

2010 American Samoa Community College Combined Research and Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

This is the 2010 Accomplishment Report from the American Samoa Community College land grant program.

In 2010 "Food Security" and "Health & Wellness" became the two primary focus areas for the American Samoa land grant program, formally known as the Community & Natural Resources (CNR) program at the American Samoa Community College.

CNR's existing planned programs are: 1) Small Farms, 2) Ecosystem, 3) Human Health & Well-being, and 4) Family, Youth, & Communities.

"Small Farms" and "Human Health & Well-being" aligned very well with the NIFA priorities on global food security, food safety and childhood obesity.

The huge increase in non-communicable chronic diseases makes addressing childhood obesity both a programmatic and ethical mandate for CNR. CNR broke ground for its "American Samoa Nutrition, Exercise, Health & Wellness Community Research Center" in December of 2010. It will seek to equip and staff the center with the purpose of seeking evidence-based and culturally sensitive interventions to help prevent diseases such as heart disease, diabetes, and cancer. CNR is playing a key role in developing an "NCD Plan" -- a territorial plan to combat non-communicable chronic diseases.

Food Safety also became a priority focus area because of the tragic human, environmental and agricultural damage due to the September 2009 tsunami that hit American Samoa. Emergency preparedness in agriculture and food incidents became an important project. Thanks to a partnership with Louisiana State University and the National Emergency Preparedness Training Center, CNR has begun to develop policy guidelines to address foodborne illnesses.

For the upcoming 2012 Plan of Work, CNR staff discussed how its other existing planned programs could be put together with NIFA priorities Climate Change and Sustainable Energy. However, CNR lacks expertise in these areas and is seeking MOU's with off-island universities for assistance. The University of Alaska has agreed to partner with American Samoa.

Assisting the local farmer remains a high priority - both commercial farmers and subsistence farming. CNR has extended its programs to include hydroponics and aquaculture mainly for vegetables. To promote health, it has completed a greenhouse to propagate fruit trees. Nutrient-based analysis of local crops and foods is an emerging area of work for CNR as well.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	11.0	0.0	10.0	0.0
Actual	11.2	0.0	11.4	0.0

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Combined External and Internal University External Non-University Panel

2. Brief Explanation

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals
- Survey of the general public
- Survey of selected individuals from the general public

Brief explanation.

ASCC CNR continues to encourage stakeholders' participation through: media announcements (television stations, newspapers, radio stations); targeted invitations (letters, phone calls, personal visits) to traditional and nontraditional stakeholder groups and individuals; and surveys of the general public and selected groups and individuals.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups
- Needs Assessments
- Use Surveys
- Other (formative and summative evaluations of workshops)

Brief explanation.

ASCC CNR continues to use inputs and recommendations from advisory committees, external and internal focus groups, surveys, workshops evaluations, and needs assessments to identify stakeholders' groups and individuals. Moreover, recommendations from CNR program administrators and staff members were utilized.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey of the general public
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Survey of selected individuals from the general public

Brief explanation.

In FY 2010, ASCC-CNR staff collected stakeholder inputs from more than 7,500 clients and program participants through focus group sessions and survey questionnaires during workshops (schools, villages, community groups, government agencies, churches, CNR, other sites), demonstrations, presentations, pesticides courses, public and council meetings, exercise and physical activity sessions, field trips, summer camps and institutes, tours, school visits, science fairs, field days, career days, farm and family visitations, clients' visitations to the office, and individual consultations.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

In 2010, our institution continued to use inputs from stakeholders to direct and improve programs in both extension and research in terms of recruiting and hiring of new staff; acquisition of new equipments and materials and supplies; improvement of existing programs and facilities; development and implementation of new programs; and construction of new facilities to address stakeholders' inputs and recommendations.

Brief Explanation of what you learned from your Stakeholders

Similar to 2009, stakeholders' inputs sessions recommended the following priorities:

Need to establish additional satellite office (either central or eastern part of the island of Tutuila) that focuses on Health, Obesity, Agriculture, Forestry, Climate Change, Youth Development, Family and Consumer Sciences, and other programs for clients in the Eastern and Central areas of Tutuila.

Need to visit the Manu'a islands on a quarterly basis and conduct programs in all program areas.

Need to build greenhouses in high schools and at the proposed central satellite office to assist with vegetables, traditional crops, fruit trees, and forest tree species production and distribution.

Need to continue programs in the following areas:

F4HN (Families, 4-H, and Nutrition Program), Health, Nutrition, Obesity and Overweight in youth and adults, Food Safety, Physical Activity, Vegetable Gardening, Food Security, Climate Change, Traditional crops, Non-traditional crops such sweet potatoes and others, "Sewing for Kids" program in schools, 4-H and Youth Development, Need to strengthen 4-H village clubs, Need to address Youth at Risk Issues, Samoan Culture and Language programs for 4-H youth, Computer literacy, Math and Arts, Entrepreneurship, Job Readiness, Parenting, Drugs and Alcohol, Samoan Culture and Indigenous art, Facilities for cooking demonstrations and physical activities, Exercise programs for teachers, and 4-H youth programs in the villages. Need to encourage farmers to adopt the recommended Waste Management systems for piggeries

Need to import improved fruit tree seeds and seedlings

Need to import seeds and seedlings of improved varieties (dwarf and disease resistant stocks)

Production and distribution of fruit trees to address health problems, agroforestry, and food security

Need disease resistant vegetable varieties

Need to address climate change challenges

Need to explore energy alternatives

Need to continue seed orders and sales

Need to involve more 4-H clubs and community residents in starting their own vegetable gardens

- Continue work on taro leaf blight resistant varieties and banana leaf streak resistant varieties
- Swine production (improve stock with AI)
- Conservation education and sustainable agricultural practices
- Flouriculture
- Leptospirosis Educational outreach
- Pesticides Safety
- Farm Safety
- Organic Agriculture
- Container gardening
- Aquaculture
- Hydroponics
- Composting
- Multiplication of native forest trees for agroforestry, coastal stabilization, beautification, and soil conservation
- Need to provide staff capacity building opportunities
- Need to collaborate with Department of Agriculture, Department of Education, Department of Marine and Wildlife, Office of Samoan Affairs, Department of Commerce (DOC), National Parks of American Samoa (NPAS), NRCS-USDA, and other government agencies in conducting joint agriculture and related projects for the community.
- Need to recruit scientists and professionals to implement programs
- Need to offer competitive salaries to attract scientists and specialists from off-island
- Need to attract local students to pursue majors in nutrition, agriculture, natural resources, forestry and related fields
- Need to provide staff professional development opportunities to upgrade skills and knowledge and to pursue undergraduate and graduate degree studies.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
928148	0	823686	0

2. Totaled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	358059	0	351968	0
Actual Matching	358059	0	351968	0
Actual All Other	0	0	0	0
Total Actual Expended	716118	0	703936	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous				
Carryover	0	0	0	0

