providing a state-wide, comprehensive educational program designed to best serve the meat goat industry".

### 4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>Reproductive Performance of Animals</td>
</tr>
<tr>
<td>302</td>
<td>Nutrient Utilization in Animals</td>
</tr>
<tr>
<td>303</td>
<td>Genetic Improvement of Animals</td>
</tr>
<tr>
<td>307</td>
<td>Animal Management Systems</td>
</tr>
<tr>
<td>311</td>
<td>Animal Diseases</td>
</tr>
<tr>
<td>315</td>
<td>Animal Welfare/Well-Being and Protection</td>
</tr>
</tbody>
</table>
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

In 2009, after 3 years of drought, producers experienced significant moisture which impacted forage quality. This also impeded producers from planting winter annuals, thus impacting the amount of stored feed needed to winter livestock.

Additionally, the economic woes of the American economy also significantly impacted program attendance. Agents had difficulty in obtaining critical mass of producers to participate in scheduled programmatic efforts. Producers were cutting costs in any manner possible. In some cases (e.g. dairy producers), producers saw gross revenue cut in half due to the milk price/cwt. Beef and swine producers saw a 10 to 20% reduction of prices received for livestock at market.

Equine owners saw animal value decline to almost 0 because of the continued U.S. horse slaughter ban.

Sheep and goat farmers as well as dog fanciers are also locally impacted by Extension via its' County and 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 and dog science, obedience training, and responsible ownership must be made available to all interested individuals across Alabama. Hence, future plans include promoting participation of other Extension professionals and increasing the number of outreach educational activities, particularly in South Alabama.

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.

ETP 11B - Goat, Sheep and Rabbit Production Systems
● Increased knowledge of key production management practices.
● Improved efficiency of production.
● Improved animal health and well-being.
● Increased marketing and profitability.

ETP 11C - Beef Cattle Performance Programs to Enhance Profitability
● Improved knowledge of purebred marketing and data collection.
● Improved knowledge of current genetic defects impacting beef cattle populations.
● Increased marketing opportunities and profitability.

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, 9 program participants (youth) gained knowledge of dog obedience training and responsible ownership.
ETP 11B - Goat, Sheep and Rabbit Production Systems
• As a result of the activities, 463 program participants gained knowledge of key production management practices.
  • As a result of the activities, 417 program participants observed improved production efficiency.
  • As a result of the activities, 417 program participants observed improved animal health and well-being.
  • As a result of the activities, 377 program participants reported increased profitability rates ranging from 5 to 18 percent.

ETP 11C - Beef Cattle Performance Programs to Enhance Profitability
• From the commercial cattle records processed, feeder cattle continue to average 550 lbs at weaning with a 5.7 frame score, which is moderate and acceptable in the U.S. Beef Industry.
  • Alabama born feeder cattle fed and harvested in the Midwest continue to perform on par or above to all cattle harvested in the U.S.
  • One-hundred forty-nine (149) buyers of bulls and replacement heifers should receive a $219,600 benefit over buying cattle with no performance information.

ETP 11M - Master Meat Goat Herdsman Program
• As a result of the activities, 37 program participants gained knowledge of meat goat science and production.