

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

**Program # 1**

**1. Name of the Planned Program**

Small-Scale Farming and Food Security

Reporting on this Program

**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%		
111	Conservation and Efficient Use of Water		10%		
123	Management and Sustainability of Forest Resources		10%		
131	Alternative Uses of Land		15%		
211	Insects, Mites, and Other Arthropods Affecting Plants		10%		
301	Reproductive Performance of Animals		10%		
501	New and Improved Food Processing Technologies		15%		
601	Economics of Agricultural Production and Farm Management		20%		
	<b>Total</b>		100%		

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

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

Year: 2014	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	0.0	10.0	0.0	0.0
<b>Actual Paid</b>	0.0	9.0	0.0	0.0
<b>Actual Volunteer</b>	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
0	730805	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	433663	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

## V(D). Planned Program (Activity)

### 1. Brief description of the Activity

This program was carried out through a variety of ongoing delivery means, namely small group meetings, workshops and training sessions, demonstrations, large group meetings and conferences, mailings, newsletters, brochures and fliers, website visits and blogs, and farm visits where technical assistance and follow-up were provided. In addition, farmers and landowners were served via telephone calls and individual mailings. Another effective mean was via on-farm research and demonstration sites that are continuing to be established on cooperating farms. Some specific activities are summarized below.

Two thousand two hundred (2,200) contacts were made with small scale livestock producers and landowners during the past year via many of the above named means. Additional contacts were made with goat, and fruit and vegetable producers.

A Livestock Program web page was developed on the Tuskegee University website ([http://www.tuskegee.edu/about\\_us/outreach/cooperative\\_extension/livestock\\_program.aspx](http://www.tuskegee.edu/about_us/outreach/cooperative_extension/livestock_program.aspx)) and information on educational materials and programs are posted on this web page.

The annual Tuskegee University Goat Day was held again this year with 93 participants. Morning lecture sessions presented information on topics related to dairy goat production such as guidelines for beginning a commercial dairy, disease control regulations, and a roundtable discussion on the challenges and future outlook of the industry. The afternoon field portion of the program featured several activities; including milking, cheese making, and pasture management demonstrations.

The sixth year of the Master Goat Producers Certification Program trained 50 individuals from four states. The first part of the training was a comprehensive three-day intensive course (lecture and hands-on) in meat goat production, followed by an exam. The second part consisted of follow-up visits to farms of those who advanced to upper training levels. The third part included a workshop concerning grants available from the Southern SARE program.

A Small Ruminant Year-Round Pasture Production and Management seminar was held for the Sheep and Goat Producers Commodity Group at the annual meeting of the Alabama Federation of Farmers. The seminar was attended by over 65 people who were informed about the benefits of year-round forage production and its benefits for producing low-cost and healthy meats.

**2. Brief description of the target audience**

The targeted audience will consist of small-scale producers and landowners in the 12 Black Belt and surrounding counties in Alabama.

**3. How was eXtension used?**

eXtension was not used in this program

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

**1. Standard output measures**

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	8515	1266	8326	826

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

**Patent Applications Submitted**

Year: 2014  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2014	Extension	Research	Total
<b>Actual</b>	3	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- The output target will consist of training, technical assistance, and service in Horticulture, Plasticsulture, Organic Farming, Food Processing, Cooperatives, Markets, Enterprise Budgeting and Economic Analysis, Forest Management, Animal Management and Marketing involving farmers, landowners, homeowners, senior citizens, youth farmer organizations, federal and state agencies and private industry.

<b>Year</b>	<b>Actual</b>
2014	0

**Output #2**

**Output Measure**

- Number of target audience adopting new ways of doing things

<b>Year</b>	<b>Actual</b>
2014	1260

**V(G). State Defined Outcomes**

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

O. No.	OUTCOME NAME
1	The output target will consist of training in Integrated Pest Management, Plasticulture, Organic Farming, Forest Management, Animal Management and Marketing involving farmers, landowners, homeowners, senior citizens, youth farmer organizations, federal and state agencies and private industry.

## **Outcome #1**

### **1. Outcome Measures**

The output target will consist of training in Integrated Pest Management, Plasticulture, Organic Farming, Forest Management, Animal Management and Marketing involving farmers, landowners, homeowners, senior citizens, youth farmer organizations, federal and state agencies and private industry.