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Small Farms
2	Ecosystem
3	Human Health and Well-being
4	Families, Youth and Communities

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

Small Farms

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
133	Pollution Prevention and Mitigation	5%		5%	
202	Plant Genetic Resources	10%		10%	
205	Plant Management Systems	25%		20%	
211	Insects, Mites, and Other Arthropods Affecting Plants	10%		12%	
212	Pathogens and Nematodes Affecting Plants	5%		10%	
215	Biological Control of Pests Affecting Plants	5%		7%	
307	Animal Management Systems	10%		7%	
315	Animal Welfare/Well-Being and Protection	5%		7%	
401	Structures, Facilities, and General Purpose Farm Supplies	5%		5%	
601	Economics of Agricultural Production and Farm Management	5%		5%	
604	Marketing and Distribution Practices	5%		7%	
903	Communication, Education, and Information Delivery	10%		5%	
	Total	100%		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	6.0	0.0	4.0	0.0
Actual	5.8	0.0	4.5	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
181592	0	137048	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
181592	0	137048	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

- Multiplication, evaluation and distribution of improved taro and banana varieties.
- List of plant-parasitic nematodes on taro, their distribution and management.
- Vegetable variety evaluation demonstrations
- Budding, grafting and airlayering workshops for citrus and other fruit trees
- Pig project to reduce inbreeding of farmers' animal operations - buying/selling or trading of stock, boar services, artificial insemination.
- Tissue culture of traditional staples and increasing genetic diversity to improve crop security.
- Plant clinic diagnoses and recommendations
- Pest surveys
- Testing of reduced-risk pesticides
- Biological control studies of economically important pests
- Technical assistance with nuisance bee problems and assessment of apiculture

- Pesticides Safety Training
- Farm Safety Training
- Farm visitations and demonstrations
- Waste Management Systems demonstrations
- Tilapia breeding program
- Evaluation of native freshwater fish and crustaceans for intensive aquaculture
- Feeds lab maintenance
- Manu'a High School aquaponics course
- Technical assistance with disease and nutrition issues for aquaculture farmers
- Technical assistance with aquaponics and integrated pig-tilapia aquaculture

2. Brief description of the target audience

Small and resource-limited farmers and ranchers, commercial farmers, aquaculture farmers, forestry clients, hobby farmers, general public, schools, and all 4-H youth and other community group members.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1500	45000	6000	20000

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of research projects completed

Year	Actual
2010	1

Output #2

Output Measure

- Number of cultivars of disease resistant taro, banana, and improved varieties of sweet potato multiplied and released,

Year	Actual
2010	23

Output #3

Output Measure

- Number of improved taro setts, banana suckers/bits, and/or sweet potato slips disseminated

Year	Actual
2010	4914

Output #4

Output Measure

- Number of plant clinic diagnoses and recommendations made to assist farmers

Year	Actual
2010	6

Output #5

Output Measure

- Number of vegetable variety demonstrations completed

Year	Actual
2010	5

Output #6

Output Measure

- Number of new fruit tree varieties introduced

Year	Actual
2010	3

Output #7

Output Measure

- Number of fruit tree propagation workshops

Year	Actual
2010	6

Output #8

Output Measure

- Number of pigs sold/traded and piglets born from AI

Year	Actual
2010	19

Output #9

Output Measure

- Number of directories published

Year	Actual
2010	0

Output #10

Output Measure

- Number of pesticide efficacy tests conducted

Year	Actual
2010	0

Output #11

Output Measure

- Number of Pesticide Applicator's Training workshops conducted

Year	Actual
2010	4

Output #12

Output Measure

- Number of biological control species introduced or augmented to control local pests.

Year	Actual
2010	0

Output #13

Output Measure

- Number of video production

Year	Actual
2010	1

Output #14

Output Measure

- Number of Tilapia released from breeding program

Year	Actual
2010	0

Output #15

Output Measure

- Number of candidate species culture trials completed

Year	Actual
2010	0

Output #16

Output Measure

- Number of tilapia feed trials completed

Year	Actual
2010	2

Output #17

Output Measure

- Number of semesters that MSC 200 was taught

Year	Actual
2010	2

Output #18

Output Measure

- Number of collaborative projects with other government agencies

Year	Actual
2010	23

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of farmers growing improved varieties of taro, bananas and sweet potatoes
2	Number of farmers targeting problems according to recommendations on plant clinic form
3	Number of farmers growing improved vegetable cultivars
4	Number of people growing improved budded/grafted or airlayered fruit trees in their back yards.
5	Number of pig farmers upgrading their stock
6	Number of reduced risk pesticides recommended for use.
7	Number of pesticide applicators trained and certified
8	Number of farmers growing improved genetic stocks of tilapia
9	Number of farmers upgrading their farms to aquaponics
10	Number of farmers making their own tilapia feeds
11	Number of students enrolled in MSC 200
12	Number of students enrolled in Manu'a High School Aquaponics course
13	Number of farmers integrating their piggeries with tilapia culture
14	Number of farmers/stakeholders involved with collaborative projects

Outcome #1

1. Outcome Measures

Number of farmers growing improved varieties of taro, bananas and sweet potatoes

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	342

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, the taro leaf blight of the 1990s and black leaf streak disease of bananas negatively impacted taro and banana production in American Samoa. With the continued multiplication and distribution of improved (disease resistant) varieties, taro and banana producers now have greater diversity of disease-resistant varieties to choose from and to address the food security issue (food supply).

What has been done

Agriculture Extension staff, in collaboration with Research staff continued to conduct more Taro Taste Tests to identify the best tasting varieties for American Samoa. These improved (disease resistant and acceptable taste) taro and banana varieties were multiplied and distributed to the farming community and the public.

Results

In FY 2010, the Agriculture Extension staff distributed 4,914 improved taro setts and banana planting materials from more than 20 cultivars of disease resistant taros and bananas to 342 farmers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants

215	Biological Control of Pests Affecting Plants
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices

Outcome #2

1. Outcome Measures

Number of farmers targeting problems according to recommendations on plant clinic form

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	20	6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In 2010, experienced farmers and extension agents continued to identify common pest problems and provide recommendations. Assistance from ASCC-CNR Entomologist is provided for less common pests or pests that are new to the area. The Entomologist also contacted counterparts in Hawaii, Pacific Region, and mainland USA for confirmation and additional recommendations.

What has been done

Similar to 2009, ASCC-CNR staff continued to assist agricultural producers and vegetable farmers utilizing the ASCC CNR plant clinic, USDA's National Plant Diagnostics Network (NPDN), the associated Pacific Islands Distance Diagnostics and Recommendation System, and local expertise. Continued quarantine surveillance trapping program for exotic fruit flies in collaboration with the American Samoa Department of Agriculture.

