

# Food Animal Production and Management

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

### 1. Name of the Planned Program

Food Animal Production and 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
302	Nutrient Utilization in Animals		100%		100%
	<b>Total</b>		100%		100%

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

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	0.0	0.1	0.0	2.5
<b>Actual</b>	0.0	0.1	0.0	2.0

### 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	6963	0	228109
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	139720
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**

For the Goat Project:

In 2007, crop by-products (CBP) such as Whole Cottonseed (WCS), Cottonseed Hulls (CSH), Broken Rice (brewers' rice) were fed to mixed cross-bred Boer goats who were also receiving concentrate rations formulated to supply 16 percent crude protein (CP) or commercial concentrate feed containing 16 percent CP. The trial concentrate grain mix contained Broken Rice (BR), Soybean meal (SBM), Chopped (cracked) Corn (CC), Salt, Vitamins premix, and minerals. The experimental design was a 3x3x3 randomized block design where all animals were fed under confined production management system in confined during the trial. Twenty seven goats (25 female and 2 wethers) were assigned to nine paddocks at the rate of three animals per paddock. The paddocks were 64 square feet in area (8 ft x 8 ft in dimension). Then the paddocks were randomly assigned to three treatments, A, B, and C with three replicates per treatment. The treatments were made up of the following: treatment A was feeding WCS and concentrate grain mix that also contained BR to provide 16 percent CP; treatment B was feeding WCH and concentrate grain mix that also contained BR to provide 16 percent CP; and treatment C was feeding low quality roughage (mixed grass hay) and commercial feed concentrate that provided 16 percent CP. Crop by-products and hay were made available to the animals at all times. Concentrate ration supplementations were fed in evening in order to encourage the animals to consume more roughages in the morning and afternoon periods. All animals were acclimated to the experimental rations for 7 days before data collection. All experimental animals received their diets throughout the trial period with exception of treatment A which started receiving some hay to stimulate the consumption of roughage from both WCS and hay. The trial spanned from May 24, 2007 to July 20, 2007. All animals received diets at the rate of 3 percent body weight (BW).

For the Swine Project:

Three feeding trials were completed in 2007. This involved the use of brewer's rice to replace corn as the main energy source for pig finishing rations. Brewer's rice is abundant in southeast Arkansas and is cheaper than corn or milo, two most commonly used energy feeds for this class of animals in this region. We are in the process of analyzing the data collected from the three trials completed in 2007. More testing of locally available feeds (mainly protein feeds) will continue in 2008.

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

The targeted audience will include high school students, college students, extension agents, livestock farmers, and stakeholders.

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

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	45	100	60	40
2007	90	300	120	80

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

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007:	0

**Patents listed**

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

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

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

**Output Target**

**Output #1**

**Output Measure**

There will be expected reduction in the cost of production (input) relative to the meat goats and pigs which will result to improvement in the economic earnings of the small farmers. Indicators to be measured are: 1) the feed efficiency for both goats and swine; 2) feed conversion; rate of consumption of crop by-products and forages, (relative weight gain (growth) of goats and swine stocked in varying densities.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2	2

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

O No.	Outcome Name
1	Number of papers,abstracts,reports and conference presentations
2	Checked

**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
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**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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**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

Populations changes (immigration, new cultural groupings, etc.)

Other (Inadequate research facilities to conduct confined livestock production systems trials.)

**Brief Explanation**

Inadequate animal research facilities constrained the scope of our research. This factor is greatly influenced by most of the external factors indicated above.

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

**1. Evaluation Studies Planned**

After Only (post program)

**Evaluation Results**

**Key Items of Evaluation**