2008 Langston University Combined Research and Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

Langston University's Research and Extension Programs work collaboratively to make a positive difference in the lives of stakeholders in Oklahoma, the nation and globally.The three major areas being reported on for 2008 are Goat Research/Extension, Aquaculture Research/Extension, 4-H Youth Development and Family & Consumer Sciences.

Goat Research at the University is conducted through the American Institute for Goat Research.The scope of the small ruminant research being performed includes Angora, meat and cashmere goats.Nutrition studies are primarily oriented toward determining the nutrient requirements of goats with special emphasis on the high□producing dairy goat. Research is being conducted with goat milk and the development of value□added products from the milk.During 2008, two cheesemaking and one soapmaking workshop were conducted through the Extension Program.Some goat producers have started supplementing their annual income by making goat cheese in their homes and selling the product.Research and Extension personnel worked collaboratively to put on goat artificial insemination clinics.These clinics allow goat producers to use superior animals to improve the genetic composition of their goat breeding stock.In 2008, two artifical insemination workshops were conducted.The workshops had 43 participants.In order to provide the proper training, workshops had to be limited to a manageable number.Other goat research and Exension efforts included enhanced dairy herd improvement, internal parasite control for small ruminants, web□based training and international collaborations.Over 800 goat producers have enrolled in the web□based on□line certification program and 105 goat producers have been certified via the site.Research findings from the Institute are incorporated into fact sheets which are distributed by our Extension Program.Data are often summarized in articles in the quarterly newsletter.In addition, research results are published in appropriate journals for goat research, including The Journal of Animal Science, Small Ruminant Research, Journal of Dairy Science, Canadian Journal of Animal Science, Sheep and Goat Research Journal and Animal Feed Science and Technology.

Aquaculture Research and Extension Programs provide information and technology needed by Oklahoma Aquaculturists, pond owners and others.Materials provided by these programs assist producers and enthusiasts in properly managing fish farms and ponds in a profitable and ecologically sustainable manner.Research is being conducted with alternative aquaculture species to test the profitability of additional fish species for Oklahoma producers.During 2008, Research and Extension personnel had face□to□face contact with fish producers during workshops, site visits, meetings and at the University's Annual Aquaculture Field Day.Information was shared from our studies which show bigmouth buffalo as a potential alternative fish species for Oklahoma producers.The Aquaculture Water Gardens Program gave presentations to stakeholders interested in developing and or managing ornamental ponds.Information was presented at the annual meeting of the Kansas Aquaculture Association, the Langston University Aquaculture Field Day, and during group sessions.A book on ornamental ponds was drafted and it will provide best management practices to assist stakeholders in the construction and maintenance of ornamental ponds.Research and Extension work in the Phytoplankton Program provided information to fish producers to help them reduce the off□flavors in their catfish by controlling phytoplankton levels in their ponds.

4□H, Youth Development and Family & Consumer Sciences provide needed programs to youth and families in Oklahoma.Langston University's Cooperative Extension Program views the youth population of Oklahoma as one of the state's most important resources. A learning by doing approach is used to enable youth to develop the knowledge, attitudes, and skills they need to become competent, caring, and contributing citizens of our society. Today's young people are living in an exciting time; with an increasingly diverse society, new technologies, and expanding opportunities. Two challenges facing many of our youth are deficiencies in reading and mathematics.Helping youth to develop and maintain high skill levels in these areas is being addressed by the Youth Development Unit at Langston University.The Extended Education Program includes a youth summer program offered to students in Kindergarten through Fifth Grade (ages 5□13).In 2008, eighty youth participated in the program.After seven weeks of training, 82% demonstrated an improvement in reading comprehension and 79% showed improvement in understanding mathematical concepts and operations.This summer program helps youth maintain math and reading skills over the summer months and positions them to achieve well when school starts in the fall.During the summer and fall of 2008, a Science, Engineering and Technology (SET) component was added to our Extended Education Program.SET activities reached twelve additional students and an older age group.

Program areas included in this Executive Summary play vital roles in reaching and making a difference in the lives of youth, families, producers, consumers and others in the State of Oklahoma.

Total Actual Amount of professional FTEs/SYs for this State

Year:2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	29.2	0.0	10.8
Actual	0.0	20.1	0.0	25.9

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Internal University Panel
- External University Panel
- Expert Peer Review

2. Brief Explanation

The merit review process for research programs included individuals from within the University, external reviewers, advisory groups and USDA/CSREES personel.

The merit review from extension programs included individuals from within the University, advisory groups and staff members.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Survey of traditional stakeholder individuals
- Survey of the general public

Brief Explanation

Stakeholders were contacted directly and/or through print, radio, television or the web media; and invited to participate in meetings, workshops, demonstrations and field days.Meetings were arranged to fit the stakeholder's schedule.Stakeholdes were openly encourged to share their input and appreciation was expressed for their comments.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use External Focus Groups

Brief Explanation

- Other Stakeholders
- Surveys
- Stakeholders who demonstrated an interest in our programs by doing the following:
- Attending meetings, workshops, training sessions, field days
- Requesting published materials, calling or e-mailing us for information
- Internet website

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Other (Telephone surveys of stakeholders.)

Brief Explanation

Stake holder input was collected by the following means:

- Telephone inquiry
- E-mail inquiry
- Workshop evaluations
- Person-to-person communication
- Surveys
- Website

3. A statement of how the input was considered

- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs

Brief Explanation

Stakeholder inputs influenced the following:
Budget decisions Project activities and priorities

Accommodations available during field days

Curriculum development

Field day and workshop presentations

Time of year for some events/training

Brief Explanation of what you learned from your Stakeholders

. We learned about some of the nee4ds of our stake holders.
Examples
(i) Youth participating in the extended Program need ways to maintain and/or strengthen their mathematics and reading skills over the summer months.
(ii) Fish producers need to divesify their production systems to incrase their profits and control phytoplankton.
(iii) Clientele need to enhance their knowledge and skills in purchasing healthy foods and preparing healthy meals.
(iv) Meat goat producers need accurate performance measurements to project the productivity of their meat goat bucks.
(v) There is a need for a dependable (non-chemical)method for internal parasite control in goats.
(vi) Goat milk producers need to lern value-added techniques to help increase their profits.

. We learned about some of the challenges faced by our stakeholders
Example

(i) Internal parasite problems in goats.
(ii) off-flavor taste of catfish from phytoplankton build-up in pronds.
(iii) Poor diets contributing to health problems.
(iv) Youth digressing over the summer months and losing many of the skills learned during the previous school year in mathematics and reading.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)

Extension		Research	
Smith-Lever 3b & 3c	**1890 Extension**	**Hatch**	**Evans-Allen**
0	1609411	0	1816814

2. Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	0	582508	0	602352
Actual Matching	0	248618	0	239853
Actual All Other	0	251713	0	386937
Total Actual Expended	0	1082839	0	1229142

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years				
Carryover	0	0	0	0

V. Planned Program Table of Content

Program #1

V(A). Planned Program (Summary)

1. Name of the Planned Program

Enhanced Goat Production in the South-Central United States

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		30%		30%
307	Animal Management Systems		30%		30%
313	Internal Parasites in Animals		20%		20%
502	New and Improved Food Products		20%		20%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.0	4.0
Actual	0.0	3.6	0.0	9.2

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	200404	0	428592
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14934	0	14934
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

Experiments were conducted, scientific manuscripts were written and published and workshops were resented

2. Brief description of the target audience

All present/potential goat producers in Oklahoma and surrounding states.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	500	1000	100	0
2008	500	500	25	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	4	4

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Direct contact with adults.

Year	Target	Actual
2008	{No Data Entered}	500

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers learning new goat production techniques.
2	Number of goat producers using new goat production techniques.

Outcome #1

1. Outcome Measures

Number of goat producers learning new goat production techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	400	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Goat enterprises are important components of many farms and farming systems in the United States; particularly among small and resource-poor units. There is a growing number of farms where sales of goats or goat products provide the majority of their income. Many large operations have diversified by adding goats to more conventional production systems to benefit from the unique feeding habits of goats. Therefore, this project can lead to improvements in goat management practices, production systems, and use of goat products for increased levels and efficiencies of goat productivity and economic returns.

What has been done

A number of experiments has been conducted. Principal outputs of the project have been in information dissemination via abstracts and associated poster presentations at scientific meetings. Numerous manuscripts have been published. Moreover, information gained has been disseminated through the website of the American Institute for Goat Research and extension activities such as the Annual Goat Field Day and various workshops held throughout the year.

Results

The resources employed and activities undertaken by this project are contributing to a better understanding of goat production, management and utilization of goat products. Both small and large diversified farming operations that utilize goats will be able to use the technology and information resulting from this project to increase their goat production levels, reduce losses in their herds and increase production efficiency. These factors will help producers increase their economic returns.

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems

Outcome #2

1. Outcome Measures

Number of goat producers using new goat production techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	40	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
313	Internal Parasites in Animals
307	Animal Management Systems
302	Nutrient Utilization in Animals

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Other (Disease)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

An Advisory Council evaluated the scientific merit and usefulness of this project.It was deemed acceptable and on-track in its efforts.

Key Items of Evaluation

The project was examined for its scientific merit and to establish if it could produce useable results.

Program #2

V(A). Planned Program (Summary)

1. Name of the Planned Program

Community Resource Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	2.0	0.0	0.0
Actual	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	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	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

No funds ere expended in this area during FY 2008.

2. Brief description of the target audience

No funds ere expended in this area during FY 2008.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	200	0	0
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of ResearchProjects Completed on Community Resource Development.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of particpants who learned about strategies for improving the economy and/or infrastructure of their community.
2	Number of participants who used strategies for improving the economy and/or infrastructure of their community.
3	Number of communities that improved their economy and/or infrastructure.

Outcome #1

1. Outcome Measures

Number of particpants who learned about strategies for improving the economy and/or infrastructure of their community.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #2

1. Outcome Measures

Number of participants who used strategies for improving the economy and/or infrastructure of their community.