Results

A total of 34,270 fruit flies were trapped and identified during the year. Fortunately no exotic invasive species were detected. The plant clinic made 6 diagnoses and recommendations to help community members deal appropriately with various pest problems. A detailed assessment verified that the biological control project to control Seychelles scale insects affecting breadfruits and other trees on Ta'u Island had succeeded after introductions of the predatory lady beetle *Rodolia pumila*.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
215	Biological Control of Pests Affecting Plants

Outcome #3

1. Outcome Measures

Number of farmers growing improved vegetable cultivars

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	316

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In 2010, farmers continued to grow improved vegetable varieties that are beneficial to farmers and consumers in terms of buying safer and cheaper seeds and generating additional revenues for the family. Also, consumers benefit in terms of reducing costs and meeting nutritional needs of the family and community members.

What has been done

Agriculture Extension staff continued to provide small quantities of different vegetable seeds/seedlings to homemakers, schools, and 4-H clubs interested in growing their own vegetables. Also, staff conducted visitations to provide follow up assistance to back-yard farmers, commercial vegetable growers, and school and church vegetable projects. Moreover, Extension sold 1,125 packages (10gramms each) of different vegetable seeds of good quality to 175 farmers at break-even price to encourage people to grow more vegetables. ASCC-CNR continued to order improved seeds of vegetable varieties and sell the seeds to the farmers and interested members of the community. Extension staff completed 5 vegetable variety trials.

Results

Extension staff identified improved vegetable cultivars that perform well in the tropics and are disease resistant. Similar to 2008 and 2009, the success of the improved cultivars in the farming community is evident by the increase in the number of seed purchases, demand to order more seeds to cover the shortage of the seed supply, increase in production and human consumption, and vegetable sales. 316 farmers cultivated improved vegetable cultivars.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
215	Biological Control of Pests Affecting Plants
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices

Outcome #4

1. Outcome Measures

Number of people growing improved budded/grafted or airlayered fruit trees in their back yards.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	36

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, there is a great need to increase consumption of fruits to address the many non-communicable diseases such as diabetes, hypertension, heart disease, obesity, and others. Parents continued to be concerned to ensure that their children have enough fresh fruits to eat. Making fruit trees available to families to plant in the back yard and land is critical in addressing the above-mentioned challenges.

What has been done

Agriculture Extension staff continued to multiply and distribute the recommended fruit tree varieties to the farmers, homemakers, and interested residents. CNR staff started the construction of a new greenhouse to accommodate the multiplication of fruit-tree planting-materials, and to serve as a teaching/learning lab for ASCC Agriculture students and farmers on the different methods of asexual propagation to increase the availability of diverse varieties of fruits for the people of American Samoa. Agriculture Extension continued to work EFNEP and 4-H to conduct the "Fruit of Life" program to increase the consumption of vegetables and fruits in order to address the poor nutrition problem and lifestyle diseases.

Results

CNR staff started construction of a new greenhouse to accommodate the multiplication of fruit-tree planting-materials, and to serve as a teaching/learning lab for ASCC Agriculture students and farmers on the different methods of asexual propagation. Agriculture Extension continued to work with EFNEP and 4-H to conduct the "Fruit of Life" program to increase the consumption of vegetables and fruits in order to address the poor nutrition problem and lifestyle diseases. Introduced 3 new fruit tree varieties and conducted 6 fruit tree propagation workshops. 36 farmers propagated improved budded/grafted or air-layered fruit trees in their back yards.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
215	Biological Control of Pests Affecting Plants
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices

Outcome #5

1. Outcome Measures

Number of pig farmers upgrading their stock

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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2010

5

21

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Similar to 2009, pig farmers are concerned because of inbreeding of their stock which has manifested itself in lower production due to increased mortality and overall slower growth. There is a continued need to introduce biodiversity in the local pig gene pool, not only from an inbreeding perspective but a homeland security one as well. Also there is a great need to address the pig waste management problem.

What has been done

CNR Extension continued to collaborate with ASEPA, DOC, DOA, NRCS, and other agencies in developing waste management systems demonstrations and educational programs. Completed the ASEPA funded CNR piggery to demonstrate the recommended waste management systems.

Results

ASEPA funded the renovation of the CNR piggery to demonstrate the three recommended waste management systems. The renovated piggery now serves as a demonstration for the pig farming community regarding their options should they want to keep their piggeries operational. Once these piggeries gain compliance of the local laws, the intent is to work with the farmers to upgrade their stock to reduce inbreeding by making available boar service and trading/selling to them some of our own improved stock. Extension staff also assisted ASEPA and FSA staff, piggery council members, and other government agencies with piggery compliance workshops (outreach) in Tutuila and Manu'a islands. 21 pig farmers upgraded their stock.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management

Outcome #6

1. Outcome Measures

Number of reduced risk pesticides recommended for use.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, American Samoa's environment, cropping systems, and pest problems are unique in many respects. Pest control solutions that work elsewhere may be ineffective or inappropriate in the territory. Agriculture extension agents must help provide proven pest control recommendations that are environmentally sound and safe for applicators and consumers.

What has been done

This activity could not be completed in 2010 due to lack of personnel

Results

This activity could not be completed in 2010 due to lack of personnel

4. Associated Knowledge Areas

KA Code	Knowledge Area
211	Insects, Mites, and Other Arthropods Affecting Plants
215	Biological Control of Pests Affecting Plants

Outcome #7

1. Outcome Measures

Number of pesticide applicators trained and certified

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	90	61

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Similar to 2008 and 2009, impacts of unsafe and illegal use of pesticides to humans and environment are documented. Also people who imported and use non-EPA registered pesticides were cited by ASEPA.

What has been done

During FY 2010, ASCC-CNR Pesticide Instructor conducted 4 Pesticide Applicator Safety workshops that enrolled 61 participants. Another Extension staff member was on hand to observe with the hope that he takes over the training in the absence of the current Pesticide Instructor. The EPA Pesticide Officer was also present to certify the participants. The Farm Safety Agent and Extension staff conducted 3 Progressive Agriculture Safety Days in selected Elementary Schools in addition to one (1) Community Safety workshop conducted on-campus. Extension Agents reached 627 students and community residents through the Farm Safety program.

Results

In FY 2010, 61 participants were trained and certified. Similar to 2008 and 2009, more people now understand the importance of handling pesticides in a safe manner and are aware of how to use these chemicals safely. Many residents are now aware of Integrated Pest Management strategies and successful biological control programs. As a result, some farmers have dramatically reduced the use of pesticides, while others are no longer using pesticides. Importation of illegal (non-EPA registered) pesticides cases are reduced.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management

Outcome #8

1. Outcome Measures

Number of farmers growing improved genetic stocks of tilapia

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Tilapia introductions in American Samoa have been few and far between. Inbreeding of existing stocks has been known to reduce growth rates and maximum sizes.

What has been done

The Center for Sustainable Integrated Agriculture and Aquaculture is in the process of being expanded to accommodate more tanks in which to conduct a breeding program to provide farmers with improved fish stocks. Tanks have been constructed and plastic liners, plumbing, pumps were purchased in preparation for tank installation.

