

V(A). Planned Program (Summary)

Program # 3

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
205	Plant Management Systems	10%	10%		
501	New and Improved Food Processing Technologies	20%	20%		
503	Quality Maintenance in Storing and Marketing Food Products	20%	20%		
504	Home and Commercial Food Service	20%	20%		
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	15%	15%		
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	15%	15%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	11.0	0.0	0.0	0.0
Actual Paid Professional	23.5	0.9	0.0	0.0
Actual Volunteer	2.5	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
696594	35329	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
528604	35329	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2511670	47106	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Food Safety Team's activities are teaching safe food preparation, processing and handling practices through 5 primary programs which are: Food Safety Training for Food Service Workers; Home Food Preservation Techniques, Better Process Controls for food processors, Good Agricultural Practices for farmers and safe seafood processing through HACCP principles. Each project includes a variety of educational activities.

The Home Grounds team contributed workshops/demo's titled, Home Grown. REAs on this team have training and tools to educate residential gardeners a better understanding of the resources they use, and pest and plant management techniques to improve food garden production. Agents also recruit volunteers (188 vol's in 2012) to assist in educational outreach at county fairs, information booths, community gardens, assisting workshops, and in displays.

The primary focus for 2012 Home Grown programs was to: 1. increase the application of IPM techniques used in home food gardens; 2. increase the production of home grown produce; 3. increase the quantity and quality of safe local food production.

2. Brief description of the target audience

The primary target audiences for the food safety team are food service workers, food processors and consumers.

The primary target audience for Home Grown workshops/demo's is residential gardeners growing for their families or as small producers at local farmers' markets.

3. How was eXtension used?

The Alabama Food Safety team provided the leadership and 4 core members to the food safety eXtension program. Information pages were posted to the eXtension website and nearly 200 Ask the Expert questions were answered by the Alabama Food Safety Team. Questions were answered not only from Alabama but from other states and even individuals from outside the US.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	22490	4780000	2301	14500

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

Patent Applications Submitted

Year: 2012
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	2	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in the prior "outcome activities and methods sections." The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Actual
2012	0

Output #2

Output Measure

- The number of Home Grown workshops coordinated/hosted by Home Grounds team REAs - 76

Year	Actual
2012	76

Output #3

Output Measure

- number of participants in Home Grown wksp/demo's

Year	Actual
2012	6250

Output #4

Output Measure

- number of media stories related to home food gardens - vegetables, fruits, pruning, raised beds, soils, etc (201)

Year	Actual
2012	201

Output #5

Output Measure

- web based video teaching "Friend or Foe" insects in the garden, <http://vimeo.com/48026353>

Year	Actual
2012	1

Output #6

Output Measure

- REA's started or continued FACEBOOK pages to promote best gardening practices

Year	Actual
2012	5

Output #7

Output Measure

- Master Gardeners had demo gardens in Lee, Houston, Elmore, Madison, Jefferson, Tuscaloosa, Montgomery, Mobile, Cleburne, Calhoun, Chilton, and Etowah counties. These teach concepts such as composting, soil amendmets, raised beds, heirloom plants, food plants, variety selection, and pollinator plants, varieties best adapted to specific parts of our state

Year	Actual
2012	12

Output #8

Output Measure

- Extension Specialists supported Home Grown wksp: Majumdar, Mitchell, Sikora, Browne, Goff, Kemble, Caylor, Jacobi, Hagan, Graham, Fields

Year	Actual
2012	11

Output #9

Output Measure

- Food Safety started a Facebook Page to promote programing and give food safety information

Year	Actual
2012	11

Output #10

Output Measure

- Number of counties served by the Food Safety Team was 67

Year	Actual
2012	67

Output #11

Output Measure

- Food Safety Programs were also offered on handwashing, safe food preparation House of Horrible Germs, Smart food shopper and General food safety programs. These programs were not evaluated.

Year	Actual
2012	14657

Output #12

Output Measure

- Food Service workers were taught in 110 classes throughout the state.

Year	Actual
2012	1227

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	A major outcome will be the number of food service workers who participate in Extension sponsored Food Safety Training.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.
3	Home Grown (HG) wksp - % participants who improved their knowledge of recommended pest mgt tactics for food garden crop plants
4	HG wksp - % participants who improved their knowledge of the value of cover crops in home food gardens
5	HG wksp - % participants who improved their knowledge of identifying disease and insect pests in food gardens
6	HG wksp - % participants who improved their knowledge of beneficial insects and pollinators (ID, predators, pollinators, etc)
7	HG wksp - % participants who improved their knowledge of fruit/veg variety selection for pest mgt and usage preferences
8	HG wksp - % participants who improved their knowledge of pruning techniques of fruit bearing plants
9	HG wksp - % participants who plan to start a new garden or expand the size of their current garden
10	HG wksp - % participants who plan to use compost in their garden as soil amendment
11	HG wksp - % participants who plan to change their pest mgt techniques to those recommended in the workshop/demo today

