

2009 University of the Virgin Islands Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

The Virgin Islands Cooperative Extension Service accomplished most of the objectives and goals that were outlined in the 14 programs that were developed as a result of the five-year plan of work. The trainings, workshops, seminars, demonstrations, short courses, and educational activities accomplished this year positively impacted and changed the lives of many Virgin Islanders. This summary is grouped under the four main areas of the Cooperative Extension System: Agriculture, Natural Resources, 4-H Youth Development, and Family & Consumer Sciences.

The Small Livestock and Beef Program conducted a series of six-week workshops and demonstrations for small livestock farmers in the Virgin Islands. A pre- and post-survey was conducted to evaluate the skills and knowledge gained and recommendations that would be used after the six-week training. Eighty-five percent of farmers that received the training reported improving their pastures and saving money on livestock feed. A total of \$28,800 was saved by the farmers using the improved pasture methods. Ninety-seven percent of the farmers reported utilizing the FAMACHA method to treat their animals for internal parasite infestations. About \$10,000 was saved by Virgin Islands livestock farmers using this method. After attending this workshop, 90% of the members of the Farmers Cooperative reported adopting recommendations for the management of their farms. The Cooperative members reported increasing their income by \$420 per farm by utilizing these recommendations.

The Sustainable Agriculture Program, through a series of seminars and workshops, trained crop and livestock farmers and other agricultural professionals on the current best management practices for producing organic products. These educational opportunities included theoretical as well as practical approaches in making their operations sustainable. Ninety percent of the participants in the training reported an increase of awareness that will help them to make sound production decisions that would ensure sustainability. More than 60 % of the participants reported that they would seek further information on sustainable crop and livestock practices. Producers also reported being able to sell more products in the local farmers' market, thereby, increasing their farm income. Producers also reported learning the proper cuts of meats, and practicing it; thereby, increasing their income from livestock products by 30%. Farmers were also taught the proper way of adding value to surplus products. After this training, farmers reported utilizing value-added strategies to reduce waste and increase profitability. A small percentage (25%) has increased the number of value-added products they sell at the farmers' market. Farmers also reported a cost savings in water usage by utilizing proper irrigation techniques and increasing their water conservation and also the amount that they spend purchasing water for their crops. An amount of \$450 per producer was saved by producers practicing this conservation method. The 20 producers that utilized this water conservation method reported saving nine thousand dollars.

The Urban Forestry Program continues to assist the local Public Works Department and local construction companies in the proper maintenance and use of trees in public places. CES continues to assist the Department of Public Works in educating the Virgin Islands public in addressing concerns of the community in the removal of trees from public places. CES continues to collaborate with public, private agencies, community leaders, and other groups in addressing the need for developing clear public policies for the management of urban and suburban trees. General and technical information were provided through workshops, seminars, radio appearances and expos to the general public. The Urban Forestry Program sponsored an annual Woodworkers Expo which was held to showcase the economic benefits of recycling trees and parts of trees that would have otherwise gone into the landfill. In a survey that was conducted with the persons attending the expo, ninety-eight percent of people attending said they have become more aware of the economic benefits of trees. About 30% of the attendees bought a wood product that generated an income of \$6,000 to the woodworkers that were involved in the expo. A tree pruning seminar was conducted for the annual meeting of the Caribbean Association of Electric Companies. Among the participants were line maintenance crew from around the Caribbean and the Virgin Islands. Before the training, participants reported that they have received their knowledge of pruning from trial and error and from neighbors. After the training, 85% of the attendees reported an increased awareness of the proper method of pruning. As part of the "Healthy Virgin Islands Challenge" campaign which was initiated by the First Lady of the Virgin Islands, a composting workshop was held for schools and invited government employees. As a result of this workshop, five compost piles were built. Three piles, one located at each of the respective governor's residence on each island, and the other two at separate schools in the territory.