Results

The expansion of the center is not yet complete and distribution of improved genetic stocks of tilapia has not begun. For this reason we report 0 farmers growing improved genetic stocks of tilapia. The center is expected to be completed by fall 2011 after which a breeding program will begin to provide farmers with these improved fish stocks.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection
601	Economics of Agricultural Production and Farm Management

Outcome #9

1. Outcome Measures

Number of farmers upgrading their farms to aquaponics

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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2010 1 0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is little, available, arable land in American Samoa. Much of the available land is comprised of poor soils that are not suitable for gardening. With the current loss of jobs and economic recession, people are looking for ways to improve their food security.

What has been done

An aquaponics system was constructed during fall 2010 at the Center for Sustainable Integrated Agriculture and Aquaculture. Presentations were made to the local Samoan Family Sunfish Cooperative, Inc. on aquaculture methods and potential.

Results

None of the existing farmers have converted their tilapia farms into aquaponics farms.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #10

1. Outcome Measures

Number of farmers making their own tilapia feeds

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Feed availability and quality are poor in American Samoa. Imported feeds are expensive and their shipping is difficult to arrange to provide a consistent supply. Locally-produced feeds are an option as are feeds for other animals, such as pigs.

What has been done

The Center for Sustainable Integrated Agriculture and Aquaculture was expanded in 2010 to include two industrial strength meat grinders and a hammer mill. This equipment will greatly improve the feed production speed as well as produce higher quality fish feeds. A study in partnership with the Oceanic Institute in Hawaii is underway to identify local food and food byproducts that are suitable for fish feeds.

Results

Samples of breadfruit, bananas, cassava, laupele, banana leaves and stalks, fishmeal, oil, and flour have and will be sent to Hawaii for nutritional analysis. This will lead to a manual with recipes and instructions for production of feeds using local ingredients. Negotiation with StarKist has also been underway and may result in a stable supply of fishmeal for use in feeds production.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection
401	Structures, Facilities, and General Purpose Farm Supplies
601	Economics of Agricultural Production and Farm Management

Outcome #11

1. Outcome Measures

Number of students enrolled in MSC 200

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Marine Science students at the American Samoa Community College require a well rounded treatment of marine science topics, including aquaculture. These students require training for work at local marine and natural resource agencies. MSC 200 Introduction to Aquaculture is one of those classes.

What has been done

The MSC 200 course was taught during spring and fall 2010 semesters.

Results

A total of fifteen students enrolled in MSC 200 during the spring and fall 2010 semesters.

4. Associated Knowledge Areas

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery

Outcome #12

1. Outcome Measures

Number of students enrolled in Manu'a High School Aquaponics course

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Students in the Manu'a islands in American Samoa have poor access to science curriculum and laboratory supplies and equipment.

What has been done

An aquaponics system was built in 2007 for Manu'a High School. Preparations were made in 2009 to conduct a special aquaponics course at the school in 2010. However the September 29, 2009 tsunami caused unsurmountable difficulty in preparing for the 2010 course.

Results

The special aquaponics course at Manu'a High School was not offered in 2010 resulting in 0 students enrolled.

4. Associated Knowledge Areas

KA Code **Knowledge Area**
 903 Communication, Education, and Information Delivery

Outcome #13

1. Outcome Measures

Number of farmers integrating their piggeries with tilapia culture

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The American Samoa Environmental Protection Agency has identified local piggeries as sources of harmful bacteria and other pollution in streams, rivers, and nearshore reef environments. Their response has been to shut down piggeries that are noncompliant with their regulations.

What has been done

In partnership with the American Samoa Environmental Protection Agency and the United States Department of Agriculture Natural Resources Conservation Service, one farmer who raised both pigs and tilapia independent of each other modified his farm to integrate the two animals. The Aquaculture Program assisted in designed the integrated farm.

Results

Six new ponds are being constructed at this farm for tilapia culture. A valve and solids separator were installed to divert liquid pig waste to the new tilapia ponds to fertilize algae to become food for tilapia. This is a solution to piggery runoff and waste management issues.

4. Associated Knowledge Areas

KA Code **Knowledge Area**
 133 Pollution Prevention and Mitigation
 307 Animal Management Systems

- 315 Animal Welfare/Well-Being and Protection
- 601 Economics of Agricultural Production and Farm Management

Outcome #14

1. Outcome Measures

Number of farmers/stakeholders involved with collaborative projects

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	500	2037

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The limited availability of financial and specialized human resources are major challenges in program planning, development, implementation, and evaluation in American Samoa.

What has been done

In 2010, more than 35 local, federal, regional government agencies and non-government organizations partnered in program planning, development, implementation, and evaluation of more than 23 collaborative projects.

Results

More than 2037 farmers and stakeholders participated in planning, development, implementation, and evaluation of more than 23 collaborative projects involving more than 35 local, federal, regional government agencies and non-government organizations partners. The partnerships resulted in many accomplishments as reported in the outputs and outcomes sections.

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants

212	Pathogens and Nematodes Affecting Plants
215	Biological Control of Pests Affecting Plants
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices
903	Communication, Education, and Information Delivery

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
- Other (Staff recruitment)

Brief Explanation

The impacts of the September 29, 2009 earthquake and tsunami delayed and/or cancelled program activities.

Loss of staff reduced program capacity.

Delay in staff recruitment process.

Entomology technician promoted to another position in the department.

In the process of recruiting for: Plant Pathologist, Forestry Researcher, Animal Specialist, Fruit Tree Specialist, Marketing Specialist, Entomology Assistant and Technician, and field and support staff.

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

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Ecosystem

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	80%		100%	
133	Pollution Prevention and Mitigation	20%		0%	
	Total	100%		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	1.0	0.0	2.5	0.0
Actual	1.4	0.0	2.8	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
49585	0	83910	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
49585	0	83910	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

Collect stream water samples for determining coliform and E. coli levels on streams not monitored by the local EPA office. We continue to share our expertise with other agencies and the public.

2. Brief description of the target audience

Pig farmers, government agencies, volunteer groups, schoolchildren.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	15	30	80	100

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Percent of streams sampled

Year	Actual
2010	30

Output #2

Output Measure

- Percent of schools visited

Year	Actual
------	--------

2010

5

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of streams with reduced loads of coliform bacteria.
2	Number of streams with high biotic integrity.

Outcome #1

1. Outcome Measures

Number of streams with reduced loads of coliform bacteria.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10	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
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

Outcome #2

1. Outcome Measures

Number of streams with high biotic integrity.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10	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
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Programmatic Challenges

Brief Explanation

A surveillance of streams for the leptospirochete responsible for the bacterial disease, leptospirosis, was postponed owing to the inability of a University of Nevada, Reno, graduate student completing a portion of his study on the polymerase chain reaction aimed at detecting this bacterium.

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

Evaluation Results

Removal of illegal piggeries from stream banks during 2009 and 2010 resulted in a decreased load of E. coli and coliform bacteria in stream waters.

