

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Global Food Security and Hunger

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
202	Plant Genetic Resources				10%
205	Plant Management Systems				15%
401	Structures, Facilities, and General Purpose Farm Supplies				20%
604	Marketing and Distribution Practices				15%
610	Domestic Policy Analysis				20%
611	Foreign Policy and Programs				20%
	Total				100%

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.0	3.5
Actual	0.0	0.0	0.0	10.4

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	0	0	1099420
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	505281
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	101772

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conducted studies in the following areas: (1) defining opportunities for rural entrepreneurs and connecting them with small-scale agricultural enterprises, existing rural businesses and prospective entrepreneurs; (2) determining viable alternatives to tobacco for small scale producers including floriculture production in tobacco greenhouses, outdoor and indoor mushroom production, and specialty melons and other crops; (3) seek improved methods for washing green leafy vegetables for use especially by small scale farmers; (4) identify factors influencing successful small farm operations in North Carolina that can be developed into a protocol for evaluating the predicted success of small farm operations; (5) economic assessment of changes in trade agreements; (6) bioterrorism threats and economic fuel requirements on various industry sectors; and (7) new domestic and international markets for North Carolina producers with particular emphasis on small scale operations.

- Present findings at professional meetings.
- Publish research findings in professional journals.
- Share findings with Extension educators and with other groups that may use the information to improve the viability of small scale agricultural operations, and use to assist small scale producers in finding markets for their products.

2. Brief description of the target audience

The targeted audiences include the scientific community, the general public, small-scale farmers and operations, small businesses, producers of small scale agriculture, and traditionally underserved populations and communities in North Carolina.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	1038	456197	0	0
Actual	2532	518835	0	0

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total

Plan	0	6	
Actual	0	21	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- # presentations at professional meetings

Year	Target	Actual
2010	8	20

Output #2

Output Measure

- # media occurrences

Year	Target	Actual
2010	9	10

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increase in number of producers/growers of alternative crops/enterprises
2	Increase in production and sales of alternative crops and enterprises
3	% farmers in groups indicating increase in knowledge about small scale operations
4	# of small farmers trained and involved in alternative farming
5	# of new regional or national markets found for NC products

Outcome #1

1. Outcome Measures

Increase in number of producers/growers of alternative crops/enterprises

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Increase in production and sales of alternative crops and enterprises

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

% farmers in groups indicating increase in knowledge about small scale operations

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	75	137

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The mushroom production program is providing a viable alternative to tobacco for small farmers in North Carolina.

What has been done

The mushroom initiative continues to offer assistance to small producers by offering demonstration workshops, by conducting research on how to best match the strains with the environmental requirements in the varying state regions, and also by providing expertise on producer problems and disease control and marketing issues.

Results

The number of producers continues to grow. The number has grown from 450 to 517 producers since last year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
604	Marketing and Distribution Practices

Outcome #4

1. Outcome Measures

of small farmers trained and involved in alternative farming

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

With the decline in tobacco production in the state, many small scale farmers are forced to either cease farming or shift production to viable alternatives.

What has been done

Scientists have researched and developed alternative production opportunities for small scale farmers particularly in the areas of pasture pork, mushrooms, and organic vegetables. This information has been shared in many forms and very effectively through field days on the university farm.

Results

The Small Farms Conference is held annually at NCA&T and part of the conference is a field day on the university farm. Two hundred and fifty-five persons participated in the field day and 70 responded to an evaluation survey. Respondents indicated that the information presented was helpful and relevant, especially the sessions on marketing locally grown crops, mushroom

production training, and seeding and transplant management. Once again, all indicated that they would likely attend farm field days in the future.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
401	Structures, Facilities, and General Purpose Farm Supplies

Outcome #5

1. Outcome Measures

of new regional or national markets found for NC products

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Connecting farmers with potential buyers of their products is the lifeline of financial success for small farmers.

What has been done

Scientists in agricultural economics involved with the L.C. Cooper, Jr. International Trade and Development Center met with farmers to train them and connect them with viable markets.

Results

The Center identified a broker/retailer and a restaurant operator who is willing to buy free range pork directly from farmers at a premium price. As a result 20 small pork farmers are negotiating a contract with the potential buyer to supply 15 pigs per farmer per week. A similar effort was developed for mushroom growers with 5 regional markets accepting their products at a premium price.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
604	Marketing and Distribution Practices

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

Brief Explanation

Changes in both competitive and noncompetitive funding will greatly influence our ability to conduct the planned research as well as deliver the results to our stakeholders. Field research could be significantly impacted by natural disasters such as hurricanes.

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

1. Evaluation Studies Planned

- During (during program)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}