

# (PSAS) Forage Based Livestock Systems - Profitable and Sustainable Agriculture

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

### 1. Name of the Planned Program

(PSAS) Forage Based Livestock Systems - Profitable and Sustainable Agriculture

## 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	20%		20%	
302	Nutrient Utilization in Animals	15%		15%	
305	Animal Physiological Processes	5%		5%	
307	Animal Management Systems	20%		20%	
311	Animal Diseases	15%		15%	
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals	5%		5%	
601	Economics of Agricultural Production and Farm Management	10%		10%	
602	Business Management, Finance, and Taxation	10%		10%	
	<b>Total</b>	100%		100%	

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

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	12.0	0.0	22.9	0.0
<b>Actual</b>	6.8	0.0	22.7	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 119340	1890 Extension	Hatch 94984	Evans-Allen
	0		0
1862 Matching 489368	1890 Matching	1862 Matching	1890 Matching
	0	221880	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**

Any or all channels of the media will be used to familiarize the public with UW CES and the AES programming areas and personnel. Media releases in local newspapers, radio spots and television advertisements will inform the public of upcoming Extension programs including contact persons. Newsletter articles distributed both electronically and through the mail by county offices, area teams, and the University of Wyoming will reach producers locally, regionally, and state-wide. Public educational programs with invited speakers and Extension specialists and educators presenting research-based information, will continue to be held in response to local, state, and national livestock production issues. Demonstrations of technology and skills training will be included in education curriculum to enhance educational effectiveness. Field tours will be organized to provide producers with the opportunity to observe industry procedure. Specific Areas of Focus. Emphasis will be placed on the four main areas which follow; Herd management and traceability, herd development, cropping systems and livestock development, risk and operation management techniques and alternatives to enhance the stability of Wyoming livestock producers. The new Sustainable Agriculture Research and Extension Center (SAREC) located at Lingle, Wyoming will provide a resource base for integrating livestock/forage based programs.

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

Participants will include policy makers for county, state, and federal government agencies, livestock producers, crop producers, ag lenders, and potential investors. An existing secondary audience will be the media, general public, and interest groups not directly involved in the production of agriculture (i.e., environmental groups).

**V(E). Planned Program (Outputs)****1. Standard output measures****Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	2000	50000	1000	1000
2007	4756	50000	1000	1000

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

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	1
2007:	1

**Patents listed**

Method of removing arsenic from water.

**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	11	92	103

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

**Output Target**

**Output #1**

**Output Measure**

Effectiveness of research programs will be based on publications, external grant support, and integration into existing extension programs. Ultimately, this program will improve livestock value through cropping practices, herd selection, and management for Wyoming livestock producers. Targets include number of programs conducted, livestock producers reporting change in practices as a result of educational efforts.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	30	110

**Output #2**

**Output Measure**

Research efforts will develop new and improved forages for high elevation livestock systems. Target measures are new or improved forages.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1	1

**Output #3**

**Output Measure**

Develop improved methods of estimating forage base under varying environmental conditions. Targets included new methods developed.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1	1

**Output #4**

**Output Measure**

Develop profitable and sustainable forage based livestock systems for the High Plains. Targets are defined as new systems developed.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1	1

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

<b>O No.</b>	<b>Outcome Name</b>
1	Awareness Created for Wyoming Livestock producers through educational activities. Target numbers indicate number of producers reached.
2	Wyoming producers will implement electronic animal identification to gain advantages in herd management. Target shows that by 2009, 10 percent of producers in Wyoming will have voluntarily implemented electronic animal identification.
3	Producers will also gain an understanding of heifer development as well as opportunities for matching genetic improvement with successful marketing strategies. Targets reflect number of livestock producers making changes in heifer development.
4	Wyoming producers will benefit through an increased value of livestock and crops related to improved cropping practices, herd selection and management. Outcomes indicate by 2009, 25 Wyoming producers will report increased sustainability and profitability due to educational efforts.
5	Through research efforts UW will minimize disease transfer between livestock and wildlife. Outcomes reflect number of methods identified to diagnose and prevent disease transfer.

**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
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**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

Natural Disasters (drought, weather extremes, etc.)

Economy

Appropriations changes

Government Regulations

Competing Public priorities

Competing Programmatic Challenges

Other (Global market changes)

**Brief Explanation**

Market conditions, and weather extremes including drought impact outcomes.

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

**1. Evaluation Studies Planned**

After Only (post program)

Retrospective (post program)

Before-After (before and after program)

During (during program)

**Evaluation Results**

**Key Items of Evaluation**