We also identified the source of an algal bloom in Pago Pago Harbor as being due to overfertilization of a new athletic field located near the head of the harbor.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Human Health and Well-being

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	40%		0%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	20%		0%	
721	Insects and Other Pests Affecting Humans	10%		0%	
722	Zoonotic Diseases and Parasites Affecting Humans	10%		0%	
724	Healthy Lifestyle	20%		100%	
	Total	100%		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	2.0	0.0	2.5	0.0
Actual	2.2	0.0	2.8	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
64189	0	83910	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
64189	0	83910	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

- Nutrition education workshops.
- Local produce (vegetable & fruit) recipe development and testing workshops.
- Vegetable gardens will be established with interested homemakers and other clients.
- Demonstrations of vegetable dishes and distribution of recipes.
- Food preparation, handling, and storage demonstrations.
- Food safety workshops and demonstrations.
- Nutrition/Food Safety awareness media (radio, TV, newspaper) programs.
- Development, translation, and distribution of calendar, posters, brochures, and other educational materials.
- Aerobics, sports, vegetable gardening, and other physical activity programs.
- Distributed Leptospirosis brochures in collaboration with ASEPA, ASPH, ASDOA and USDA NRCS.
- Research biology and control of disease-carrying mosquitoes.
- Communicated results via research reports, brochures, seminars, TV, and individual contacts with other agencies.
- Developed designs to construct new facility for health programs.
- Conducted eight focus groups with 74 adults, 18 to 55+ years old, of Samoan ethnicity to identify barriers to healthful living and to recommend culturally acceptable interventions.

2. Brief description of the target audience

All residents of American Samoa are the target audience including recipients of the Food Stamp and WIC programs, Mental Health Program clients, village and church women's organization members, homemakers, farmers, students, interested individuals, children and youth program participants.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	3200	35000	3500	20000

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

Patent Applications Submitted

Year: 2010
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of research projects completed

Year	Actual
2010	1

Output #2

Output Measure

- Number of Nutrition educational workshops

Year	Actual
2010	315

Output #3

Output Measure

- Number of vegetable gardening workshops

Year	Actual
2010	68

Output #4

Output Measure

- Number of vegetable gardens established

Year	Actual
2010	157

Output #5

Output Measure

- Number of different recipes using local produce given out

Year	Actual
------	--------

2010 47

Output #6

Output Measure

- Number of food safety workshops conducted

Year	Actual
2010	548

Output #7

Output Measure

- Number of publications/brochures/posters/calendars

Year	Actual
2010	1

Output #8

Output Measure

- Number of exercise and physical activity programs completed

Year	Actual
2010	100

Output #9

Output Measure

- Number of nutrient-dense traditional crop varieties disseminated

Year	Actual
2010	12

Output #10

Output Measure

- Number of collaborative projects with other agencies/organizations

Year	Actual
2010	28

Output #11

Output Measure

- Number of publications/brochures/posters/calendars distributed

Year	Actual
2010	5580

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of program participants that acquired knowledge and developed skills in nutrition, vegetable gardening, nutritious meal preparation, food safety and health and physical activities
2	Number of people eating more vegetables as a result of the vegetable gardening project
3	Number of program participants that prepared and consumed more economical and nutritious meals.
4	Number of program clients that adopted balance diets utilizing local produce and healthy foods.
5	Number of program clients who adopted safer food handling, storage, and preparation practices
6	Number of program clients that increased participation in physical activities and exercises
7	Number of program clients that lost weight and improved self-esteem
8	Number of program clients that lived healthier lifestyles
9	Number of clients involved in collaborative projects
10	Number of villages using ASCC CNR generated information to control mosquitoes
11	Number of program clients that made successful transition from youth at risk behaviors to clean, health, and esteemed lifestyles.

Outcome #1

1. Outcome Measures

Number of program participants that acquired knowledge and developed skills in nutrition, vegetable gardening, nutritious meal preparation, food safety and health and physical activities

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	6005

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and overweight, poor nutrition, lack of exercise, and food safety issues continued to be major health problems for both adults and youth in American Samoa in 2010.

What has been done

In 2010, F4HN professional and paraprofessional staff continued to provide nutrition education programs to youth, homemakers, community residents, and other traditional and nontraditional clients. Moreover, F4HN staff continued to conduct workshops, presentations, and food demonstrations in villages, schools, Day Cares, Health clinics, churches and government offices. In-school programs emphasized the importance of physical activity to reduce the high risk of obesity, production and the consumption of local food with gardening projects, and food safety.

Results

6,005 program participants acquired knowledge and developed skills in nutrition, vegetable gardening, nutritious meal preparation, food safety and health and physical activities.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

Outcome #2

1. Outcome Measures

Number of people eating more vegetables as a result of the vegetable gardening project

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	4389

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The diets in American Samoa continues to be high in meats, starches, sugars, and fats and tend to be very low in vegetables, fruits and dairy products. Such diets lead to diet and life style related diseases such hypertension, diabetes, heart disease, strokes, obesity, and others. Diets could be greatly enhanced with the increased production and consumption of locally grown nutrient rich vegetables.

What has been done

In 2010, the F4HN program continued to collaborate with Agriculture Extension staff in the vegetable gardening project workshops in the community and in schools. In a multidisciplinary effort, Agriculture Extension encouraged homemakers and community residents to grow more vegetables in their backyard in an effort to address the obesity issue and related problems. "Putting Food on the Table" brochures with step by step instructions on how to grow your own vegetables in addition to cooking recipes using these vegetables continued to be developed and distributed to clients. Agriculture extension staff continued to encourage homemakers to grow their own tomatoes, bell peppers, beans, cucumbers and distributed spices (free of charge) such as basil and oregano seedlings. Continued to place orders of seeds from reliable sources and sold the seeds at break-even prices to encourage people to grow more vegetables. Agriculture Extension staff continued with farm visitations to assist not only start-up and subsistence farmers, but also hobby and commercial vegetable growers.

Results

Program participants' fresh vegetables supply from their own gardens and consumption of vegetables increased. Participants attended 68 vegetable gardens workshops and established 157 vegetable gardens as a result of the program. 4,389 continued to consume more vegetables as result of the vegetable gardening project. 418 participants continued to grow vegetables. 5,030

participants prepared and consumed more economical and nutritious meals.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

Number of program participants that prepared and consumed more economical and nutritious meals.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	5030

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and overweight, poor nutrition, lack of exercise, and food safety issues continued to be major health problems for both adults and youth in American Samoa. The value of nutrition education for improving the diets and ultimately the health of people with limited resources has long been recognized in American Samoa.