12	HG wksp - % participants who will prune their fruit plants as shown/taught in today's workshop/demo
13	The Food Safety team measured the knowledge for participants of the Better Process Control Schools.
14	The Food Safety Team Measured knowledge and behavior change in individuals completing the Master Food Preserver course.
15	The Food Safety Team teaches Food Service Workers which conclude with an intensive examination in which 88% of the individuals pass the course allowing for the establishment to stay in business.
16	The Food Safety Team taught Good Agricultural Practices to Farmers and producers of fruits and vegetables.
17	The Food Safety Team taught a AFDO certifying course of HACCP to Seafood Processors.

Outcome #1

1. Outcome Measures

A major outcome will be the number of food service workers who participate in Extension sponsored Food Safety Training.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
503	Quality Maintenance in Storing and Marketing Food Products
504	Home and Commercial Food Service
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

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
503	Quality Maintenance in Storing and Marketing Food Products
504	Home and Commercial Food Service
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

Home Grown (HG) wksp - % participants who improved their knowledge of recommended pest mgt tactics for food garden crop plants

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	93

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

According to the National Gardening Assoc., 2009, Impact of Home & Community Gardening in America, survey - An estimated 37% of U.S. households had a food garden - and 21% of these were new to vegetable gardening activities.

What has been done

Home Grounds team REA's provided teaching/demonstration in pest management strategies for the home food garden

Results

93% of respondents showed a knowledge gain comparing their understanding of pest management tactics prior to the workshop/demo and after - 563 participants surveyed

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #4

1. Outcome Measures

HG wksp - % participants who improved their knowledge of the value of cover crops in home food gardens

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	87

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Cover crops, whether used in large agronomic production or small garden production, improve soil (tilth, structure, nutrition, etc), reduce soil losses, can be used as mulch, can reduce disease pressure

What has been done

Home Grounds REAs provided workshops/demonstrations

Results

87% of respondents showed knowledge gain comparing their understanding of cover crops prior to the workshop/demo and after - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #5

1. Outcome Measures

HG wksp - % participants who improved their knowledge of identifying disease and insect pests in food gardens

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	88

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Disease and insects thrive in the southeastern US and can have devastating affects to food garden production. For new gardeners, this is a particular challenge as food garden pests are different and more abundant than pests of ornmental plants.

What has been done

Home Grown workshops/demo's to teach pest identification

Results

88% of respondents showed a knowledge gain comparing their understanding of pest ID prior to the workshop/demo and after - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #6

1. Outcome Measures

HG wksp - % participants who improved their knowledge of beneficial insects and pollinators (ID, predators, pollinators, etc)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	92

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Home Gardeners have become overly reliant on chemical controls to manage pests in the garden. They mis-use and over-use them. This not only has the potential to cause pest resistance and population booms, it can also harm beneficial insect predators/parasitoids and pollinators. Good pest management is about monitoring pests, target treating them early, and knowing how to avoid harm to beneficial insects.

What has been done

Home Grounds team REAs provided teaching/demonstration

Results

92% of respondents showed knowledge gain comparing their understanding of beneficial insect ID and their value prior to the workshop/demo and after - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #7

1. Outcome Measures

HG wksp - % participants who improved their knowledge of fruit/veg variety selection for pest mgt and usage preferences

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	89

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There are many (sometimes 100's) of different varieties for each fruit or vegetable available to grow in home food gardens. Each has it's own adaptability/resistances to specific climates and pests, and each can be better suited to particular recipe types or food preservation usage. Learning these differences will not only affect the plants' production capacity, but is also important in choosing the best variety for the family's preferences for each fruit/vegetable crop.

What has been done

Home Grounds REAs provided teaching/demonstration

Results

89% of respondents showed a knowledge gain comparing their understanding of the importance of fruit/veg variety selction for pest mgt and usage preferences - 563 participant surveys - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #8

1. Outcome Measures

HG wksp - % participants who improved their knowledge of pruning techniques of fruit bearing plants

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	93

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Perennial fruit plants like peaches, blueberries and muscadines perform best and have higher yields when pruned properly. Proper pruning can affect disease mgt, structural integrity, and yield

What has been done

Home Grounds REAs provided teaching/demonstrations

Results

93% of respondents showed a knowledge gain comparing their understanding of pruning techniques in fruit crops prior to the workshop/demo and after - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #9

1. Outcome Measures

HG wksp - % participants who plan to start a new garden or expand the size of their current garden