2. Associated Institution Types

•1890 Extension
•1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #3

1. Outcome Measures

Number of communities that improved their economy and/or infrastructure.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

None

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

1. Evaluation Studies Planned

- During (during program)
- Case Study

Evaluation Results

None

Key Items of Evaluation

None

Program #3

V(A). Planned Program (Summary)

1. Name of the Planned Program

School Enrichment

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	**1890**	**1862**	**1890**
Plan	0.0	2.0	0.0	0.0
Actual	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	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
0	0	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 has been combined with Program 7: Extended Education.No funds were expended in this area during FY 2008.

2. Brief description of the target audience

This program has been combined with Program 7: Extended Education.No funds were expended in this area during FY 2008.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	200	300
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on School Enrichment.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of youth taught about agriculture and other life skills through the School Enrichment Program.
2	Number of youth who used information presented during the School Enrichment Program.
3	Number of youth who gained an appreciation for agriculture and who gained new skills.

Outcome #1

1. Outcome Measures

Number of youth taught about agriculture and other life skills through the School Enrichment Program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

What has been done

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

Results

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Number of youth who used information presented during the School Enrichment Program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

What has been done

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

Results

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of youth who gained an appreciation for agriculture and who gained new skills.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

What has been done

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

Results

This program has been combined with Program 7: Extended Education. No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Public priorities

Brief Explanation

None

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

1. Evaluation Studies Planned

- During (during program)
- Case Study

Evaluation Results

None

Key Items of Evaluation

None

Program #4

V(A). Planned Program (Summary)

1. Name of the Planned Program

Teen Pregnancy Prevention

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	2.0	0.0	0.0
Actual	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	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	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

No funds were expended in this area during FY 2008.

2. Brief description of the target audience

No funds were expended in this area during FY 2008.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	200	300
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- None

Year	Target	Actual
2008	{No Data Entered}	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of teens being taught about prenancy prevention.
2	Number of teens using pregnancy prevention information.
3	Number of teen pregancies prevented.

Outcome #1

1. Outcome Measures

Number of teens being taught about prenancy prevention.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2

1. Outcome Measures

Number of teens using pregnancy prevention information.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area

802 Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Number of teen pregancies prevented.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	70	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other (Social views)

Brief Explanation

None

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

None

Key Items of Evaluation

None

Program #5

V(A). Planned Program (Summary)

1. Name of the Planned Program

Drug and Alcohol Prevention

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	2.0	0.0	0.0
Actual	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	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	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

No funds were expended in this area during FY 2008.

2. Brief description of the target audience

No funds were expended in this area during FY 2008.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	200	300
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Drug and Alcohol prevention.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of teens being taught about drug and alcohol prevention.
2	Number of teens using drug and alcohol prevention information.
3	Number of youth prevented from abusing drugs and alcohol.

Outcome #1

1. Outcome Measures

Number of teens being taught about drug and alcohol prevention.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2

1. Outcome Measures

Number of teens using drug and alcohol prevention information.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area

802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Number of youth prevented from abusing drugs and alcohol.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other (Social Views)

Brief Explanation

None

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

None

Key Items of Evaluation

None

Program #6

V(A). Planned Program (Summary)

1. Name of the Planned Program

4-H Clubs

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	**1890**	**1862**	**1890**
Plan	0.0	10.0	0.0	0.0
Actual	0.0	1.4	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	77020	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
0	14558	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
0	24133	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The 4-H program conducted meetings, training sessions, classes and use other learning vehicles to help youth develop life skills.

2. Brief description of the target audience

Youth in Oklahoma who qualify for the program.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	200	300
2008	0	0	225	320

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of of Research Projects completed in the 4-H Club Program.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of youth learning new informations from the 4-H Club Program.
2	Number of youth using information learned in the 4-H Club program.
3	Youth who develop life skills.

Outcome #1

1. Outcome Measures

Number of youth learning new informations from the 4-H Club Program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need for 4-H Clubs in Oklahoma Counties was identified as an issue by concerned parents and community leaders. Most Oklahoma communities offer limited youth education programs for young people. Consequently, there is an unacceptably high number of students susceptible to the negative effects of drugs, alcohol, teen pregnancy, peer pressure, gang violence and school drop out.

What has been done

Langston University Cooperative Extension staff worked with 4-H volunteer leaders in order to help them maintain their volunteer certification. The staff visited each leader and provided training that included 4-H orientation, steps in starting new 4-H community clubs and serving as effective project leaders. The staff also provided information and materials to leaders in order to help them implement specific projects and events. Most clubs conducted meetings; averaging one per month. Club members worked on 4-H projects including gardening, woodworking, horses, goats, fabrics and fashion, photography, visual arts, plasticulture, entrepreneurship, money management and public speaking.

Results

During 2008, over 200youth were reached through Langston University 4-H Club efforts. Many, if not all, of these youth improved their skills in leadership, public speaking and proper human interaction. These skills will help our 4-H youth become responsible adult citizens.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Number of youth using information learned in the 4-H Club program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need for 4-H Clubs in Oklahoma Counties was identified as an issue by concerned parents and community leaders. Most Oklahoma communities offer limited youth education programs for young people. Consequently, there is an unacceptably high number of students susceptible to the negative effects of drugs, alcohol, teen pregnancy, peer pressure, gang violence and school drop out.

What has been done

Langston University Cooperative Extension staff worked with 4-H volunteer leaders in order to help them maintain their volunteer certification. The staff visited each leader and provided training that included 4-H orientation, steps in starting new 4-H community clubs and serving as effective project leaders. The staff also provided information and materials to leaders in order to help them implement specific projects and events. Club members worked on projects including gardening, woodworking, horses, goats, fabrics and fashion, photography, visual arts, plasticulture, entrepreneurship and public speaking.

Results

During 2008, over 200 youth were reached through Langston University 4-H Club efforts. Many, if not all, of these youth improved their skills in leadership, public speaking and proper human interaction. These skills will help our 4-H youth become responsible adult citizens.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Youth who develop life skills.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need for 4-H Clubs in Oklahoma Counties was identified as an issue by concerned parents and community leaders. Most Oklahoma communities offer limited youth education programs for young people. Consequently, there is an unacceptably high number of students susceptible to the negative effects of drugs, alcohol, teen pregnancy, peer pressure, gang violence and school drop out.

What has been done

Langston University Cooperative Extension staff worked with 4-hH volunteer leaders in order to help them maintain their volunteer certification. The staff visited each leader and provided training that included 4-H orientation, steps in starting new 4-H community clubs and serving as effective project leaders. The staff also provided information and materials to leaders in order to help them implement specific projects and events. Most clubs conducted meetings; averaging one per month. Club members worked on projects including gardening, woodworking, horses, goats, fabrics and fashion, photography, visual arts, plasticulture, entrepreneurship and public speaking.

Results

During 2008, over 200yout were reached through Langston University 4-H Club efforts. Many, if not all, of these youth improved their skills in leadership, public speaking and proper human interaction. These skills will help our 4-H youth become responsible adult citizens.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Competing Public priorities

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Most Oklahoma communities offer limited educational programs for youth.The 4□H Clubs sponsored through the Langston University Cooperative Extension Program provide opportunities for youth to develop leadership skills, enhance their self□esteem and acquire new skills through involvement in age appropriate projects and activities.

Key Items of Evaluation

•Learned new life skills •Built self-confidence •Learned responsibility •Set and achieved goals

Program #7

V(A). Planned Program (Summary)

1. Name of the Planned Program

Extended Education

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	2.0	0.0	0.0
Actual	0.0	1.1	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
0	55468	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	24133	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Extension personnel conducted classes and mini camps in reading, writing, math, science, engineering and technology for youth in Oklahoma.

2. Brief description of the target audience

Youth in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	30	30
2008	0	0	92	120

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects competed on Extended Education.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of youth taught extended education techniques.
2	Number of youth grasping and using extended education techniques.
3	Number of youth who improved their academic performance and catch up in the classroom.

Outcome #1

1. Outcome Measures

Number of youth taught extended education techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	92

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need for a 4-H Literacy in Action summer program in Logan County was identified as an issue by concerned parents and community leaders. Logan County offers limited youth education programs for young people during the summer months. Consequently, there is an unacceptably high number of latchkey students. Students who do not participate in skills building and recreation programs during their summer vacation are more likely to experience a diminishment in their reading and math capabilities and health and physical fitness. Students who do not have something constructive to do are more susceptible to becoming engaged in destructive situations. There is a national effort through 4-H to increase the number of youth involved in programs in science, engineering and technology. We also addressed that challenge in 2008.

What has been done

Langston University Cooperative Extension staff planned and conducted an annual Literacy in Action Summer Reading Program designed to help Oklahoma Logan County youth, in grades kindergarten through fifth, learn developmental concepts that helped to maintain their academic capabilities and strengthen their overall well being. A setting was created that motivated life skill development during the months of June through July. Eighty students received group and individualized instructions and hands-on practice in math, reading and writing. They participated in nutrition education workshops and performed physical fitness exercises daily. We also developed curriculum that was age-specific in science, engineering and technology (SET). This was part of a new program launched during the summer and fall of 2008. College support students, volunteers and university faculty and staff helped deliver the program.

Results

The eighty students who participated in our 4-H Literacy Program received reinforcement over the summer to help maintain or strengthen their skills in reading and mathematics. Students who participated in the 4-H SET Summer Program received age-specific training in biotechnology, GIS/GPS, map making computer technology and other areas to create a thirst for science, engineering and technology in them.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Number of youth grasping and using extended education techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need for a 4-H Literacy in Action summer program in Logan County was identified as an issue by concerned parents and community leaders. Logan County offers limited youth education programs for young people during the summer months. Consequently, there is an unacceptably high number of latchkey students. Students who do not participate in skills building and recreation programs during their summer vacation are more likely to experience a diminishment in their reading and math capabilities and health and physical fitness. Students who do not have something constructive to do are more susceptible to becoming engaged in destructive situations. There is a national effort through 4-H to increase the number of youth involved in programs in science, engineering and technology. We also addressed that challenge in 2008.