What has been done

In FY 2010, F4HN staff conducted 315 Nutrition educational workshops. Moreover, the F4HN staff continued to distribute nutrition educational handouts, recipes, brochures, posters, and other nutrition materials to traditional and non-traditional clients. "Putting Food on the Table" brochures with step by step instructions on how to grow your own vegetables in addition to cooking recipes using these vegetables continued to be developed and distributed to clients. Moreover, the F4HN staff continued to distribute nutrition educational handouts such as Pacific Food Guide Pyramid, recipes, brochures, posters, and other nutrition materials to Food Stamp recipients, students, teachers, homemakers, and other clients. Community Awareness programs on the negative

impacts of obesity, overweight, poor nutrition, lack of physical activity continued to be implemented. In a multidisciplinary effort, agriculture extension staff continued to encourage homemakers and community residents to grow more vegetables in their backyard in an effort to address obesity and related health problems.

Results

Program participants continued to acquire knowledge and develop skills in purchasing and preparing safe, economical, and nutritious meals. Further, participants were able to better manage their food resources especially food stamps, WIC vouchers, and others. With fresh vegetables available from their own gardens in the back yard, the consumption of vegetables increased. With a better diet, diet related diseases are reduced. Similar to 2009, participants have shown improvements in diet, knowledge and food related behavior. Moreover, participants learned how to use local fruits and vegetables in preparing economical and nutritious recipes. Participants attended 68 vegetable gardens workshops and established 157 vegetable gardens as a result of the program. 4,389 continued to consume more vegetables as result of the vegetable gardening project. 418 participants continued to grow vegetables. 5,030 participants prepared and consumed more economical and nutritious meals.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #4

1. Outcome Measures

Number of program clients that adopted balance diets utilizing local produce and healthy foods.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	5807

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, the diets in American Samoa are high in meats, starches, sugars, and fats and tend to be very low in vegetables, fruits and dairy products. Such diets lead to diet and life style related diseases such hypertension, diabetes, heart disease, strokes, obesity, and

others. Diets could be greatly enhanced with the increased production and consumption of locally grown nutrient rich vegetables.

What has been done

In 2010, F4HN staff conducted 315 workshops, presentations, and demonstrations in the villages, schools, churches, government agencies, and community groups on developing and testing recipes using locally grown produce. "Putting Food on the Table" brochures with step by step instructions on how to grow your own vegetables in addition to cooking recipes using these vegetables continued to be developed and distributed to clients.

Results

47 different recipes using local produce were given out to the participants. 5,807 participants adopted recipes and diets using local produce and healthy foods. More vegetables were consumed and more participants' health improved. Participants have shown improvements in diet, knowledge and food related behavior. Moreover, participants learned how to use local fruits and vegetables in preparing economical and nutritious recipes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

Outcome #5

1. Outcome Measures

Number of program clients who adopted safer food handling, storage, and preparation practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	3038

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and overweight, poor nutrition, lack of exercise, and food safety issues continued to be major health problems for both adults and youth in American Samoa. The value of nutrition

education and food safety for improving the diets the health of people with limited resources has long been recognized in American Samoa.

What has been done

In 2010, F4HN staff conducted 548 food safety workshops and demonstrations about safe food handling, storage and preparation to youth, childcare providers, WIC participants, Food Stamp clients, homemakers, and other clients. Demonstrations on the correct way to wash hands to prevent food borne illness continued to be conducted to school age children and adults.

Results

3,038 program participants adopted safer food handling, storage, and preparation practices. Teachers and parents reported that more students are washing their hands before preparing family meals and consumption of food.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

Outcome #6

1. Outcome Measures

Number of program clients that increased participation in physical activities and exercises

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	3760

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and overweight, poor nutrition, lack of exercise, and food safety issues continued to be major health problems for both adults and youth in American Samoa.

What has been done

During FY 2010, F4HN staff conducted 100 exercise and physical activity programs in schools, villages, community groups, government agencies, churches, and other community settings. Community awareness programs on the negative impacts of obesity, overweight, poor nutrition, lack of physical activity, and food safety issues continued to be implemented. Moreover, sports, aerobics, and other exercise programs were implemented in schools, work place, and village settings as alternative physical activity programs.

Results

3,760 program clients increased their participation in physical activity and exercise programs; hence, reduced the incident of high blood pressure, diabetic, heart disease, and related illnesses.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #7

1. Outcome Measures

Number of program clients that lost weight and improved self-esteem

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	400	258

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and overweight, poor nutrition, lack of exercise, and food safety issues continued to be major health problems for both adults and youth in American Samoa.

What has been done

In 2010, F4HN staff conducted 100 exercise and physical activity programs in schools, villages, community groups, government agencies, churches, and other community settings. Community awareness programs on the negative impacts of obesity, overweight, poor nutrition, lack of physical activity, and food safety issues continued to be implemented. Moreover, sports, aerobics, and other exercise programs continued to be implemented in schools, work place, and village settings as alternative physical activity programs.

Results

258 program clients lost weight and improved self-esteem.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

Outcome #8

1. Outcome Measures

Number of program clients that lived healthier lifestyles

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	5807

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity and overweight, poor nutrition, lack of exercise, and food safety issues continued to be major health problems for both adults and youth in American Samoa.

What has been done

Similar to 2009, F4HN staff conducted 100 exercise and physical activity programs in schools, villages, community groups, government agencies, churches, and other community settings. Community awareness programs on the negative impacts of obesity, overweight, poor nutrition, lack of physical activity, and food safety issues continued to be implemented. Moreover, sports, aerobics, and other exercise programs were implemented in schools, work place, and village settings as alternative physical activity programs.

Results

In 2010, 5,807 program participants lived healthier lifestyles as evident by participants' increased in physical activities, weight loss and improved self-esteem, adoption of food safety practices, and

consumption of balanced and nutritious meals. Also, participants acquired knowledge and developed skills in nutritious and balanced meals preparation, vegetable gardening, food safety, and health and physical activities

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
724	Healthy Lifestyle

Outcome #9

1. Outcome Measures

Number of clients involved in collaborative projects

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	4900

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The limited availability of financial and specialized human resources are major challenges in program planning, development, implementation, and evaluation in American Samoa.

What has been done

More than 35 local, federal, regional government agencies and non-government organizations partnered in program planning, development, implementation, and evaluation of more than 28 collaborative projects.

Results

More than 4900 clients participated and involved in planning, development, implementation, and evaluation of more than 28 collaborative projects involving more than 35 local, federal, regional

government agencies and non-government organizations partners. The partnerships resulted in many accomplishments as reported in the outputs and outcomes sections.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
721	Insects and Other Pests Affecting Humans
722	Zoonotic Diseases and Parasites Affecting Humans
724	Healthy Lifestyle

Outcome #10

1. Outcome Measures

Number of villages using ASCC CNR generated information to control mosquitoes

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

ASCC CNR Entomologist continued to participate in collaborative research on disease-carrying mosquitoes to strengthen the scientific basis for vector control efforts against endemic filariasis and potential exotic threats, including dengue, Ross River virus, West Nile virus, and Chikungunya virus.

What has been done

Provided research-based information on dengue vector control to local department of health and other agencies, and the public through one-on-one contacts, informational brochures, and presentations to students.

Results

Many households have eliminated the water-holding containers that serve as breeding sites for local disease-carrying mosquito species, such as discarded tires and appliances, buckets, drums, etc. Many others have not.

