

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Global Food Security and Hunger: Livestock Improvement Program

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
303	Genetic Improvement of Animals	40%		0%	
307	Animal Management Systems	40%		0%	
311	Animal Diseases	5%		0%	
312	External Parasites and Pests of Animals	5%		0%	
313	Internal Parasites in Animals	5%		0%	
902	Administration of Projects and Programs	5%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	1.0	0.0
Actual Paid	0.0	0.0	0.0	0.0
Actual Volunteer	0.5	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
17702	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

The NMC-CREES Livestock Improvement Program aims to develop educational and capacity building programs that support and encourage livestock producers, contributing to the sustainability and financial viability of their operations. Our program uses a variety of methods and venues that serve to gather and disseminate information to livestock producers, to include, technical assistance, demonstrations, workshops, field days, and locally appropriate research studies related to breed improvement, pasture management, feed processing, animal health, disease management, meat processing and value adding, herd surveys, waste management, and marketing. Although this program works with individuals and associations involved in livestock production, the goals of the program help to contribute to local and regional improvements in food security, access to fresh meats and proteins, increased agricultural commerce, and the adaptability of local agriculture to the affects of climate change.

2. Brief description of the target audience

*Youth and adult agencies *Leaders *Ranchers/farmers *Retirees looking at new investment *Livestock producers *Entrepreneurs *Government *Entrepreneurs

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	100	300	75	250

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

Patent Applications Submitted

Year: 2014
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Research projects on Animal Diseases and management, Animal genetic upgrading, Animal nutrition, and Animal science
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of Workshops and professional development trainings for livestock program (Production, Animal Health, etc.)and sustainable agriculture program

Year	Actual
2014	6

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Numbers of clients adopted livestock best management practices as well as sustainable agriculture that resulted to creation of alternative livestock enterprise
2	Numbers of new client gained knowledge and skills about animal science, production, health and management, animal husbandry and sustainable agriculture

Outcome #1

1. Outcome Measures

Numbers of clients adopted livestock best management practices as well as sustainable agriculture that resulted to creation of alternative livestock enterprise

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Livestock Production is an important component of our local food systems. Livestock producers provide our communities with access to fresh meats that would otherwise not be available to the general public, due to the sheer distance from our islands to the Mainland USA. Many livestock producers have structured their production systems, based on outdated and unsustainable management practices, resulting in losses to production and created the threat of environmental damage.

What has been done

The NMC-CREES Livestock Improvement Program has been working in partnership with the University of Hawaii, University of Guam, and University of the Virgin Islands, and many other partners to conduct a series of training and capacity building opportunities for farmers in the CNMI and Guam, which has come to be known as the "Marianas Grazing Academy". We set up farmer advisory councils and met with producers throughout the region to guide our program planning efforts. We have developed the first publicly supported artificial insemination program for cattle, established grass and leuceana demonstration and research plots, and conducted workshops and field days on a variety of livestock production topics.

The NMC-CREES livestock Improvement program employs a variety of evaluation tools to assess our programs, to include pre and post-surveys, herd and livestock surveys, areas under pasture, pasture and legume data collection, numbers of clients applying and receiving EQIP and FSA funding, amount of USDA dollars applied for and spent on conservation practices, numbers of waste management systems constructed, number of clients adopting BEST management practices (such as composting), pre and post-tests, interviews, advisory councils, direct and indirect client contact numbers.

Results

Through the collection and analysis of data collected through a variety of methods, our program has observed increases in livestock production, pastured areas, meat processing activity and businesses, legislative support (imports to Guam), and increases in the interest levels of farmers in adopting BEST management practices, such as, weed suppression, pasture management, animal health, biomass and forage improvement, breed improvement, animal waste management, and overall community support for sustainable livestock production in the CNMI.

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals
307	Animal Management Systems
311	Animal Diseases
312	External Parasites and Pests of Animals
313	Internal Parasites in Animals
902	Administration of Projects and Programs

Outcome #2

1. Outcome Measures

Numbers of new client gained knowledge and skills about animal science, production, health and management, animal husbandry and sustainable agriculture

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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producers have structured their production systems, based on outdated and unsustainable management practices, resulting in losses to production and created the threat of environmental damage.

What has been done

The NMC-CREES Livestock Improvement Program has been working in partnership with the University of Hawaii, University of Guam, and University of the Virgin Islands, and many other partners to conduct a series of training and capacity building opportunities for farmers in the CNMI and Guam, which has come to be known as the "Marianas Grazing Academy". We set up farmer advisory councils and met with producers throughout the region to guide our program planning efforts. We have developed the first publicly supported artificial insemination program for cattle, established grass and leuceana demonstration and research plots, and conducted workshops and field days on a variety of livestock production topics.

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Results

Through the collection and analysis of data collected through a variety of methods, our program has observed increases in livestock production, pastured areas, meat processing activity and businesses, legislative support (exports to Guam), and increases in the interest levels of farmers in adopting BEST management practices, such as, weed suppression, pasture management, animal health, biomass and forage improvement, breed improvement, animal waste management, and overall community support for sustainable livestock production in the CNMI.

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals
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V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Cultural)

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Through the collection and analysis of data collected through a variety of methods, our program has observed increases in livestock production, pastured areas, meat processing activity and businesses, legislative support (imports to Guam), and increases in the interest levels of farmers in adopting BEST management practices, such as, weed suppression, pasture management, animal health, biomass and forage improvement, breed improvement, animal waste management, and overall community support for sustainable livestock production in the CNMI.

Key Items of Evaluation

Leauceana/grass plots production and soil research data, farmer adoption of sustainable production practices and Breed Improvement data.