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4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of youth who improved their academic performance and catch up in the classroom.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need for a 4-H Literacy in Action summer program in Logan County was identified as an issue by concerned parents and community leaders. Logan County offers limited youth education programs for young people during the summer months. Consequently, there is an unacceptably high number of latchkey students. Students who do not participate in skills building and recreation programs during their summer vacation are more likely to experience a diminishment in their reading and math capabilities and health and physical fitness. Students who do not have something constructive to do are more susceptible to becoming engaged in destructive situations. There is a national effort through 4-H to increase the number of youth involved in programs in science, engineering and technology. We also addressed that challenge in 2008.

What has been done

Langston University Cooperative Extension staff planned and conducted an annual Literacy in Action Summer Reading Program designed to help Oklahoma Logan County youth, in grades kindergarten through fifth, learn developmental concepts that helped to maintain their academic capabilities and strengthen their overall well being. A setting was created that motivated life skill development during the months of June through July. Eighty students received group and individualized instructions and hands-on practice in math, reading and writing. They participated in nutrition education workshops and performed physical fitness exercises daily. We also developed curriculum that was age-specific in science, engineering and technology (SET). This was part of a new program launched during the summer and fall of 2008. College support students, volunteers and university faculty and staff helped deliver the program.

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The eighty students who participated in our 4-H Literacy Program received reinforcement over the summer to help maintain or strengthen their skills in reading and mathematics. Students who participated in the 4-H SET Summer Program received age-specific training in biotechnology, GIS/GPS, map making computer technology and other areas to create a thirst for science, engineering and technology in them.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Public priorities

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- Before-After (before and after program)

Evaluation Results

The 4□H Literacy in Action summer program provides a safe, positive learning environment where youth participants strenghtened their skills in mathematics and reading.

Key Items of Evaluation

. Built self-confidence
. Improved math skills
. Improved reading skills

Program #8

V(A). Planned Program (Summary)

1. Name of the Planned Program

Family and Consumer Sciences

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	2.0	0.0	0.0
Actual	0.0	0.4	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	24797	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	24133	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Extension personnel conducted classes, seminars, workshops and forums to share Family and Consumer Sciences resources.

2. Brief description of the target audience

Primarily citizens of Oklahoma in underserved areas.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	200	20	20
2008	102	210	60	50

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Family and Consumer Sciences

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of participants who learned about Family and Consumer Sciences.
2	Number of participants who used Family and Consumer Sciences resources.
3	Number of families that improved their quality of life at least in part from this program.

Outcome #1

1. Outcome Measures

Number of participants who learned about Family and Consumer Sciences.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	162

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Public officials continue to sound the alarm about America's mounting obesity epidemic; which is no respecter of age, gender, race, or socioeconomic status. With the downturn in the economy, many Americans are facing issues in stretching food, housing and medical dollars. The Family and Consumer Sciences Program at Langston University assists clientele in combating these challenges.

What has been done

During 2008, participants were provided hands-on lessons on My-Pyramid, food preparation, healthy food portions, fruit and vegetable selection, clothing construction, money management and other training modules.

Results

Program participants incorporated come of the information shared during sessions into their lives. Behavior changes have been shown by some participants as they have started making healthier food selections, cooking healthier and managing their food dollars more efficiently.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #2

1. Outcome Measures

Number of participants who used Family and Consumer Sciences resources.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Public officials continue to sound the alarm about America's mounting obesity epidemic; which is no respecter of age, gender, race, or socioeconomic status. With the downturn in the economy, many Americans are facing issues in stretching food, housing and medical dollars. The Family and Consumer Sciences Program at Langston University assists clientele in combating these challenges.

What has been done

During 2008, participants were provided hands-on lessons on My-Pyramid, food preparation, healthy food portions, fruit and vegetable selection, clothing construction, money management and other training modules.

Results

Program participants incorporated come of the information shared during sessions into their lives. Behavior changes have been shown by some participants as they have started making healthier food selections, cooking healthier and managing their food dollars more efficiently.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #3

1. Outcome Measures

Number of families that improved their quality of life at least in part from this program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Public officials continue to sound the alarm about America's mounting obesity epidemic; which is no respecter of age, gender, race, or socioeconomic status. With the downturn in the economy, many Americans are facing issues in stretching food, housing and medical dollars. The Family and Consumer Sciences Program at Langston University assists clientele in combating these challenges.

What has been done

During 2008, participants were provided hands-on lessons on My-Pyramid, food preparation, healthy food portions, fruit and vegetable selection, clothing construction, money management and other training modules.

Results

Program participants incorporated come of the information shared during sessions into their lives. Behavior changes have been shown by some participants as they have started making healthier food selections, cooking healthier and managing their food dollars more efficiently.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Public priorities

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- Case Study

Evaluation Results

Evaluations revealed positive changes in food selection, preparation and storage.Improved money management resulted in more efficient use of food dollars.

Key Items of Evaluation

- Improved food selection
- Improved food preparation and storage skills

Program #9

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food and Nutrition

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
504	Home and Commercial Food Service		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	2.0	0.0	0.0
Actual	0.0	1.1	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
0	51448	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	24133	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Extension personnel will conduct classes, seminars, workshops and hold community forums to teach healthy food and nutrition concepts.

2. Brief description of the target audience

Primarily limited income families, youth and the elderly.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	200	100	200
2008	100	200	20	200

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects competed on Food and Nutrition.

Year	Target	Actual
2008	0	120

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of participants who learned about food and nutrition.
2	Number of participants who used knowledge/guidelines presented during food and nutrition sessions.
3	Number of participants who improve thier lifestyles by following food and nutrition guidelines.

Outcome #1

1. Outcome Measures

Number of participants who learned about food and nutrition.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food and nutrition play a key role in the health of a nation. Many common diseases or conditions leading to diseases such as diabetes, hypertension and heart disease are linked to poor food and nutrition choices. This is especially true within the minority population.

What has been done

During 2008, educational programs on nutrition, health, professional etiquette, money management, decision making and food safety were conducted in selected Oklahoma Counties. Sessions were conducted on the MY-Pyramid to teach both adults and youth U.S. Dietary Guidelines. Proper food storage was also addressed.

Results

Written and verbal responses from the 120 participants indicated that many of them increased their knowledge of better food and nutrition practices and some have adopted healthier nutrition practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
504	Home and Commercial Food Service

Outcome #2

1. Outcome Measures

Number of participants who used knowledge/guidelines presented during food and nutrition sessions.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food and nutrition play a key role in the health of a nation. Many common diseases or conditions leading to diseases such as diabetes, hypertension and heart disease are linked to poor food and nutrition choices. This is especially true within the minority population.

What has been done

During 2008, educational programs on nutrition, health, professional etiquette, money management, decision making and food safety were conducted in selected Oklahoma Counties. Sessions were conducted on the MY-Pyramid to teach both adults and youth U.S. Dietary Guidelines. Proper food storage was also addressed.

Results

Written and verbal responses from the 120 participants indicated that many of them increased their knowledge of better food and nutrition practices and some have adopted healthier nutrition practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
504	Home and Commercial Food Service

Outcome #3

1. Outcome Measures

Number of participants who improve thier lifestyles by following food and nutrition guidelines.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food and nutrition play a key role in the health of a nation. Many common diseases or conditions leading to diseases such as diabetes, hypertension and heart disease are linked to poor food and nutrition choices. This is especially true within the minority population.

What has been done

During 2008, educational programs on nutrition, health, professional etiquette, money management, decision making and food safety were conducted in selected Oklahoma Counties. Sessions were conducted on the MY-Pyramid to teach both adults and youth U.S. Dietary Guidelines. Proper food storage was also addressed.

Results

Written and verbal responses from the 120 participants indicated that many of them increased their knowledge of better food and nutrition practices and some have adopted healthier nutrition practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
504	Home and Commercial Food Service

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations
- Competing Public priorities

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Participants indicated that they are making better decisions and choices related to food, nutrition, budgeting and balanced diets.

Key Items of Evaluation

- Improvement in food selection, preparation and storage skills. •Development of better budgeting skills.

Program #10

V(A). Planned Program (Summary)

1. Name of the Planned Program

Biotechnology

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
201	Plant Genome, Genetics, and Genetic Mechanisms		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	**1890**	**1862**	**1890**
Plan	0.0	0.0	0.0	2.0
Actual	0.0	0.2	0.0	1.1

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	9455	0	57002
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
0	14558	0	64025
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
0	8385	0	26826

V(D). Planned Program (Activity)

1. Brief description of the Activity

Researchers will develop a local peanut nucleotide data base and build a bioinformatics pipeline for peanut gene discovery.

2. Brief description of the target audience

All peanut producers in Oklahoma

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	15	50	0	0
2008	15	50	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	3	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Biotechnology.

Year	Target	Actual
2008	0	15

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning about the peanut nucelotide database.
2	Number of farmers using the peanut nucleotide database.
3	Farmers who use the peanut nucleotide database or new peanut gene discoveries to improve their peanut production system.

Outcome #1

1. Outcome Measures

Number of farmers learning about the peanut nucelotide database.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a need for developing improved peanut and daylily genotypes that are higher yielding and more disease and insect resistant. Goat genotypes that are higher milk yielders would also increase milk yields for producers. The pace for developing these improved genotypes would be accelerated through the use of modern techniques such as those used in the Biotechnology Program at Langston University.

What has been done

During 2008, genomic studies were conducted on goats and peanuts. mRNA isolation, cDNA cloning and amplification, select sequencing and sequence analysis were conducted on peanut organs and goat mammary gland tissue and muscle. Studies on daylily in vitro cell, tissue and organ culture were also conducted.