4. Associated Knowledge Areas

KA Code	Knowledge Area
721	Insects and Other Pests Affecting Humans

Outcome #11

1. Outcome Measures

Number of program clients that made successful transition from youth at risk behaviors to clean, health, and esteemed lifestyles.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	629

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

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
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Staff recruitment)

Brief Explanation

The impacts of the September 29, 2009 earthquake and tsunami delayed and/or cancelled program activities.

Loss of staff reduced program capacity.

Recruited one plant pathologist.

Delay in staff recruitment process.

In the process of recruiting for: Forestry Researcher, Animal Specialist, Fruit Tree Specialist, Marketing Specialist, Entomology Assistant and Technician, and field and support staff.

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

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Families, Youth and Communities

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	35%		20%	
802	Human Development and Family Well-Being	15%		30%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	15%		40%	
806	Youth Development	35%		10%	
	Total	100%		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	2.0	0.0	1.0	0.0
Actual	2.1	0.0	1.4	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
62693	0	47100	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
62693	0	47100	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

Entrepreneurial and job readiness workshops.
 Apprenticeship and career shadowing programs.
 Sewing and arts and crafts workshops and demonstrations.
 Vegetable gardening and marketing projects.
 Parenting and character counts workshops.
 Samoan cultural workshops and demonstrations
 4-H fairs, camps, and summer programs.
 Youth at risk issues workshops, conferences, forums, and seminars.
 Public awareness media (radio, TV, newspaper) programs.
 Development, translation, and distribution of posters, brochures, and other educational materials.
 Communicate results via accomplishment reports, brochures, presentations, seminars, TV, and individual contacts with other agencies.

2. Brief description of the target audience

Similar to 2009, all residents of American Samoa are the target audience including parents, youth, village and church women and youth organization members, homemakers, farmers, students, interested individuals, children and youth program participants.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	3000	30000	4000	25000

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of entrepreneurial and job readiness workshops

Year	Actual
2010	62

Output #2

Output Measure

- Number of apprenticeship and career shadowing programs

Year	Actual
2010	71

Output #3

Output Measure

- Number of sewing workshops and demonstrations

Year	Actual
2010	87

Output #4

Output Measure

- Number of arts and crafts workshops and demonstrations

Year	Actual
2010	173

Output #5

Output Measure

- Number of vegetable gardening and marketing projects

Year	Actual
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2010 157

Output #6

Output Measure

- Number of Samoan cultural workshops and demonstrations

Year	Actual
2010	84

Output #7

Output Measure

- Number of vegetable gardens established

Year	Actual
2010	157

Output #8

Output Measure

- Number of parenting and character counts workshops

Year	Actual
2010	85

Output #9

Output Measure

- Number of 4-H fairs, camps and summer programs

Year	Actual
2010	6

Output #10

Output Measure

- Number of youth-at-risk issues workshops, conferences, forums and seminars

Year	Actual
2010	34

Output #11

Output Measure

- Number of public awareness media (radio, TV, newspaper) programs

Year	Actual
2010	48

Output #12

Output Measure

- Number of publications/brochures/posters/calendars

Year	Actual
2010	2

Output #13

Output Measure

- Number of videos

Year	Actual
2010	2

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of program participants that acquired knowledge and developed skills in resources management (poverty), parenting, Samoan culture, and youth at risk issues
2	Number of participants generating revenues from resource management activities
3	Number of participants starting home-based and small businesses
4	Number of participants securing employment in the private and public sectors
5	Number of people continuing to grow and sell vegetables as a result of the vegetable gardening and marketing project
6	Number of program participants that improved parent and children relationship
7	Number of program clients that developed a sense of pride and appreciation of the Samoan culture
8	Number of program clients that became self-reliant, productive, and contributing members of the society
9	Number of program clients that made successful transition from youth at risk behaviors to clean, healthy, and esteemed lifestyles

Outcome #1

1. Outcome Measures

Number of program participants that acquired knowledge and developed skills in resources management (poverty), parenting, Samoan culture, and youth at risk issues

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	450	3300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2009, resource management (poverty), parenting, culture, and youth at risk issues continued to be the major areas of concern in American Samoa. Additionally, more than 58.3% of American Samoa's families are considered poor and below the U.S. poverty level. Unemployment is about 18%; cost of living is high and more than 50% of average spending goes to food and housing. With per capita income at \$4357, people need to manage family resources wisely and take advantage of economic opportunities to maintain and increase their quality of life.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops, 87 sewing workshops/demonstrations, 173 arts and crafts workshops/demonstrations, 85 parenting and character counts workshops, 34 youth at risk issues workshops, and 84 Samoan cultural workshops/demonstrations. Moreover, F4HN staff hosted 6 4-H fairs, camps, and summer programs; and completed 48 public awareness programs (radio, TV, newspapers). Ag Extension staff also conducted 157 vegetable gardening and marketing projects. Established 157 vegetable gardens.

Results

3,300 program participants acquired knowledge and developed skills in resource management, parenting, Samoan culture, and youth at risk issues.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #2

1. Outcome Measures

Number of participants generating revenues from resource management activities

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	385

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, more than 58.3% of American Samoa's families are considered poor and below the U.S. poverty level. Moreover, unemployment is about 18%; cost of living is high and more than 50% of average spending goes to food and housing. With per capita income at \$4357, people need to manage family resources wisely and take advantage of economic opportunities to maintain and increase their quality of life.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops, 87 sewing workshops/demonstrations, and 173 arts and crafts workshops/demonstrations. F4HN staff also hosted 6 4-H fairs, camps, and summer programs; and completed 48 public awareness programs (radio, TV, newspapers). Ag Extension staff also conducted 157 vegetable gardening and marketing projects. Established 157 vegetable gardens.

Results

385 participants generated revenues from resource management activities (vegetable gardening, sewing projects, arts and crafts sales, bake sales, marketing projects, traditional weaving, home based and small businesses, and employment in the private and public sectors. Program participants also established 157 vegetable gardens as a family revenue generating enterprise. 316 participants continue to grow and sell vegetables as a result of the vegetable gardening and marketing projects.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #3

1. Outcome Measures

Number of participants starting home-based and small businesses

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	5	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, more than 58.3% of American Samoa's families are considered poor and below the U.S. poverty level. Moreover, unemployment is about 18%; cost of living is high and more than 50% of average spending goes to food and housing. With per capita income at \$4357, people need to manage family resources wisely.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops, 87 sewing workshops/demonstrations, and 173 arts and crafts workshops/demonstrations. F4HN staff also hosted 6 4-H fairs, camps, and summer programs; and completed 48 public awareness programs (radio, TV, newspapers). Ag Extension staff also conducted 157 vegetable gardening and marketing projects. Established 157 vegetable gardens.

