

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

**Program # 14**

**1. Name of the Planned Program**

Global Food Security and Hunger - Farm and Agribusiness 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
601	Economics of Agricultural Production and Farm Management	50%		100%	
602	Business Management, Finance, and Taxation	15%		0%	
603	Market Economics	20%		0%	
610	Domestic Policy Analysis	15%		0%	
	<b>Total</b>	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	8.8	0.0	3.0	0.0
Actual	7.5	0.0	1.5	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
125000	0	63663	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
125000	0	63663	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1100000	0	407432	0

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

1. Brief description of the Activity

Research based information developed

Decision aids developed that assist farm and agribusiness managers in improved decisions

Educational programs conducted that improve the management skills of farm and agribusiness managers

Farm and agribusiness managers are able to better understand economic consequences and make more informed decisions

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

Managers, owners, and employees of farms and agribusinesses

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

**1. Standard output measures**

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Plan</b>	500	1000	100	200
<b>Actual</b>	8141	194720	400	5000

**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
<b>Plan</b>	10	10	
<b>Actual</b>	35	20	55

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

**Output Target**

**Output #1**

**Output Measure**

- Number of board members of farmer-owned cooperatives receiving credentialed director training for board governance

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	50	45

**Output #2**

**Output Measure**

- Number of software decision analysis aids developed

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	2	2

**Output #3**

**Output Measure**

- Number of manuscripts submitted to refereed journals

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	10	15

**Output #4**

**Output Measure**

- Number of farm income tax management schools conducted

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	10	10

**Output #5**

**Output Measure**

- Number of economists trained at other universities to deliver packer-feeder workshops and classes

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	1	1

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

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

O. No.	OUTCOME NAME
1	Number of tax preparers using information from OCES tax schools
2	Number of credentialed board members serving on agricultural cooperative boards (cumulative)
3	Number of beef producers applying some level of financial management decision skills learned through Master Cattleman certification
4	Number of specialty crop producers and goat producers improving farm management and/or financial management skills
5	Participants Increasing Knowledge of the Cattle Marketing System - Packer-Feeder Simulation
6	Potential difference in productivity through genetic markers

## **Outcome #1**

### **1. Outcome Measures**

Number of tax preparers using information from OCES tax schools

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

- 1862 Extension

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

Change in Knowledge Outcome Measure

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

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2010	300	1250

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

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

Frequent changes in Federal and Oklahoma State Tax Laws create a need to keep tax preparers informed of the impact of the changes and how to best help their clients utilize the tax planning and management opportunities available in the current tax laws. These tax schools are designed to update tax preparers about new laws and regulations covering farm, non-farm business and individual taxpayer issues.

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

The mission of the Oklahoma State University Tax Schools is to provide a quality tax education experience for income taxpreparers. This program has been conducted for the past 46 years. It has grown from a one-day seminar to its present form of two days per location for the fall Farm and Business Tax Institutes and the summer Tax Clinic. The combination of all the schools allows a preparer to get the full 40 hours of CPE/CLE as required by state. Topics covered range from presentation of new tax laws and their implications, agricultural issues, business issues, tax planning opportunities, professional ethics, retirement, and social security to name a few. Twelve two day sessions are conducted each year with two of these in the summer and ten in the fall and two one day special topics courses. Total 2010 attendance for the schools was approximately 2,030 tax preparers in 11 workshops. Certified public accountants make up 46 percent of the attendance, 27 percent are tax preparers and bookkeepers, 10 percent are enrolled agents, 2 percent are attorneys, and the remaining 15 percent come from a variety of backgrounds. These tax preparers file roughly 80 percent of the farm returns for taxpayers in the state of Oklahoma.

#### **Results**

High quality, professional instruction is provided to make continuing education credit available for Certified Public Accountants, Enrolled Agents, and Tax Attorneys. Many of those attending have stated that they have been coming to these programs since they began. Participants filed more than 37,645 Federal farm tax returns and 255,428 Federal non-farm tax returns as reported by

the participants in the most recent program evaluations. Most of the tax preparers that attend are from Oklahoma however there have been preparers from Kansas, Texas, New Mexico, Arkansas, Florida, and California attending the program in order to maintain their Oklahoma accreditation. Participants in these schools have indicated on the evaluation form that they file approximately 297,000 Federal non-farm income tax returns as well as 40,000 Federal farm returns. This is roughly 65 percent of the total farm returns filed in Oklahoma. A recently added question asked the participants to place a subjective value on the education received which they then use to assist their clients with tax planning advice to reduce Federal and Oklahoma income taxes, to increase return filing accuracy, to provide retirement planning assistance, and/or to educate their clients of important estate planning tools. The participants were asked specify a value per return they filed which averaged just slightly greater than \$80.00 per return. Therefore using the number of participants willing to provide this information (roughly 25% of the participants) and the average number of returns completed by this group annually (195 returns) the value of the tax schools is over \$7,500,000 for 2010. Other testimonials from attendees follow.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