Results

Activities conducted in 2008 resulted in development and characterization of the first goat mammary gland and muscle cDNA libraries. From the mammary gland library, genes associated with lactation and dry cycles were identified. Cloning, sequencing, and functional analysis of goat ATP-binding cassette transporter G2 (ABCG2) were also achieved during the same period. 20,000 gene clones were isolated from a normalized cDNA library that was constructed from the peanut whole plant during 2008. In both peanuts and goats, cDNA libraries contained more than one million gene clones that will be fully screened overtime. An efficient method for in vitro large scales multiplication of newly regenerated daylily plants was also developed. The potential impact of these findings is the development of improved species that allow farmers and ranchers to increase the quality and quantity of there peanut, daylily and goat operations. This will result in higher profits and income for them.

4. Associated Knowledge Areas

KA Code	Knowledge Area
201	Plant Genome, Genetics, and Genetic Mechanisms

Outcome #2

1. Outcome Measures

Number of farmers using the peanut nucleotide database.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a need for developing improved peanut and daylily genotypes that are higher yielding and more disease and insect resistant. Goat genotypes that are higher milk yielders would also increase milk yields for producers. The pace for developing these improved genotypes would be accelerated through the use of modern techniques such as those used in the Biotechnology Program at Langston University.

What has been done

During 2008, genomic studies were conducted on goats and peanuts. mRNA isolation, cDNA cloning and amplification, select sequencing and sequence analysis were conducted on peanut organs and goat mammary gland tissue and muscle. Studies on daylily in vitro cell, tissue and organ culture were also conducted.

Results

Activities conducted in 2008 resulted in development and characterization of the first goat mammary gland and muscle cDNA libraries. From the mammary gland library, genes associated with lactation and dry cycles were identified. Cloning, sequencing, and functional analysis of goat ATP-binding cassette transporter G2 (ABCG2) were also achieved during the same period. 20,000 gene clones were isolated from a normalized cDNA library that was constructed from the peanut whole plant during 2008. In both peanuts and goats, cDNA libraries contained more than one million gene clones that will be fully screened overtime. An efficient method for in vitro large scales multiplication of newly regenerated daylily plants was also developed. The potential impact of these findings is the development of improved species that allow farmers and ranchers to increase the quality and quantity of there peanut, daylily and goat operations. This will result in higher profits and income for them.

4. Associated Knowledge Areas

KA Code	Knowledge Area
201	Plant Genome, Genetics, and Genetic Mechanisms

Outcome #3

1. Outcome Measures

Farmers who use the peanut nucleotide database or new peanut gene discoveries to improve their peanut production system.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a need for developing improved peanut and daylily genotypes that are higher yielding and more disease and insect resistant. Goat genotypes that are higher milk yielders would also increase milk yields for producers. The pace for developing these improved genotypes would be accelerated through the use of modern techniques such as those used in the Biotechnology Program at Langston University.

What has been done

During 2008, genomic studies were conducted on goats and peanuts. mRNA isolation, cDNA cloning and amplification, select sequencing and sequence analysis were conducted on peanut organs and goat mammary gland tissue and muscle. Studies on daylily in vitro cell, tissue and organ culture were also conducted.

Results

Activities conducted in 2008 resulted in development and characterization of the first goat mammary gland and muscle cDNA libraries. From the mammary gland library, genes associated with lactation and dry cycles were identified. Cloning, sequencing, and functional analysis of goat ATP-binding cassette transporter G2 (ABCG2) were also achieved during the same period. 20,000 gene clones were isolated from a normalized cDNA library that was constructed from the peanut whole plant during 2008. In both peanuts and goats, cDNA libraries contained more than one million gene clones that will be fully screened overtime. An efficient method for in vitro large scales multiplication of newly regenerated daylily plants was also developed. The potential impact of these findings is the development of improved species that allow farmers and ranchers to increase the quality and quantity of there peanut, daylily and goat operations. This will result in higher profits and income for them.

4. Associated Knowledge Areas

KA Code	Knowledge Area
201	Plant Genome, Genetics, and Genetic Mechanisms

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Public priorities

Brief Explanation

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

1. Evaluation Studies Planned

- Time series (multiple points before and after program)

Evaluation Results

Annual progress with mapping pathways and developing DNA libraries for improving test species.

Key Items of Evaluation

Developing DNA libraries.

Program #11

V(A). Planned Program (Summary)

1. Name of the Planned Program

Water Gardens (Aquaculture)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
401	Structures, Facilities, and General Purpose Farm Supplies		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	**Extension**		**Research**	
	1862	**1890**	**1862**	**1890**
Plan	0.0	0.3	0.0	0.1
Actual	0.0	0.6	0.0	0.2

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	29868	0	9815
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
0	14558	0	14558
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
0	12233	0	28163

V(D). Planned Program (Activity)

1. Brief description of the Activity

Studies were conducted on water garden filtration utilizing native submergent aquatic vegetation and on biological filter design for koi ponds.

2. Brief description of the target audience

All aquaculture farmers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	300	0	0
2008	150	300	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Water Gardens

Year	Target	Actual
2008	0	150

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning water garden techiques.
2	Number of farmers using water garden techniques.
3	Farmers who improve the water quality of their water gardens and reduce operational costs.

Outcome #1

1. Outcome Measures

Number of farmers learning water garden techiques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	60	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Producers and sellers of fish and hard goods for ornamental ponds need accurate information and appropriate technologies to grow their businesses and purchasers need proper information and technology to sustain their enthusiasm for the hobby.

What has been done

Information was transmitted via e-mail, telephone, presentations and personal visits. Research was initiated that investigated the feasibility of native submerged aquatic vegetation as a filtration system for ornamental ponds. Fact sheets addressing site location, pond design, pond types and liners and fish management were written and posted on the Aquaculture Program website.

Results

Activities in this program provide garden pond hobbyists additional water quality and filtration tools. The activities also provide the opportunity to reduce the use of aquatic nuisance species in the garden pond industry. These improvements in filtration tools and reductions in nuisance species can translate into monetary profits and/or savings, by garden pond enthusiasts

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #2

1. Outcome Measures

Number of farmers using water garden techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Producers and sellers of fish and hard goods for ornamental ponds need accurate information and appropriate technologies to grow their businesses and purchasers need proper information and technology to sustain their enthusiasm for the hobby.

What has been done

Information was transmitted via e-mail, telephone, presentations and personal visits. Research was initiated that investigated the feasibility of native submerged aquatic vegetation as a filtration system for ornamental ponds. Fact sheets addressing site location, pond design, pond types and liners and fish management were written and posted on the Aquaculture Program website.

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4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #3

1. Outcome Measures

Farmers who improve the water quality of their water gardens and reduce operational costs.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10	10

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Producers and sellers of fish and hard goods for ornamental ponds need accurate information and appropriate technologies to grow their businesses and purchasers need proper information and technology to sustain their enthusiasm for the hobby.

What has been done

Information was transmitted via e-mail, telephone, presentations and personal visits. Research was initiated that investigated the feasibility of native submerged aquatic vegetation as a filtration system for ornamental ponds. Fact sheets addressing site location, pond design, pond types and liners and fish management were written and posted on the Aquaculture Program website.

Results

Activities in this program provide garden pond hobbyists additional water quality and filtration tools. The activities also provide the opportunity to reduce the use of aquatic nuisance species in the garden pond industry. These improvements in filtration tools and reductions in nuisance species can translate into monetary profits and/or savings, by garden pond enthusiasts

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- Time series (multiple points before and after program)

Evaluation Results

Development of best management practices for the water garden industry.

Key Items of Evaluation

Sharing best management practicies with clientele.

Program #12

V(A). Planned Program (Summary)

1. Name of the Planned Program

Alternative Species (Aquaculture)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
307	Animal Management Systems		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.5	0.0	1.5
Actual	0.0	0.3	0.0	0.1

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	12542	0	6230
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	14558
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	28163

V(D). Planned Program (Activity)

1. Brief description of the Activity

Buffalo fish species were tested for sustainability and profitability in Oklahoma.

2. Brief description of the target audience

All aquaculture farmers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	300	0	0
2008	300	300	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	300

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Alternative Species

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning alternative fish species techniques.
2	Number of farmers using alternative fish species techniques.
3	Farmers who improved their yearly income by using alternative fish species.

Outcome #1

1. Outcome Measures

Number of farmers learning alternative fish species techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	60	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Channel catfish producers need additional marketing opportunities to offset low prices from processors and competition from imported catfish products. Consumers want more product choices, including kinds and sizes of live fish vs. fish processed by any means. Consumers also want, but seldom find, high quality temperate, scaled fish. Aquaculture [production of buffalo fishes and grass carp] can meet consumer desires and provide additional income opportunities for channel catfish producers.

What has been done

We compared the growth of bigmouth and smallmouth buffalo in channel catfish ponds to determine if smallmouth buffalo would be better suited for polyculture production than bigmouth buffalo. Growth for second season smallmouth buffalo was greater than for second season bigmouth buffalo in both single and combination stocking assemblages. Morning dissolved oxygen (DO) was significantly higher in ponds with smallmouth buffalo only and in smallmouth/bigmouth combination than in ponds with bigmouth buffalo only or in ponds without buffalo for June and August.

Results

Activities in this program help fish producers to explore or develop existing and new markets for their fish crops. Some alternative fish species also allow fish farmers to sequester unused nutrients in culture ponds into more stable and sellable products. The end results of these efforts are more profits for fish producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #2

1. Outcome Measures

Number of farmers using alternative fish species techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:
Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Channel catfish producers need additional marketing opportunities to offset low prices from processors and competition from imported catfish products. Consumers want more product choices, including kinds and sizes of live fish, vs. fish processed by any means. Consumers also want, but seldom find, high quality temperate, scaled fish. Aquaculture [production of buffalo fishes and grass carp can meet consumer desires and provide additional income opportunities for channel catfish producers.

What has been done

We compared the growth of bigmouth and smallmouth buffalo in channel catfish ponds to determine if smallmouth buffalo would be better suited for polyculture production than bigmouth buffalo. Growth for second season smallmouth buffalo was greater than for second season bigmouth buffalo in both single and combination stocking assemblages. Morning dissolved oxygen (DO) was significantly higher in ponds with smallmouth buffalo only and in smallmouth/bigmouth combination than in ponds with bigmouth buffalo only or in ponds without buffalo for June and August.