Results

In 2010, 25 participants started home-based and small businesses such as sewing shops, arts and crafts shops, cookie shops, vegetables and fruits roadside market stalls. 316 participants continued to grow and sell vegetables as a result of the vegetable gardening and marketing project.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #4

1. Outcome Measures

Number of participants securing employment in the private and public sectors

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	5	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

More than 58.3% of American Samoa's families are considered poor and below the U.S. poverty level. Unemployment is about 18%; cost of living is high and more than 50% of average spending goes to food and housing. With per capita income at \$4357, people need to manage family resources wisely and take advantage of economic opportunities to maintain and increase their quality of life.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops, 87 sewing workshops/demonstrations, and 173 arts and crafts workshops/demonstrations, and 71 career shadowing and apprenticeship programs. F4HN staff also hosted 6 4-H fairs, camps, and summer programs; and completed 48 public awareness programs (radio, TV, newspapers). Ag Extension staff also conducted 157 vegetable gardening and marketing projects. Established 157 vegetable gardens.

Results

70 participants secured employment in the private and public sectors. The majority operate their own home-based and small businesses while the rest secured employment with the government and private businesses. Program participants also established 157 vegetable gardens as a family

revenue generating enterprise. 316 participants continued to grow and sell vegetables as a result of the vegetable gardening and marketing project.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #5

1. Outcome Measures

Number of people continuing to grow and sell vegetables as a result of the vegetable gardening and marketing project

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	316

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, more than 58.3% of American Samoa's families are considered poor and below the U.S. poverty level. Moreover, unemployment is about 18%; cost of living is high and more than 50% of average spending goes to food and housing. With per capita income at \$4357, people need to manage family resources wisely and take advantage of economic opportunities to maintain and increase their quality of life.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops. Agriculture extension staff also conducted 157 vegetable gardening and marketing projects. Established 157 vegetable gardens.

Results

316 participants continued to grow and sell vegetables as a result of the vegetable and marketing project. Program participants acquired knowledge and developed skills in vegetable production and marketing that resulted in the establishment of 157 vegetable gardens, which served as family revenue generating enterprises.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #6

1. Outcome Measures

Number of program participants that improved parent and children relationship

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	350

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, resource management (poverty), parenting, culture, and youth at risk issues are major areas of concern in American Samoa. More specifically, parent and child relationship is a critical issue in American Samoa. Lack of supervision for children and youth due to working or absent parents continued to be a major concern. Therefore, providing programs and resources to help parents become better parents and for the children to remain respectful of their parents are necessary.

What has been done

In 2010, F4HN staff conducted 85 parenting and character counts workshops and 34 youth at risk issues workshops. F4HN staff also completed 48 public awareness programs (radio, TV, newspapers) on parenting, youth character, youth at risk issues, and other topics.

Results

350 program participants improved parent and children relationships. Similar to 2009, appreciation and respect for parents by the children were reported. Moreover parents acquired knowledge and developed skills to improve relationship and in handling and raising children especially those who were born and raised outside of American Samoa.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #7

1. Outcome Measures

Number of program clients that developed a sense of pride and appreciation of the Samoan culture

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	350	920

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As reported in 2008 and 2009, American Samoan families are becoming more westernized and are forced to reconcile their traditional culture of respect for elders and communal living with the often directly opposite western value of individualism. Attitudes toward the Samoan culture or fa'a Samoa are changing and that people are losing their perspective and respect for high moral standards and ethical conduct. Therefore, providing learning opportunities to preserve the Samoan culture, language, and family values via 4-H and Family & Consumer Science programs need to be continued.

What has been done

In 2010, F4HN staff conducted 84 Samoan cultural workshops and demonstrations 85 parenting and character counts workshops, and 34 youth at risk issues workshops. F4HN staff also completed 48 public awareness programs (radio, TV, newspapers) on Samoan culture and

language, parenting, youth character, youth at risk issues, and other topics.

Results

920 program clients developed a sense of pride and appreciation of the Samoan culture. Similar to 2009, many youth developed a sense of identity and affiliation. Moreover, participants acquired knowledge and develop skills in traditional customs, Samoan language, entertainment/performances (songs and dances), arts and handicrafts, sports, social norms and values, and other related topics.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #8

1. Outcome Measures

Number of program clients that became self-reliant, productive, and contributing members of the society

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	553

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Similar to 2009, resource management, parenting, culture, and youth at risk issues continued to be the major areas of concern in American Samoa. People need to: manage family resources wisely; become better parents and for the children to remain respectful of their parents; provide learning opportunities to preserve the Samoan culture, language, and family values; and opportunities to help youth make a smooth transition from youth at risk behaviors to becoming self-reliant, productive, and contributing members of the society.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops, 87 sewing workshops, 173 arts and crafts workshops, 85 parenting and character counts workshops, 34 youth at risk issues workshops, 144? Samoan cultural workshops. Moreover, F4HN staff hosted 6 4-H fairs, camps, and summer programs; and completed 48 public awareness programs (radio, TV, newspapers). Ag Extension staff also conducted 157 vegetable gardening and marketing projects. Established 157 vegetable gardens.

Results

553 program clients became self-reliant, productive, and contributing members of the society.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #9

1. Outcome Measures

Number of program clients that made successful transition from youth at risk behaviors to clean, healthy, and esteemed lifestyles

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	629

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The American Samoa 2007 Youth Risk Behavior Survey of 3,625 high school students in six public high schools reported: 22.2% of the students carried a weapon, 56.8% tried cigarette smoking, 46.6% drank alcohol, 17.6% used marijuana, 32.0% had sexual intercourse, and 19.6% attempted suicide. Addressing the youth at risk issues will help the youth of American Samoa become productive, self-reliant, and contributing members of the community.

What has been done

In 2010, F4HN staff conducted 62 entrepreneurial and job readiness workshops, 87 sewing workshops, 173 arts and crafts workshops, 85 parenting and character counts workshops, 34 youth at risk issues workshops, 84 Samoan cultural workshops. Moreover, F4HN staff hosted 6 4-H fairs, camps, and summer programs; and completed 48 public awareness programs (radio, TV, newspapers). Ag Extension staff also conducted 157 vegetable gardening and marketing projects.

Results

In 2010, 629 program participants made successful transition from youth at risk behaviors to clean, healthy, and esteemed lifestyles. Similar to 2009: participants acquired knowledge and developed skills in dealing with youth at risk issues; and some participants served as ambassadors in spreading the news to their peers and friends about the negative impacts of youth at risk behaviors.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Other (Staff recruitment, culture)

Brief Explanation

The impacts of the September 29, 2009 earthquake and tsunami delayed and/or cancelled program activities.

Loss of staff reduced program capacity.

In the process of recruiting for: Nutritionist, Plant Pathologist, Forestry Researcher, Animal Specialist, Fruit Tree Specialist, Marketing Specialist, and field and support staff. Samoan culture versus other cultures (acculturation) especially for youth who were born and raised outside of American Samoa.

Topics such premarital sex, teen pregnancy, and sexually transmitted diseases are held in taboo.

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

Evaluation Results

Key Items of Evaluation