### **2. Associated Institution Types**

- 1890 Extension

### **3a. Outcome Type:**

Change in Knowledge Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2014	0

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

This program addresses many of the challenges small-scale producers, their families and communities face in efforts to maintain profitable and sustainable farms, and related agribusinesses. Many of the challenges concern the lack of sufficient knowledge of the changing nature of agricultural production strategies and technologies, marketing strategies and capital acquisition, particularly for small-scale operations. Included and specifically are the lack of sufficient knowledge of sustainable production methods, governmental assistance programs, cooperatives, value added and safe food processing, marketing, and other aspects of sustainable and profitable farming. Other challenges in many rural communities are related to landownership losses, food deserts, and agricultural pollution.

#### **What has been done**

As part of Tuskegee University's research based educational programs, the Extension staff made more than 1,200 contacts with small scale livestock producers during the year through workshops, farm demonstrations, group meetings, farm and home visits, office visits, newsletters, and professional conferences. Other livestock related programs included a goat day training conference with 93 participants, and a small ruminant year-round pasture production and management seminar with more than 65 participants. Pasture and grazing management field days, training workshops, and sessions were also conducted. Monthly Farm Peer workshop sessions for beginning farmers were held in Barbour County. More than twenty-eight farmers attended the tri-county 16th Annual Small Farmers Area Work Conference where topics of interest to farmers were discussed. In addition, the 122nd Farmers Conference was attended by more than 300 farmers where they were exposed to various valuable subjects. Extension also

held 40 meetings that trained farmers in Food Safety regulations for Good Agricultural Practices certification, and conducted training for Master Goat Producer and Vegetable Gardener Certification, the latter leading to volunteers helping to establish new Community Gardens in four counties. Vegetable farmers were trained in assembling hoop and tunnel houses, associated drip irrigation systems, integrated pest management, and other technologies. Also, youth were trained in maintaining school gardens and livestock showmanship, leading them to participating in goat and cattle shows.

### Results

Cattle producers improved breeding stock by selecting purebred and high quality replacement bulls and heifers. One producer with 40-50 heads of cattle reduced production costs by \$4860.00 to \$6480.00 per year after improving and better managing pastures. Two goat producers were able to save \$221.00 to \$237.00 per month by growing forages to feed their herds (35 to 40 head) during the winter time. Other benefits included reduced parasitic infestation by at least 70 percent in animals grazing tannin rich forages. About 65 percent of beef and goat producers improved the quality and quantity of forages, renovating approximately 1500 acres of pastures and hay fields. Five farmers graduated from Farm Peer training. Ten farmers became Food Safety Certified (Good Agricultural Practices, GAP) to sell to commercial markets in 2014. In addition, three women farmers became GAP certified to sell leafy greens, resulting in them grossing over \$16,000 in a Farm to School program. Several farmers through a cooperative jointly produced about 746 bins of watermelons and over 3000 cases of peas that were marketed to large retailers, a new market for them. Another four farmers contracted 15,000 watermelons through private sales totaling over \$75,000, a 90 percent increase from 2013. Farmers who began using plasticulture for the first time grew about seven acres of collards under plastic and received an increase of 30 to 35 percent in profits compared to open row culture. In addition, farmers are installing hoop houses to increase vegetable production throughout the year, especially during the winter and early spring.

## 4. Associated Knowledge Areas

<b>KA Code</b>	<b>Knowledge Area</b>
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
123	Management and Sustainability of Forest Resources
131	Alternative Uses of Land
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501	New and Improved Food Processing Technologies
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
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

### **Brief Explanation**

Program outcomes were particularly affected by extreme weather conditions and the economy. A number of planned field demonstrations were cancelled due to bad weather and the number of participants were lower than expected for some workshop and training sessions that required registration fees and/or more time off from farm and other job-related activities.

## **V(I). Planned Program (Evaluation Studies)**

### **Evaluation Results**

Almost all the producers that participated in educational workshops and training sessions indicated a willingness to adopt the recommended practices to help reduce cost, improve efficiency and in turn increase their profits. A number of farmers have already adopted a cooperative marketing program and have seen higher profits from their sales. Through the risk management educational and training efforts, producers have made significant increases in profits through the collaborative marketing strategy to penetrate local commercial markets including Walmart, Whole Foods, and Sodexo. Farmers have gained a myriad of information and skills relating to farm safety and quality control, crop insurance, food safety, pricing and grading, as well as packaging and transportation of produce to commercial retailers. A number of youth from various Black Belt counties who participated in agricultural educational programs including livestock shows, TAPS, Agri-Treck and forestry camps have also been exposed to career opportunities and resources in the agriculture and natural resources field. About 40% have indicated an intension to pursue career paths in this field.

### **Key Items of Evaluation**

Key program components focus on technical assistance and educational programs and resources on animal production efficiency and herd health management, fruits and vegetables production using plasticulture and hoop-houses, organic agriculture and sustainable practices, farm risk management and cooperative marketing, and timber sales management.