Results

Activities in this program help fish producers to explore or develop existing and new markets for their fish crops. Some alternative fish species also allow fish farmers to sequester unused nutrients in culture ponds into more stable and sellable products. The end results of these efforts are more profits for fish producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #3

1. Outcome Measures
Farmers who improved their yearly income by using alternative fish species.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:
Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Channel catfish producers need additional marketing opportunities to offset low prices from processors and competition from imported catfish products. Consumers want more product choices, including kinds and sizes of live fish, vs. fish processed by any means. Consumers also want, but seldom find, high quality temperate, scaled fish. Aquaculture [production of buffalo fishes and grass carp can meet consumer desires and provide additional income opportunities for channel catfish producers.

What has been done

We compared the growth of bigmouth and smallmouth buffalo in channel catfish ponds to determine if smallmouth buffalo would be better suited for polyculture production than bigmouth buffalo. Growth for second season smallmouth buffalo was greater than for second season bigmouth buffalo in both single and combination stocking assemblages. Morning dissolved oxygen (DO) was significantly higher in ponds with smallmouth buffalo only and in smallmouth/bigmouth combination than in ponds with bigmouth buffalo only or in ponds without buffalo for June and August.

Results

Activities in this program help fish producers to explore or develop existing and new markets for their fish crops. Some alternative fish species also allow fish farmers to sequester unused nutrients in culture ponds into more stable and sellable products. The end results of these efforts are more profits for fish producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- After Only (post program)

Evaluation Results

Determine whether bigmouth or smallmouth buffalo fish can result in profitable polycultue fish crops for fish growers.

Key Items of Evaluation

•Production cost analyses •Feasibility study on use of alternative fish species

Program #13

V(A). Planned Program (Summary)

1. Name of the Planned Program

Feeder Design (Aquaculture)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
401	Structures, Facilities, and General Purpose Farm Supplies		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	**Extension**		**Research**	
	1862	**1890**	**1862**	**1890**
Plan	0.0	0.0	0.0	0.0
Actual	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	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
0	0	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

No funds were expended in this area during FY 2008.

2. Brief description of the target audience

No funds were expended in this area during FY 2008.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	0	0
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Feeder Design.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning fish feeder design techniques.
2	Number of farmers using fish feeder design techniques.
3	Farmers who design and build fish feeders that help increase fish feeding efficiency.

Outcome #1

1. Outcome Measures

Number of farmers learning fish feeder design techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #2

1. Outcome Measures

Number of farmers using fish feeder design techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #3

1. Outcome Measures

Farmers who design and build fish feeders that help increase fish feeding efficiency.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
401	Structures, Facilities, and General Purpose Farm Supplies

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

None

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

1. Evaluation Studies Planned

- Time series (multiple points before and after program)

Evaluation Results

None

Key Items of Evaluation

None

Program #14

V(A). Planned Program (Summary)

1. Name of the Planned Program

Phytoplankton (Aquaculture)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.2	0.0	1.2
Actual	0.0	0.6	0.0	0.3

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	23419	0	12285
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	14558
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	28163

V(D). Planned Program (Activity)

1. Brief description of the Activity

Water analysis and phytoplankton managment practices were tested to determine feasible methods of phytoplankton management for small scale fish farmers.

2. Brief description of the target audience

All aquacultue farmers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	300	0	0
2008	135	300	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Phytoplankton.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning phytoplankton management techniques.
2	Number of farmers using phytoplankton management techniques.
3	Farmers who adopted phytoplankton management techniques to contain or eradicate their phytoplankton problems.

Outcome #1

1. Outcome Measures

Number of farmers learning phytoplankton management techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	60	135

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Aquaculture producers need to manage phytoplankton in order to successfully raise and market fish. Private pond owners are concerned about control of nuisance algal blooms.

What has been done

We reduced nuisance algae in culture ponds with chaining, and informed private pond owners about nutrient input and its effect on phytoplankton.

Results

Large phytoplankters are a source of off-flavors in channel catfish flesh. Private pond owners were taught the importance of nutrient input in pond watersheds as a cause/effect of production of nuisance phytoplankton blooms. This information will help pond owners reduce the off-flavors in their catfish by controlling levels of phytoplankton in their ponds. This will make their catfish more marketable and increase the price they can ask for their fish.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

Outcome #2

1. Outcome Measures

Number of farmers using phytoplankton management techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	135

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Aquaculture producers need to manage phytoplankton in order to successfully raise and market fish. Private pond owners are concerned about control of nuisance algal blooms.

What has been done

We reduced nuisance algae in culture ponds with chaining, and informed private pond owners about nutrient input and its effect on phytoplankton.

Results

Large phytoplankters are a source of off-flavors in channel catfish flesh. Private pond owners were taught the importance of nutrient input in pond watersheds as a cause/effect of production of nuisance phytoplankton blooms. This information will help pond owners reduce the off-flavors in their catfish by controlling levels of phytoplankton in their ponds. This will make their catfish more marketable and increase the price they can ask for their fish.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

Outcome #3

1. Outcome Measures

Farmers who adopted phytoplankton management techniques to contain or eradicate their phytoplankton problems.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	135

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Aquaculture producers need to manage phytoplankton in order to successfully raise and market fish. Private pond owners are concerned about control of nuisance algal blooms.

What has been done

We reduced nuisance algae in culture ponds with chaining, and informed private pond owners about nutrient input and its effect on phytoplankton.

Results

Large phytoplankters are a source of off-flavors in channel catfish flesh. Private pond owners were taught the importance of nutrient input in pond watersheds as a cause/effect of production of nuisance phytoplankton blooms. This information will help pond owners reduce the off-flavors in their catfish by controlling levels of phytoplankton in their ponds. This will make their catfish more marketable and increase the price they can ask for their fish.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Helping fish farmers reduce or eliminate the off-flavors in their catfish caused by pond phytoplankton.

Key Items of Evaluation

Effectiveness of techniques shared with fish producers in phytoplankton management.

Program #15

V(A). Planned Program (Summary)

1. Name of the Planned Program

Fishery Management (Aquaculture)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
307	Animal Management Systems		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	1.0	0.0	0.0
Actual	0.0	0.4	0.0	0.4

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	23673	0	21723
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	14558
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	28163

V(D). Planned Program (Activity)

1. Brief description of the Activity

Work was performed in fishery managment under such conditions as pond nutrient loading, aquatic vegetation infestation and pond leaks.

2. Brief description of the target audience

All aquaculture farmers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	300	0	0
2008	150	300	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Fishery Management.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning new fisher management techniques.
2	Number of farmers using new fisher management techniques.
3	Farmers who have improved thier production efficiency and raised their profits with the new fishery management techniques.

Outcome #1

1. Outcome Measures

Number of farmers learning new fisher management techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	60	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Home owners in urban areas often become pond caretakers through community covenants and home owners associations. The housing development is often centered around a large pond. The pond watershed includes the houses. These neighborhoods are usually upscale and have professional lawn services. The result is high nutrient levels from lawn and garden fertilization entering the pond and creating nuisance aquatic plant and algae problems with attendant consequences of fish kills and odors.

What has been done

During 2008, on-site visits have been made to individual pond owners, home owners associations and representatives of these associations. Pond problems were evaluated and recommendations made concerning remedies for existing problems and methods of preventing future problems. Education was concentrated on nutrient reduction in the watershed and annual pond maintenance.

Results

Pond owners were generally very receptive to proposed solutions to problems. They were interested in working with lawn service enterprises to reduce phosphorus and nitrogen applications to lawns. However, many believed that neighbors would be reluctant to do anything that reduced perceived lawn quality. Some home owners associations produced a newsletter sent to all members. Best Management Practices for lawn application of fertilizer and other pond related information were included in newsletters. Aeration devices were installed in some ponds. Overall improvement in urban pond water quality and consequently, watershed streams is likely to occur in the addressed areas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #2

1. Outcome Measures

Number of farmers using new fisher management techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Home owners in urban areas often become pond caretakers through community covenants and home owners associations. The housing development is often centered around a large pond. The pond watershed includes the houses. These neighborhoods are usually upscale and have professional lawn services. The result is high nutrient levels from lawn and garden fertilization entering the pond and creating nuisance aquatic plant and algae problems with attendant consequences of fish kills and odors.

What has been done

During 2008, on-site visits have been made to individual pond owners, home owners associations and representatives of these associations. Pond problems were evaluated and recommendations made concerning remedies for existing problems and methods of preventing future problems. Education was concentrated on nutrient reduction in the watershed and annual pond maintenance.

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4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #3

1. Outcome Measures

Farmers who have improved thier production efficiency and raised their profits with the new fishery management techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Home owners in urban areas often become pond caretakers through community covenants and home owners associations. The housing development is often centered around a large pond. The pond watershed includes the houses. These neighborhoods are usually upscale and have professional lawn services. The result is high nutrient levels from lawn and garden fertilization entering the pond and creating nuisance aquatic plant and algae problems with attendant consequences of fish kills and odors.

What has been done

During 2008, on-site visits have been made to individual pond owners, home owners associations and representatives of these associations. Pond problems were evaluated and recommendations made concerning remedies for existing problems and methods of preventing future problems. Education was concentrated on nutrient reduction in the watershed and annual pond maintenance.

Results

Pond owners were generally very receptive to proposed solutions to problems. They were interested in working with lawn service enterprises to reduce phosphorus and nitrogen applications to lawns. However, many believed that neighbors would be reluctant to do anything that reduced perceived lawn quality. Some home owners associations produced a newsletter sent to all members. Best Management Practices for lawn application of fertilizer and other pond related information were included in newsletters. Aeration devices were installed in some ponds. Overall improvement in urban pond water quality and consequently, watershed streams is likely to occur in the addressed areas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Overall improvement in urban pond water quality at specific sites and consequently improvement in the quality of some watershed streams.