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	49

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

According to the National Gardening Assoc, 2009, Impact of Home & Community Gardening in America survey - the average yields in home gardens = 1/2 lb/ft2 and the majority of gardens were sized 100 ft2 or less. And according to Gail Langellotto, Oregon State Univ (How Much Does a Vegetable Garden Cost/Save, 4/14/12), the average vegetable garden has a value return of \$0.74/ft2

What has been done

Home Grounds REAs provided teaching/demonstration

Results

49% of respondents intend to start a new food garden, raised bed, or expand the size of their current garden as a result of attending our program - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #10

1. Outcome Measures

HG wksp - % participants who plan to use compost in their garden as soil amendment

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	74

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Compost not only makes use of an on-site resource (lawn clippings, fall leaves, etc), but it is a valuable soil amendment that improves soil's water holding, infiltration, structure, tilth, etc

What has been done

Home Grounds REAs provided teaching/demonstration

Results

74% of respondents said they intend to use compost in their gardens as a result of attending our program. 52% said they will START composting the yard waste from their property. - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #11

1. Outcome Measures

HG wksp - % participants who plan to change their pest mgt techniques to those recommended in the workshop/demo today

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	73

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Pest management involves daily/weekly monitoring in a food garden. Treating with prevention or exclusion (ex: variety selection, row covers, netting) is not a new tactic, but is less known to home gardeners. Choosing disease resistant varieties is the preferred method of dealing with many disease pressures in SE gardens. These are examples of the IPM tactics taught in the workshops/demos

What has been done

Home Grounds REAs provided teaching/demonstration

Results

73% of respondents intend to start using the pest mgt tactics recommended in our workshops/demos as a result of attending our programs. Following our recommendations for pest management potentially decreases wasteful or unnecessary pesticide use and protects beneficial insects. As well, 73% of respondents said they intend to first ID the insect before applying pesticides in their home garden. Accurate ID is the first step in a good pest mgt plan. - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #12

1. Outcome Measures

HG wksp - % participants who will prune their fruit plants as shown/taught in today's workshop/demo

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	86

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Pruning is an important part of managing perennial fruit plants. Proper pruning improves yields, can reduce diseases, makes harvesting easier, improves structural integrity and more.

What has been done

Home Grounds REAs provided teaching, and for pruning in particular, demonstration

Results

86% of respondents intend to start pruning their fruit crop plants as shown in today's program - 563 participant surveys

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #13

1. Outcome Measures

The Food Safety team measured the knowledge for participants of the Better Process Control Schools.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	32

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food Processors that produce caned foods by any method must successfully complete the Better Process Control School to stay in compliance with Food and Drug Administration (FDA) guidelines.

What has been done

Three workshops were completed through out the state. One in Birmingham, one in Auburn and one in the Troy area. Each participant must complete 8 exams to become certified.

Results

Thirty-two individuals successfully completed the classes. This allows food industry to stay in business producing safer food and also to allow new food entrepreneur businesses to start.

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
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 #14

1. Outcome Measures

The Food Safety Team Measured knowledge and behavior change in individuals completing the Master Food Preserver course.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	250

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Proper home preservation techniques has been taught by extension since the start of extension programing. However, with more women working these techniques and safety measures have been lost for a generation. Now that individuals are looking more at where their food comes from more individuals are requesting safe methods for home preserving foods.

What has been done

Therefore, Home Food Preservation classes were offered in twenty one counties in Alabama. Participants were invited to attend from small adjoining counties. Proper Food Preservation techniques for freezing, canning and drying were taught. A notebook with clear deatils, both in words and pictures were given to each participant.

Results

Over 250 individuals attended the hands on workshops. Ten questions were asked at teh begining of the series and at the end of the classes. Half of the questions were behavior change questions. At the end of the series 92% of the participants showed a change in behavior and an increase in knowledge.

4. Associated Knowledge Areas

KA Code	Knowledge Area
504	Home and Commercial Food Service
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #15

1. Outcome Measures

The Food Safety Team teaches Food Service Workers which conclude with an intensive examination in which 88% of the individuals pass the course allowing for the establishment to stay in business.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	1227

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

More individuals are eating out as they try to balance work and home responsibilities. It is estimated that as many as 70% of meals are eaten away from home. This gives increased responsibility to the food service worker to supply safe and nutritious meals for the consumer. The state of Alabama requires that one individual from each food service establishment complete this intensive course to keep the food service facility open for business.

What has been done

A total of 110 classes through out the state of Alabama were taught in all 67 counties. Each participant is required to complete the two day course of study and complete an intensive exam.

Results

A total of 1227 individuals completed the class with 88% of the participants passing the exam. Even the individuals that did not pass the exam they did receive two days of training. The course emphasises avoiding cross contamination, proper cooking and cooling temperatures along with no bare hand contact.