#### Outcome #2

##### 1. Outcome Measures

Number of credentialed board members serving on agricultural cooperative boards (cumulative)

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Action Outcome Measure

##### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	150	155

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

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

The board of directors of an agricultural cooperative has responsibility for strategic decisions and for safeguarding the organizations assets. Agricultural cooperative board members are producers who are elected by the membership to serve with only token remuneration. In recent times, all board members, including cooperative board members are under intense scrutiny. The incidence of legal proceedings against board members has increased dramatically. These litigations are typically initiated by owner (member) groups and they focus on the competency and diligence of the board. The severe repercussions from errant business decisions and the intense

scrutiny of board member competency have created a critical need for educational programs.

### **What has been done**

In response to the critical need to improve the competencies of cooperative board members the Oklahoma Credential Cooperative Director (OCCD) program was created. The OCCD program involves two days of training on finance, legal responsibilities, parliamentary procedure, effective meeting management, strategic planning and other related topics. In designing the OCCD curriculum, board of director training material from across the U.S. was examined. OCCD instructors include OCES faculty as well as industry experts including bankers, auditors, attorneys and consultants. The OCCD program is delivered simultaneously at a central location and via two-way interactive video at eight remote locations across Oklahoma.

The OCCD program was initiated in November of 2001. Since then it has been offered fifteen times (spring and fall) with twelve advanced sessions. Over 3800 directors have attended the Credentialing sessions and over 1,500 directors have returned for advanced training.

### **Results**

The directors completing the OCCD program have a better understanding of financial management and the legal roles and responsibilities of the board of directors and are able to make better business decisions and to safeguard the assets of their cooperative organizations. Currently there are over 150 Credentialed directors representing 44 cooperatives and over 150 more directors who are progressing through the credentialing training. Over 400 directors from 37 separate cooperatives have attended an advanced session. Twenty cooperatives have achieved the status of having every board member credentialed. The typical Oklahoma cooperative includes 1,500 or more farmer members and organizational assets of over \$10M. The OCCD program impacts thousands of Oklahoma producers by enhancing the board's ability to manage and safeguard cooperative assets.

## **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
602	Business Management, Finance, and Taxation

### **Outcome #3**

#### **1. Outcome Measures**

Number of beef producers applying some level of financial management decision skills learned through Master Cattleman certification

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

- 1862 Extension

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

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	175

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Production management, business planning, risk management and marketing are major issues for the beef producers who comprise Oklahoma's #1 agricultural industry.

#### What has been done

A comprehensive educational program developed and delivered in cooperation between Agricultural Economics, Animal Science, Plant and Soil Science, Vet Med, Biosystems and Ag Engineering. The OSU Master Cattleman Program was launched in 2004 with the objective of enhancing the profitability of beef operations and the quality of life of beef producers by equipping them with vital information on many aspects of beef production, business planning, risk management and marketing. The educational curriculum is based on the Oklahoma Beef Cattle Manual. PPTs and lesson plans are available to educators via the Master Cattleman website. Producers must complete 4 hours in each of 6 subject matter areas plus an additional four hours of instruction or special projects. Local Extension educators plan and organize the Master Cattleman educational series and select the specific curriculum offered.

#### Results

An additional 30 producers were certified under the OSU Master Cattleman Program in 2010

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation

### Outcome #4

#### 1. Outcome Measures

Number of specialty crop producers and goat producers improving farm management and/or financial management skills

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	50

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

The meat goat industry has been rapidly expanding in Oklahoma and the United States. Meat goat numbers in Oklahoma have gone from not even being counted by USDA to 94,000 in 2007, ranking 5th in the U.S goat numbers. This rapid expansion in goat numbers has created a need for meat goat production education. In addition to the differences between goat production and other livestock production systems, many goat producers are relatively new to livestock production. These producers not only need education on goat production practices but also education on how to do the simple management techniques such as ear tagging, castrating, and body scoring that many livestock producers take for granted. The Oklahoma Meat Goat Boot Camp was created to meet the educational needs of these goat producers.

#### What has been done

The Oklahoma Meat Goat Boot Camp is a three day workshop that combines hands-on demonstration and activities with classroom presentations and exercises. Camps size was limited to 50 participants. Cost to the participants was \$100. During the three days each participant gain information and skills on animal identification, hoof care, fencing, forage management, business management, nutrition, parasite control, herd health management, predator control, kidding and neonatal care and reproduction and pregnancy diagnosis.

#### Results

All participants were asked to evaluate the program and determine the impact to their operation. The following are the results from the evaluations.

