

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Food Safety

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
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals	20%	20%	0%	
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	40%	40%	0%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	40%	40%	0%	
	Total	100%	100%	0%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	25.0	3.0	0.0	0.0
Actual Paid Professional	23.0	0.0	0.0	0.0
Actual Volunteer	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
221164	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
221164	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

Key educational methods to be used across the state: Improving fresh produce safety/ Small farm food safety

- On-site training for produce workers using existing materials on CD with appropriate activities or other adult learning methods; In-service training for faculty; County training with activities, adult learning methods for consumers; Distribution of current EDIS pubs, develop others as needed.
- Use media outreach to increase awareness of fresh produce food safety e.g. print and broadcast media, Family Album Radio, the Solutions for Your Life and county Web sites.

Key educational methods: Revitalizing home food preservation

- Continue training of county faculty based on recent research on home food preservation in collaboration with UGA National Center for Home food preservation, Dr. Elizabeth Andress.
- Seek grant funding and/or support for canning supplies for training
- Facilitate county faculty mentoring program to support for 4-H and adult community training
- Prepare and review publications as needed.

Key educational methods: Continuing food safety education for food handlers

- Serv Safe® Training and Certification for food service managers/operators
- Food service workers/food handlers training (SafeStaff ®or equivalent) on site or elsewhere

- Use media to raise awareness and classes/programs to increase knowledge and competency of consumers and volunteers on safe food handling
- Face-to-face training: Food safety and quality update for FCS county faculty; training by state government officials on food businesses regulation; other emerging programs and issues.

2. Brief description of the target audience

- 1) Improving fresh produce safety/ Small farm food safety Target audience: Small farm owners; farm workers; produce handlers; consumers
- 2) Revitalizing home food preservation

Potential partners: Produce vendors; canning centers; regulators Target audiences: County faculty; adults (consumers/ volunteers); youth (4-Hers)

- 3) Continuing food safety education of food handlers Target audiences: Food service operators: food handlers (adults; youth); consumers; volunteers, and county faculty

3. How was eXtension used?

{No Data Entered}

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	218907	497803	0	0

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

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	18	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- {No Data Entered}

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Change in knowledge related to processing, distribution, safety and security of food systems
2	Change in behavior related to processing, distribution, safety and security of food systems
3	Change in condition related to processing, distribution, safety and security of food systems

Outcome #1

1. Outcome Measures

Change in knowledge related to processing, distribution, safety and security of food systems

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	1218

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #2

1. Outcome Measures

Change in behavior related to processing, distribution, safety and security of food systems

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	430

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #3

1. Outcome Measures

Change in condition related to processing, distribution, safety and security of food systems

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
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2013

99

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Florida is still heavily impacted by the economic downturn and although the economy appears to be improving it is expected that sequestration will be an issue and this is delaying a stronger economy. Public education in Florida has lost more than 50% of state funding and has been impacted by other losses or increases such as the failure of tuition to be increased to bring the state more into line with other state tuitions. Counties across the state are impacted by devolution from the state level and this also has a direct impact on the land-grant universities.

Natural and national disasters can also affect the number of volunteers available to work with youth and Florida citizens and this is an area that the land-grant universities use to support programs. Natural disasters such as hurricanes, fires, storms and flooding are common within the state leading to many issues that impact the land-grant colleges.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Foodborne illnesses continue to be a major health concerns (CDC data), especially for

persons

with compromised immunity, such as infants, young children, older adults, and persons with certain medical conditions. The majority of foodborne illnesses in the US are due to microbial causes, and in Florida, about 50% of foodborne illness outbreaks are attributed to restaurants and other commercial food service establishments. Food safety education, such as teaching proper food handling practices to those who handle food in restaurants and other food service

establishments, can reduce the burden of foodborne illness. In the area of processing, distributing,

safety and security of food systems in 2013 of those surveyed working within industries that can impact food safety and security, 1,218 increased their knowledge, 430 made

changes in their behaviors and 99 made changes within food industry that had positive impacts on the

community. In areas of food safety and nutrition 33,634 added to their knowledge, 50,988 changed their

behavior and 2,456 made changes that had a direct impact on the larger community.

Key Items of Evaluation

Issues or Situation & Target Audiences:

The Centers for Disease Control and Prevention (CDC) estimate 48 million cases of foodborne illness, 128,000 hospitalizations, and 3,000 deaths occur each year from foodborne microorganisms. The commodities that have led to the most outbreak-related illnesses were fruits and nuts (24%), vine and leafy vegetables (23%) and beef (13%). In response to these and other food safety issues, the federal government has enacted the 2011 Food Safety Modernization Act (FSMA). In addition to regulatory compliance, there is an expectation of food safety throughout the food system to significantly exceed standards defined by FSMA. Additionally, buyer-driven food safety demands are increasing pressure on farmers to have food safety plans that exceed regulatory requirements. At all points in the Florida food system, support is needed to help clientele develop a strong food safety culture and an understanding of the new regulatory framework and overall market demands that relate to their products. The target audience for these programs were producers, packers, and distributors.

What we did:

We provided trainings, seminars, packing house field days, short courses and Good Agricultural Practices (GAPs) trainings throughout the state.

Outcomes/Impacts:

More than 46 individual companies/businesses participated citrus in packing house trainings, resulting in 1,445 documented/trained employees in Food Safety. Indian River Citrus League estimates value of each program per person is approximately \$50 per person

based on training costs if they paid private consultants. The 2013 training value is \$72,250 = 1,445 trained @ \$50/attendee.

The overall 2013 Fresh Citrus Training/GlobalGap team coordinated teaching (English & Spanish) resulted in 8,933 trained in six program offerings (training value of \$ 446,650 = 8,933 trained @ \$50/attendee/program.) Certain Fresh Citrus training programs, i.e., Food Safety, Personal Hygiene and WPS, are considered major musts and failing to comply with audit requirements can result in failing the audit, causing the company extra costs in lost production and additional audit inspections/requirements.

There were 116 participants in the annual Tomato Food Safety Training workshops who represented 37 tomato grower/packer/shippers. The total number of registrants continues to increase and this year there were 25% more than in 2012. This high participation rate reinforces the importance of this program to our Florida tomato industry. Eighty-three participants completed pre/post-tests to qualify for a Certificate of Completion. The pretest/post-test results showed that the average participant had an average pretest score was of 71, and the post-test score was 85, an increase of 21%. Several respondents indicated that they improved their 3rd party audits as a result of previous year's training program.