Key Items of Evaluation

•Increase in water quality for specific residential ponds.

Program #16

V(A). Planned Program (Summary)

1. Name of the Planned Program

Sustainable Internal Parasite Control for Small Ruminants

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
313	Internal Parasites in Animals		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.5	0.0	0.0
Actual	0.0	0.2	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	12366	0	2013
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14634	0	14634
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

Workshops were conducted to share best management practices in Integrated Pest Management with goat producers.

2. Brief description of the target audience

All goat producers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	400	0	0
2008	170	530	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Direct and indirect contact with adults

Year	Target	Actual
2008	{No Data Entered}	170

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers learning internal parasite control techniques.
2	Number of goat producers using internal parasite control techniques.
3	Goat producers who have gotten internal parasites under control by using the learned control technique.

Outcome #1

1. Outcome Measures

Number of goat producers learning internal parasite control techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	170

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Internal parasites are the most important health issue in small ruminants; causing greater morbidity, mortality and lost production than the next three most important diseases. The problems with internal parasites include lack of knowledge on biology and management practices to control them, internet disinformation and dewormer resistance.

What has been done

During 2008, we held parasite workshops in coordination with county extension agents in five counties to train producers in the concept of integrated pest management as applied to internal parasites. Parasite workshops were held in areas where producers requested them. Besides holding workshops, a series of articles was authored in a popular press goat magazine reflecting the content of the parasite workshops. The articles have subsequently been posted on the Web as a producer accessible source of information. We are evaluating the feasibility of implementing a web-based interactive training workshop. We are also in the process of surveying producers who attended our workshops over the last several years to evaluate the long term impact of the workshop and areas that need to be emphasized more. In addition, we expect to have some examples to demonstrate effective application of principles at the producer level.

Results

At a recent goat activity, two producers who had taken the parasite workshop several years ago stated that parasites were no longer a problem in their goat herds. This was due to applying principles learned in the workshop, mainly pasture management and culling the most parasite susceptible animals. Producers have contacted us about how much FAMACHA has reduced their need for deworming. This has resulted in notable savings for our producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
313	Internal Parasites in Animals

Outcome #2

1. Outcome Measures

Number of goat producers using internal parasite control techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:
Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	170

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Internal parasites are the most important health issue in small ruminants; causing greater morbidity, mortality and lost production than the next three most important diseases. The problems with internal parasites include lack of knowledge on biology and management practices to control them, internet disinformation and dewormer resistance.

What has been done

During 2008, we held parasite workshops in coordination with county extension agents in five counties to train producers in the concept of integrated pest management as applied to internal parasites. Parasite workshops were held in areas where producers requested them. Besides holding workshops, a series of articles was authored in a popular press goat magazine reflecting the content of the parasite workshops. The articles have subsequently been posted on the Web as a producer accessible source of information. We are evaluating the feasibility of implementing a web-based interactive training workshop. We are also in the process of surveying producers who attended our workshops over the last several years to evaluate the long term impact of the workshop and areas that need to be emphasized more. In addition, we expect to have some examples to demonstrate effective application of principles at the producer level.

Results

At a recent goat activity, two producers who had taken the parasite workshop several years ago stated that parasites were no longer a problem in their goat herds. This was due to applying principles learned in the workshop, mainly pasture management and culling the most parasite susceptible animals. Producers have contacted us about how much FAMACHA has reduced their need for deworming. This has resulted in notable savings for our producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
313	Internal Parasites in Animals

Outcome #3

1. Outcome Measures
Goat producers who have gotten internal parasites under control by using the learned control technique.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:
Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	15	170

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Internal parasites are the most important health issue in small ruminants; causing greater morbidity, mortality and lost production than the next three most important diseases. The problems with internal parasites include lack of knowledge on biology and management practices to control them, internet disinformation and dewormer resistance.

What has been done

During 2008, we held parasite workshops in coordination with county extension agents in five counties to train producers in the concept of integrated pest management as applied to internal parasites. Parasite workshops were held in areas where producers requested them. Besides holding workshops, a series of articles was authored in a popular press goat magazine reflecting the content of the parasite workshops. The articles have subsequently been posted on the Web as a producer accessible source of information. We are evaluating the feasibility of implementing a web-based interactive training workshop. We are also in the process of surveying producers who attended our workshops over the last several years to evaluate the long term impact of the workshop and areas that need to be emphasized more. In addition, we expect to have some examples to demonstrate effective application of principles at the producer level.

Results

At a recent goat activity, two producers who had taken the parasite workshop several years ago stated that parasites were no longer a problem in their goat herds. This was due to applying principles learned in the workshop, mainly pasture management and culling the most parasite susceptible animals. Producers have contacted us about how much FAMACHA has reduced their need for deworming. This has resulted in notable savings for our producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
313	Internal Parasites in Animals

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Goat producers achieving better internal parasite control in their animals.

Key Items of Evaluation

•Workshops provided on internal parasite control •Skills developed by producers in internal parasite control

Program #17

V(A). Planned Program (Summary)

1. Name of the Planned Program

Goat Internet Website

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
903	Communication, Education, and Information Delivery		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.2	0.0	0.0
Actual	0.0	0.1	0.0	0.1

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	6192	0	5610
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14934	0	14934
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Langston University goat internet website provides quality information for goat producers.This website will continue to be updated with viable information and expanded.

2. Brief description of the target audience

All goat producers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	800	0	0
2008	105	882	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	1	0	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Goat Internet Website.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers learning about information found on the goat internet website.
2	Number of goat producers using the goat internet website.
3	Goat producers who improved their operations with information from the goat internet website.

Outcome #1

1. Outcome Measures

Number of goat producers learning about information found on the goat internet website.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	800	105

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Meat goat production is one of the fastest growing sectors of the livestock industry in the United States. New producers, as well as some established ones, have an expressed need for current, correct information on how to raise goats and produce safe, wholesome products in demand by the public. As the meat goat industry grows and evolves, a quality assurance (QA) program is essential. Such a QA program ensures the production of a wholesome product that satisfies consumers and increases profit for the meat goat industry.

What has been done

Langston University was awarded funding by the Food Safety and Inspection Service of USDA to develop training and certification for meat goat producers. Langston University organized and led a consortium of 1890 Universities and producer associations in this project. The consortium identified the subject topics most pertinent and pressing for the instructional modules. The consortium then identified experts as module authors. These authors represent the most qualified persons in their field in academia as well as in the industry. Langston University translated the 22 instructional modules into web pages with accompanying images, and pre- and post-tests for those producers wishing to pursue certification. All modules are also available in pdf for easy printing and the introductory module is available as a podchapter for downloading and listening on your favorite mp3 player. The web-site (http://www2.luresext.edu/goats/training/qa.html) was well-received by the goat community.

Results

Eight hundred eighty-two goat producers have enrolled in the on-line certification program and 105 goat producers have been certified via the site to date. They represent nearly every state in the United States, several provinces in Canada, and one foreign country. Knowledge gained by producers for more efficient and effective goat production can potentially result in increased profits for many of these 105 certified producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

Outcome #2

1. Outcome Measures

Number of goat producers using the goat internet website.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	500	105

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Meat goat production is one of the fastest growing sectors of the livestock industry in the United States. New producers, as well as some established ones, have an expressed need for current, correct information on how to raise goats and produce safe, wholesome products in demand by the public. As the meat goat industry grows and evolves, a quality assurance (QA) program is essential. Such a QA program ensures the production of a wholesome product that satisfies consumers and increases profit for the meat goat industry.

What has been done

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4. Associated Knowledge Areas

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

Outcome #3

1. Outcome Measures

Goat producers who improved their operations with information from the goat internet website.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	105

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Meat goat production is one of the fastest growing sectors of the livestock industry in the United States. New producers, as well as some established ones, have an expressed need for current, correct information on how to raise goats and produce safe, wholesome products in demand by the public. As the meat goat industry grows and evolves, a quality assurance (QA) program is essential. Such a QA program ensures the production of a wholesome product that satisfies consumers and increases profit for the meat goat industry.

What has been done

Langston University was awarded funding by the Food Safety and Inspection Service of USDA to develop training and certification for meat goat producers. Langston University organized and led a consortium of 1890 universities and producer associations in this project. The consortium identified the subject topics most pertinent and pressing for the instructional modules. The consortium then identified experts as module authors. These authors represent the most qualified persons in their field in academia as well as in the industry. Langston University translated the 22 instructional modules into web pages with accompanying images, and pre- and post-tests for those producers wishing to pursue certification. All modules are also available in pdf for easy printing and the introductory module is available as a podchapter for downloading and listening on your favorite mp3 player. The web-site (http://www2.luresext.edu/goats/training/qa.html) was well-received by the goat community.

Results

Eight hundred eighty-two goat producers have enrolled in the on-line certification program and 105 goat producers have been certified via the site to date. They represent nearly every state in the United States, several provinces in Canada, and one foreign country. Knowledge gained by producers for more efficient and effective goat production can potentially result in increased profits for many of these 105 certified producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Eagerness of goat producers to register for and complete the goat producer certification module.

Key Items of Evaluation

Certified goat producers improve their goat production practices.

Program #18

V(A). Planned Program (Summary)

1. Name of the Planned Program

Development of New Dairy Goat Products

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
502	New and Improved Food Products		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.1	0.0	0.1
Actual	0.0	0.3	0.0	0.4

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	14436	0	16230
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14634	0	14634
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

Work was performed to develop new dairy goat products and create new opportunities for goat producers.

2. Brief description of the target audience

All goat producers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	400	0	0
2008	100	200	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	1	0	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Goat producers without cheesemaking experience were taught these basic skills

Year	Target	Actual
2008	{No Data Entered}	100

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers learning about techniques for developing new dairy goat products.
2	Number of goat producers using techniques for developing new dairy goat products.
3	Goat producers developing increasing yearly income from new dairy goat products.