- ?80% of the sessions taught were of great value to participants
- ?425% potential adoption rate of information and management practices from the boot camp
- ?Average perceived dollar value of the information presented was \$20.89/goat
- ?Total value perceived for the 2010 programs was \$93,600

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation

## **Outcome #5**

### **1. Outcome Measures**

Participants Increasing Knowledge of the Cattle Marketing System - Packer-Feeder Simulation

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

- 1862 Extension
- 1862 Research

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

Change in Knowledge Outcome Measure

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

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2010	{No Data Entered}	125

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

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

Price discovery is consistently cited as a critical issue in the beef industry. Increasing consolidation of buyers and changing pricing methods have heightened the need for producers, cattle feeders and affiliated agribusiness professionals to understand fed cattle market dynamics, the behavior of buyers and sellers, and alternative pricing methods.

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

The Fed Cattle Market Simulator was developed at Oklahoma State University in 1990 and has been used in all three missions of the Land Grant University mission ? teaching, extension, and research.

While the focus of simulation workshops is on price discovery, participants also learn the importance of several economic concepts, including value of information, market dynamics, breakeven analysis, derived demand, production efficiency, economies of size, hedging and risk management, and industry behavior and performance. This one-of-a-kind market simulator is used for groups of 24-48 people. The team has conducted workshops with persons as young as teenagers to persons in corporate executive management positions. Workshops of four hours are most common, but more in-depth, intensive workshops are offered to some groups, up to two-day sessions at large agribusiness corporations. Numerous extension and research publications have been written concerning the Fed Cattle Market Simulator in classroom teaching, extension education, and experimental simulation research.

#### **Results**

The simulator has been the basis for an OSU course offered once a year for 14 years. It has been the basis for marketing workshops with over 100 groups of 25 or more participants. One of

the largest agribusiness firms has incorporated it into its annual employee training program. The developers have conducted 18 workshops with its managers from sales, procurement, and corporate operations. The developers have conducted producer workshops in 17 states, two provinces in Canada, and one state in Mexico, including 8 times at the national convention of the National Cattlemen's Beef Association. Over 20 workshops with producers have been conducted in Oklahoma. A large foundation in Oklahoma has included the simulator in its annual AgVenture youth camp for the past 9 years. Agricultural economists in other states have adopted the software for use in classroom teaching and extension education programs (Colorado State University, Iowa State University, Kansas State University, Sam Houston State University, South Dakota State University, Texas A&M University, Texas Christian University, and University of Kentucky). During 2010, 3 workshops were conducted with over 125 participants.

Workshop evaluations clearly indicate the value of the simulator in teaching economics concepts. Anecdotal evidence indicates the market simulator changes attitudes about how markets work and why; increases knowledge and understanding of pricing methods for various genetic types of cattle; and enhances the bargaining skills of producers. Evaluation comments indicate the market simulator aids participants to better understand price discovery.

#### 4. Associated Knowledge Areas

<b>KA Code</b>	<b>Knowledge Area</b>
603	Market Economics

#### Outcome #6

##### 1. Outcome Measures

Potential difference in productivity through genetic markers

##### 2. Associated Institution Types

- 1862 Research

##### 3a. Outcome Type:

Change in Knowledge Outcome Measure

##### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

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

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

Advances in genetic testing technology have prompted members of the beef industry to consider the effects of using genetic marker tests to improving selection and marketing of beef cattle.

Several companies such as Merial and Pfizer now offer and sell a host of genetic tests for beef

cattle, but at present it is unclear whether the benefits of using the tests exceed the costs.

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

- ?Developed models to determine the value of genetic markers to sort feedlot cattle
- ?Conducted statistical analysis to determine the relative profitability of feedlot cattle with differing genetic markers
- ?Conducted statistical analysis to determine the effect of genetic markers on yearling bull sales prices
- ?Conducted surveys of bull buyers to determine the value of genetic marker information
- ?Developed models to determine the economic value of genetic information to determine the genome-wide effects of improving beef tenderness via genetic marker-based selection of bulls and replacement heifers
- ?Written several papers on the topic and given presentations to numerous producer, industry, and academic audiences

#### **Results**

- ?Determined that an industry-wide strategy to select bulls in the upper 30% of genetic merit of meat tenderness would result in increased profitability of \$9.60/head for feeder cattle and \$1.23/head for fed cattle in 20 years. The net present value of the genetic improvement program is estimated to produce economic benefits of \$7.6 billion.
- ?Determined that there is a more than \$60/head difference in the profitability of animals with the best genetic markers compared to those with the worst.
- ?The models developed to determine the value of genetic information to optimally sort cattle have been used by a number of the largest feedlots in the U.S.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

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

### **1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

### **Evaluation Results**

{No Data Entered}

### **Key Items of Evaluation**

{No Data Entered}