4. Associated Knowledge Areas

KA Code	Knowledge Area
503	Quality Maintenance in Storing and Marketing Food Products
504	Home and Commercial Food Service
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 #16

1. Outcome Measures

The Food Safety Team taught Good Agricultural Practices to Farmers and producers of fruits and vegetables.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	54

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As Americans are encouraged to eat more fruits and vegetables the standards for the production of these products has increased. Also the industries that purchase the fruits and vegetables have required that the GAP guidelines be met in order to purchase the farmers produce. Also the consumer is interested in buying more foods locally therefore increasing the need to teach safe growing and harvesting practices.

What has been done

To engage the farmers in these practices 6 workshops were offered in various locations through out the state to make it convient for the farmers to attend the meetings. Two classes were offered in the northern part of the state, two in the central part and two in teh southern part of hte state.

Results

Since this was the first year these classes were offered and the farmers were new to the guidelines only 54 individuals attended the GAP meetings offered. The Standards of Operation of a GAP certified farm were reviewed in detail and each participant received a notebook with examples of forms and teh standards that need to be followed

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
501	New and Improved Food Processing Technologies
503	Quality Maintenance in Storing and Marketing Food Products

- 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 #17

1. Outcome Measures

The Food Safety Team taught a AFDO certifying course of HACCP to Seafood Processors.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	20

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Individuals are encouraged to eat more seafood since it is low in calories when properly prepared. Seafood, however, has many food safety hazards that must be considered when processing and harvesting seafood.

What has been done

A Seafood HACCP workshop was offered for the first time in nearly 10 years to seafood processors in Alabama. The course was certified by the Association of Food and Drug Officials (AFDO). Each participant received a Seafood Hazards Guide and a Workshop course book. These materials will be important tools for them to reference when making decisions on safety back at their individual seafood processing plants.

Results

All 20 participants completed the assigned HACCP plan. They went through the entire process of completing the HACCP plan with a team of 4 or 5 other participants. At the course end the participants had to present their plans to a FDA inspector and they had to pass the inspection before completing the course.

4. Associated Knowledge Areas

KA Code	Knowledge Area
503	Quality Maintenance in Storing and Marketing Food Products
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from

712 Agricultural and Other Sources
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
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

HG - Recent economic events (likely starting in 2008) have created a higher demand for food gardening programs. Over half of the programmatic requests in Home Grounds related to home food gardens in 2012.

The Food Safety Team continues to be in high demand due to the need for food produced in the US. The programs we offer assist food processors to meet the US State and Federal regulations in order to stay in business. More Home Food Preservation Classes were offered this year due to more individuals wanting to know how to process their own food.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

In the Home Grounds programs, Home Grown workshops/demo's, significant learning occurred for the survey respondents. Overall participants improved their knowledge from 46% to 107%. Many also responded they intend to apply the principles taught or shown to them during the programs (start a garden, use compost, start composting, change their pest mgt tactics to those recommended, ID insects before using pesticides, etc)

The Food Safety Team completed evaluations for 5 of our programming areas. These are outlined with each of the program areas. In summary 1084 of the 1227 Food Service workers gained certification, twenty Seafood Processors received certification from AFDO, 54 farmers attended the GAP/GHP Standards workshop with only 10 becoming certified, 32 food processors completed the Better Process Control School as required by FDA and over 250 individuals completed a series of classes in food preservation with an end score of 92% behavior change in unsafe practices.

Key Items of Evaluation

In the Home Grounds programs, participants will have higher garden yields by implementing the recommended techniques. Presuming an average garden size of 50ft², a single season garden can minimally add \$18.50 to a families resources (see references ACES reporting website, <http://tinyurl.com/buhv1kp>). This \$\$ increases with garden size and additional crop seasons. Following these recommendations can also reduce unnecessary or wasteful pesticide usage and exposure; using cover crops and/or compost can increase yields by 100% or more; increased soil organic matter can increase soil water-holding capacity and soil structure, enhance fertility management, and enhance irrigation efficiency; cover crops can decrease weed pressure, nutrient leaching, and

erosion, and potentially improve overall plant production efficiency.

Add to this a national need to increase consumption of fruits/vegetables, the home garden is a prime opportunity for improving a family's diet. People who grow/tend a garden are more likely to eat greater quantities of fruits/vegetables. Now consider this impact if all Home Grown workshop participants (both surveyed and not) adopted these actions.

The Alabama Food Safety Team of Regional Agents covers issues from food production to food consumption. It is important to see that extension constantly provides the professionals in the state with research based information. Many organizations get grant money and come and do one time programs or even ask extension to carry out the programing when they received the grant money. It seems more efficient that the money come to extension for us to continue to be the source of research based programing.