Outcome #1

1. Outcome Measures

Number of goat producers learning about techniques for developing new dairy goat products.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The consumption of goat milk and cheese and the popularity of goat milk soap in the U.S. have been on the rise in recent years. To meet the demand for goat milk cheese and goat milk soap and increase profitability of goat dairying, dairy goat producers need skills and techniques to produce high quality goat milk products.

What has been done

During 2008, we conducted training courses for goat milk cheeses and goat milk soaps in addition to our annual cheesemaking workshops. To promote the dairy goat industry and add value to goat milk, 2 cheesemaking workshops and 1 soapmaking workshop were conducted on and off campus. Hands-on cheesemaking and soapmaking procedures and techniques were demonstrated to goat producers, school teachers, physicians and 4-H members. Different varieties of cheese and soap were made for diversified audiences. Milk quality control measures, practical skills and product development evaluation basics were presented to the goat producers.

Results

Goat producers without cheesemaking and soapmaking experiences were taught basic skills. Some of them have started cheesemaking and/or soapmaking at home and several have gone commercial. By making goat milk products and adding value to goat milk, goat producers increase their income in goat farming.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products

Outcome #2

1. Outcome Measures

Number of goat producers using techniques for developing new dairy goat products.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	40	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The consumption of goat milk and cheese and the popularity of goat milk soap in the U.S. have been on the rise in recent years. To meet the demand for goat milk cheese and goat milk soap and increase profitability of goat dairying, dairy goat producers need skills and techniques to produce high quality goat milk products.

What has been done

During 2008, we conducted training courses for goat milk cheeses and goat milk soaps in addition to our annual cheesemaking workshops. To promote the dairy goat industry and add value to goat milk, 2 cheesemaking workshops and 1 soapmaking workshop were conducted on and off campus. Hands-on cheesemaking and soapmaking procedures and techniques were demonstrated to goat producers, school teachers, physicians and 4-H members. Different varieties of cheese and soap were made for diversified audiences. Milk quality control measures, practical skills and product development evaluation basics were presented to the goat producers.

Results

Goat producers without cheesemaking and soapmaking experiences were taught basic skills. Some of them have started cheesemaking and/or soapmaking at home and several have gone commercial. By making goat milk products and adding value to goat milk, goat producers increase their income in goat farming.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products

Outcome #3

1. Outcome Measures

Goat producers developing increasing yearly income from new dairy goat products.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The consumption of goat milk and cheese and the popularity of goat milk soap in the U.S. have been on the rise in recent years. To meet the demand for goat milk cheese and goat milk soap and increase profitability of goat dairying, dairy goat producers need skills and techniques to produce high quality goat milk products.

What has been done

During 2008, we conducted training courses for goat milk cheeses and goat milk soaps in addition to our annual cheesemaking workshops. To promote the dairy goat industry and add value to goat milk, 2 cheesemaking workshops and 1 soapmaking workshop were conducted on and off campus. Hands-on cheesemaking and soapmaking procedures and techniques were demonstrated to goat producers, school teachers, physicians and 4-H members. Different varieties of cheese and soap were made for diversified audiences. Milk quality control measures, practical skills and product development evaluation basics were presented to the goat producers.

Results

Goat producers without cheesemaking and soapmaking experiences were taught basic skills. Some of them have started cheesemaking and/or soapmaking at home and several have gone commercial. By making goat milk products and adding value to goat milk, goat producers increase their income in goat farming.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- After Only (post program)

Evaluation Results

Teaching goat producers how to develop goat products that can help increase their marketing and selling power.

Key Items of Evaluation

An increased number of dairy goat producers adding value to their goat products.

Program #19

V(A). Planned Program (Summary)

1. Name of the Planned Program

Demonstration Clinic: Artificial Insemination for Goats

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.1	0.0	0.0
Actual	0.0	0.1	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
0	3786	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14634	0	14634
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

Hands-on artifical insemination (AI) workshops were conducted to teach AI techniques to goat producers.These AI skills will allow goat producers to gain access to genetically superior sires for herd improvement.

2. Brief description of the target audience

All goat producers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	40	100	0	0
2008	43	120	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of direct adult contacts

Year	Target	Actual
2008	{No Data Entered}	120

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers learning about artificial insemination techniques.
2	Number of goat producers using artificial insemination techniques.
3	Goat producers who improved their herds by using artificial insemination techniques.

Outcome #1

1. Outcome Measures

Number of goat producers learning about artificial insemination techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	40	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The use of superior sires is imperative in improving the genetic composition of breeding stock. Artificial insemination (AI) has long been used in the dairy cattle industry and is a simple technology that goat producers can acquire. However, opportunities for goat producers to acquire the necessary skills via formal and practical instruction are not widespread. Langston University has instituted a practical workshop for instruction in artificial insemination in goats. Producers are instructed in the anatomy and physiology of the female goat, estrus detection and handling and storage of semen. Producers participate in a hands-on insemination exercise. An understanding of the anatomy and physiology enable the producer to devise seasonal breeding plans and troubleshoot problem breeders.

What has been done

In 2008, AI workshops were held on 09/06/08 at the main Langston University campus (Langston, Oklahoma) and on 10/18/08 at the county fairgrounds in Antlers, Oklahoma. Forty-three participants enrolled in the two workshops; 20 at Langston University and 23 in Antlers.

Results

Two workshops were held in AI for goats. Goat producers are under-served in this area because traditional AI courses are geared toward cattle and the AI techniques differ drastically between the species. Goat producers participating in the workshops can save money by being able to conduct their own herd artificial inseminations. They can also potentially improve their herds with access to genetic material from superior sires.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals

Outcome #2

1. Outcome Measures

Number of goat producers using artificial insemination techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The use of superior sires is imperative in improving the genetic composition of breeding stock. Artificial insemination (AI) has long been used in the dairy cattle industry and is a simple technology that goat producers can acquire. However, opportunities for goat producers to acquire the necessary skills via formal and practical instruction are not widespread. Langston University has instituted a practical workshop for instruction in artificial insemination in goats. Producers are instructed in the anatomy and physiology of the female goat, estrus detection and handling and storage of semen. Producers participate in a hands-on insemination exercise. An understanding of the anatomy and physiology enable the producer to devise seasonal breeding plans and troubleshoot problem breeders.

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Results

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4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals

Outcome #3

1. Outcome Measures

Goat producers who improved their herds by using artificial insemination techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	2	120

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The use of superior sires is imperative in improving the genetic composition of breeding stock. Artificial insemination (AI) has long been used in the dairy cattle industry and is a simple technology that goat producers can acquire. However, opportunities for goat producers to acquire the necessary skills via formal and practical instruction are not widespread. Langston University has instituted a practical workshop for instruction in artificial insemination in goats. Producers are instructed in the anatomy and physiology of the female goat, estrus detection and handling and storage of semen. Producers participate in a hands-on insemination exercise. An understanding of the anatomy and physiology enable the producer to devise seasonal breeding plans and troubleshoot problem breeders.

What has been done

In 2008, AI workshops were held on 09/06/08 at the main Langston University campus (Langston, Oklahoma) and on 10/18/08 at the county fairgrounds in Antlers, Oklahoma. Forty-three participants enrolled in the two workshops; 20 at Langston University and 23 in Antlers.

Results

Two workshops were held in AI for goats. Goat producers are under-served in this area because traditional AI courses are geared toward cattle and the AI techniques differ drastically between the species. Goat producers participating in the workshops can save money by being able to conduct their own herd artificial inseminations. They can also potentially improve their herds with access to genetic material from superior sires.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Goat producers acquiring artificial insemination skills.

Key Items of Evaluation

•Goat producers saving money by performing artifical insemination on their own herds •Goat producers improving their herds via genetic material from superior sires

Program #20

V(A). Planned Program (Summary)

1. Name of the Planned Program

Fish Marketing (Aquaculture)

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		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.5	0.0	1.5
Actual	0.0	0.3	0.0	0.2

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	15893	0	9313
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14558	0	14558
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	28163

V(D). Planned Program (Activity)

1. Brief description of the Activity

Methods of marketing alternative fish species will be explored to increase fish producers' profits.

2. Brief description of the target audience

All aquaculture producers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	300	0	0
2008	300	300	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Fish Marketing.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning new fish marketing techniques.
2	Number of farmers using new fish marketing techniques.
3	Farmers who use new fish marketing techniques to increase their profits.

Outcome #1

1. Outcome Measures

Number of farmers learning new fish marketing techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	60	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Channel catfish producers need additional marketing opportunities to offset low prices from processors and competition from imported catfish products. Consumers want more product choices, including kinds and sizes of live fish vs. fish processed by any means.

What has been done

We used monthly campus sales to determine the sizes of channel catfish, grass carp and bigmouth buffalo preferred by local consumers. The information was primarily transferred to producers at the Langston University Aquaculture Field Day and at meetings of the Oklahoma and Kansas Aquaculture Associations.

Results

This program identifies locations for fish farmers where direct sales of food fish from fish culturists to producers are then taught effective methods for direct fish sales. Producers are beginning to market live channel catfish to Asian markets. African American brokers are purchasing increasing amounts of channel catfish for resale. Fish broking has allowed more fish entrepreneurs to earn profits through fish sales.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management

Outcome #2

1. Outcome Measures

Number of farmers using new fish marketing techniques.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Channel catfish producers need additional marketing opportunities to offset low prices from processors and competition from imported catfish products. Consumers want more product choices, including kinds and sizes of live fish vs. fish processed by any means.

What has been done

We used monthly campus sales to determine the sizes of channel catfish, grass carp and bigmouth buffalo preferred by local consumers. The information was primarily transferred to producers at the Langston University Aquaculture Field Day and at meetings of the Oklahoma and Kansas Aquaculture Associations.

Results

This program identifies locations for fish farmers where direct sales of food fish from fish culturists to producers are then taught effective methods for direct fish sales. Producers are beginning to market live channel catfish to Asian markets. African American brokers are purchasing increasing amounts of channel catfish for resale. Fish broking has allowed more fish entrepreneurs to earn profits through fish sales.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management

Outcome #3

1. Outcome Measures

Farmers who use new fish marketing techniques to increase their profits.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Channel catfish producers need additional marketing opportunities to offset low prices from processors and competition from imported catfish products. Consumers want more product choices, including kinds and sizes of live fish vs. fish processed by any means.

What has been done

We used monthly campus sales to determine the sizes of channel catfish, grass carp and bigmouth buffalo preferred by local consumers. The information was primarily transferred to producers at the Langston University Aquaculture Field Day and at meetings of the Oklahoma and Kansas Aquaculture Associations.

Results

This program identifies locations for fish farmers where direct sales of food fish from fish culturists to producers are then taught effective methods for direct fish sales. Producers are beginning to market live channel catfish to Asian markets. African American brokers are purchasing increasing amounts of channel catfish for resale. Fish broking has allowed more fish entrepreneurs to earn profits through fish sales.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- Time series (multiple points before and after program)

Evaluation Results

Development of new markets or marketing methods for fish producers.

Key Items of Evaluation

- Fish producers improving their income via direct marketing of fish.

Program #21

V(A). Planned Program (Summary)

1. Name of the Planned Program

Meat Buck Performance Test

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
303	Genetic Improvement of Animals		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.2	0.0	0.0
Actual	0.0	0.2	0.0	0.1

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	13754	0	5847
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14634	0	14634
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

Extension personnel conducted the annual meat goat performance test for young, growing meat bucks to evaluate growth and feed efficiency.

2. Brief description of the target audience

All goat producers in Oklahoma

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	50	100	0	0
2008	35	70	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Meat Buck Performance Test.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers learning about the meat buck performance test.
2	Number of goat producers using the meat goat performance test.
3	Goat producers who improve their herds via the meat buck performance test.

Outcome #1

1. Outcome Measures

Number of goat producers learning about the meat buck performance test.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An influential aspect of meat goat production is the growth rate and/or efficiency of kids. Objective performance records are needed when making informed genetic selections to improve average daily gain and/or feed efficiency. In order to compare animals from different ranches or environments, central performance meat buck testing is conducted. In 1997, Langston University established a meat buck performance test to promote the identification and increased utilization of genetically superior sires.

What has been done

The twelfth annual meat buck performance test started May 3, 2008 with 35 bucks enrolled from 8 different breeders.

Results

The meat buck performance test has enabled goat producers to demand higher prices for goats sold on the market because of their performance test. Some producers have been able to purchase more superior goat breeds and improve their herds. This increases the potentials for future profits.

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals

Outcome #2

1. Outcome Measures

Number of goat producers using the meat goat performance test.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An influential aspect of meat goat production is the growth rate and/or efficiency of kids. Objective performance records are needed when making informed genetic selections to improve average daily gain and/or feed efficiency. In order to compare animals from different ranches or environments, central performance meat buck testing is conducted. In 1997, Langston University established a meat buck performance test to promote the identification and increased utilization of genetically superior sires.

What has been done

The twelfth annual meat buck performance test started May 3, 2008 with 35 bucks enrolled from 8 different breeders.

Results

The meat buck performance test has enabled goat producers to demand higher prices for goats sold on the market because of their performance test. Some producers have been able to purchase more superior goat breeds and improve their herds. This increases the potentials for future profits.

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals

Outcome #3

1. Outcome Measures

Goat producers who improve their herds via the meat buck performance test.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An influential aspect of meat goat production is the growth rate and/or efficiency of kids. Objective performance records are needed when making informed genetic selections to improve average daily gain and/or feed efficiency. In order to compare animals from different ranches or environments, central performance meat buck testing is conducted. In 1997, Langston University established a meat buck performance test to promote the identification and increased utilization of genetically superior sires.

What has been done

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Results

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4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Meat buck performace tests give goat producers an accurate assessment of the market value of their animals.

Key Items of Evaluation

Some meat goat producers are able to demand higher market values for their animals becasue of an accurate buck performance test.

Program #22

V(A). Planned Program (Summary)

1. Name of the Planned Program

Goat Dairy Herd Improvement (DHI) Laboratory

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
308	Improved Animal Products (Before Harvest)		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	1.1	0.0	0.0
Actual	0.0	0.1	0.0	1.2

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	7987	0	27692
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	14634	0	14634
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	12233	0	31328

V(D). Planned Program (Activity)

1. Brief description of the Activity

Extension personnel conducted goat milk quality tests in the Langton University Goat Dairy Herd Improvement Laboratory.

2. Brief description of the target audience

All goat producers in Oklahoma.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1000	1000	0	0
2008	700	300	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Goat Dairy Herd Improvement (DHI) Laboratory.

Year	Target	Actual
2008	0	700

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of goat producers who learned about the Goat Dairy Herd Improvement Laboratory.
2	Number of goat producers who are using teh Goat Dairy Herd Improvement Laboratory.
3	Goat producers who have increased their production profits by utilizing the Goat Dairy Herd Improvement Laboratory.

Outcome #1

1. Outcome Measures

Number of goat producers who learned about the Goat Dairy Herd Improvement Laboratory.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1000	700

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Dairy Herd Improvement Association (DHIA) has been serving cow producers for decades. However, for many years dairy goat producers had to deal with records written in cow language. This meant that they could not get accurate information in goat terms and that all the reports reflected cows, bulls and calves rather than does, bucks and kids. Records produced by the DHI lab at Langston University are used to identify high producing does. These records are useful for the exportation of these does to foreign countries and accurate data could enhance the resale value of their does and offspring for the producers domestically as well.

What has been done

Langston University established a certified DHI laboratory that operates under the supervision of the National DHIA to provide service to goat producers in the nation. We have also worked in cooperation with Texas A&M University to write a program that utilizes goat language. This program produces records with dairy goat breeds along with correct sex identification and expected delivery dates for pregnant does.

Results

Goat producers are now able to get records for their animals that reflect accurate information with the correct language. These records not only reflect higher fat and protein values for a doe, but also are easier to understand when used for genetic evaluation and for herd management. Currently, we are serving 129 goat producers in 29 states. Information provided by the Langston University DHI Laboratory has allowed goat producers to demand higher prices for their animals during sales.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)

Outcome #2

1. Outcome Measures

Number of goat producers who are using teh Goat Dairy Herd Improvement Laboratory.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1500	700

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Dairy Herd Improvement Association (DHIA) has been serving cow producers for decades. However, for many years dairy goat producers had to deal with records written in cow language. This meant that they could not get accurate information in goat terms and that all the reports reflected cows, bulls and calves rather than does, bucks and kids. Records produced by the DHI lab at Langston University are used to identify high producing does. These records are useful for the exportation of these does to foreign countries and accurate data could enhance the resale value of their does and offspring for the producers domestically as well.

What has been done

Langston University established a certified DHI laboratory that operates under the supervision of the National DHIA to provide service to goat producers in the nation. We have also worked in cooperation with Texas A&M University to write a program that utilizes goat language. This program produces records with dairy goat breeds along with correct sex identification and expected delivery dates for pregnant does.

Results

Goat producers are now able to get records for their animals that reflect accurate information with the correct language. These records not only reflect higher fat and protein values for a doe, but also are easier to understand when used for genetic evaluation and for herd management. Currently, we are serving 129 goat producers in 29 states. Information provided by the Langston University DHI Laboratory has allowed goat producers to demand higher prices for their animals during sales.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)

Outcome #3

1. Outcome Measures

Goat producers who have increased their production profits by utilizing the Goat Dairy Herd Improvement Laboratory.

2. Associated Institution Types

- 1890 Extension
- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	700

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Dairy Herd Improvement Association (DHIA) has been serving cow producers for decades. However, for many years dairy goat producers had to deal with records written in cow language. This meant that they could not get accurate information in goat terms and that all the reports reflected cows, bulls and calves rather than does, bucks and kids. Records produced by the DHI lab at Langston University are used to identify high producing does. These records are useful for the exportation of these does to foreign countries and accurate data could enhance the resale value of their does and offspring for the producers domestically as well.

What has been done

Langston University established a certified DHI laboratory that operates under the supervision of the National DHIA to provide service to goat producers in the nation. We have also worked in cooperation with Texas A&M University to write a program that utilizes goat language. This program produces records with dairy goat breeds along with correct sex identification and expected delivery dates for pregnant does.

Results

Goat producers are now able to get records for their animals that reflect accurate information with the correct language. These records not only reflect higher fat and protein values for a doe, but also are easier to understand when used for genetic evaluation and for herd management. Currently, we are serving 129 goat producers in 29 states. Information provided by the Langston University DHI Laboratory has allowed goat producers to demand higher prices for their animals during sales.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

External factors did not affect outcomes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

Goat producers are able to get accurate milk fat and protein records for their dairy goats.

Key Items of Evaluation

Goat producers are able to get accurate milk fat and protein values to use in marketing their does and improving their herds.

Program #23

V(A). Planned Program (Summary)

1. Name of the Planned Program

Small Farms Systems

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems		100%		100%
	Total		100%		100%

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.5	0.0	0.5
Actual	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	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	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

No funds were expended in this area during FY 2008.

2. Brief description of the target audience

No funds were expended in this area during FY 2008.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	200	25	50
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research Projects completed on Small Farm Systems

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of farmers learning new small farm systems techniques.
2	Number of farmers using new small farm systems techniques.
3	Farmers who developed profitable, sustainable small farm systems.

Outcome #1

1. Outcome Measures

Number of farmers learning new small farm systems techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #2

1. Outcome Measures

Number of farmers using new small farm systems techniques.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area

205	Plant Management Systems

Outcome #3

1. Outcome Measures

Farmers who developed profitable, sustainable small farm systems.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

No funds were expended in this area during FY 2008.

What has been done

No funds were expended in this area during FY 2008.

Results

No funds were expended in this area during FY 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)

Brief Explanation

None

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

None

Key Items of Evaluation

None