With the financial crisis that occurred in the United States, there is a rise in local food prices. Because of local food price

the Cooperative Extension Service. A program called *Home Grown* was initiated to assist the local population in creating their own small backyard gardens, box gardens, and container gardens to assist in combating the high cost of food. A total of 17 residents were selected from the island of St. Croix, 18 from the island of St. Thomas, seven from the island of St. John, and one from Water Island. These people are being taught the basic techniques of establishing a garden. They are also receiving technical advice on the mechanics of maintaining and sustaining a garden. These technical sessions are being filmed every week and will be shown on the local public television station to assist the local community in establishing vegetable gardens. The Cooperative Extension Service continues to assist local elementary schools and secondary schools in maintaining their school gardens. The nutritional values of the products that are being produced in the gardens are being communicated to the youth and the different school kitchens have been preparing products from the gardens for the youth. A total of 12 public and private schools are involved.

The Natural Resources and Environmental Management Program facilitated the interaction of community groups and leaders to address resource conservation and management issues, pollution prevention, and the establishment of an eco-tourism industry based on the incorporation of the Virgin Islands natural and cultural history and low impact tourism concepts. The St. Croix Environmental Repository, established with funding from EPA and housed at the Cooperative Extension Service, continues to expand its holdings and increase its use by the local environmental population. The two books co-authored by Extension staff, *Island Peaks to Coral Reefs* and *The Remarkable Big Trees of the Virgin Islands*, continue to be used by the Yale Coastal and Watershed Management Program, UVI Masters of Marine and Environmental Management Program, and local libraries. CES also conducted tours and site visits for resource managers, government agencies, regulatory personnel, researchers, developers, educators, hotels, students, landscape architects on native plant inventories and plant identifications. Taxi drivers and tour company operators were provided with technical information to promote the eco-tourism industry.

The Water Quality Program focused on transmitting information on water quality protection and household cistern water management. Workshops and demonstrations on the use of toxic household products were given to different housing communities, corporate groups, schools, and the general public. The program also assisted residents in safeguarding and testing their cistern water for bacterial contamination and treating the cistern to make their household water safe for drinking and for use in other activities. An onsite wastewater training and licensing plan was developed to train officers of the Department of Planning and Natural Resource, personnel of the Environmental Health, personnel from the Waste Management Authority, staff of the University of the Virgin Islands, and others in the design, maintenance and repair of septic systems in the Virgin Islands. CES continues to promote the implementation of best management practices to protect water quality at coastal public parks, hotels, and large subdivisions with intensive coastal and offshore resources.

The 4-H Youth Development Programs include 4-H Summer Camp, 4-H Volunteer Development and Management, and 4-H Youth Development. The Virgin Islands 4-H annual summer camp drew students from the St. Croix district in a six-week program enrolling 250 youth, and employing 65 teachers and high school and college students. Courses were offered in cultural heritage, agriculture, science and technology, engineering and entrepreneurship. Campers received training on eating healthy and exercising daily as part of the Healthy Lifestyle Grant. The evaluation of the program showed that 54% of the students were eating breakfast daily, 80% reported that they have increased their physical activity, and 80% reported that they had decreased their eating of fast food. All summer camp staff received training on teamwork, leadership, working with multi-age groups and experiential learning strategies. The 4-H Volunteer Development and Management Program continues to recruit and develop volunteers to lead and establish 4-H clubs in the community. For the first time, two collegiate 4-H chapters were established, one each on St. Croix and St. Thomas. One school-based club and one community club were established on the island of St. Croix and three clubs were established in the St. Thomas/St. John district. On both the islands of St. Croix and St. Thomas, two special interest groups were established to participate in the St. Thomas Carnival and the Christmas Festival in St. Croix. These clubs were established with the assistance of volunteers. These clubs won special recognition at the two events.

The Family and Consumer Sciences Program conducted training in marketable skills for limited resource families. Clientele also received training in computer skills and technology. The marketable skills program provided information through workshops, short courses, and seminars to unemployed persons trying to enter the job market. The program focuses its workshops and demonstrations to assist low income, at-risk audiences build knowledge, skills, and attitude that positively improve their quality of life. After taking a course in workforce preparation, three of the persons that participated in the six-week short course gained employment. Twenty percent of the participants attending the six-week clothing construction short course reported an increase in knowledge gained. Eighty-five percent of the participants graduated from the basic level to the intermediate and advanced levels. Twelve of the persons enrolled reported an increased in personal income. A series of computer training workshops on literacy were conducted for farmers, limited resources individuals and the general population. At the final graduation participants reported gaining computer skills that would assist them in the operation of their businesses and also increase their income. Three participants, in particular, reported that the new skills had made them an income gain of \$11,000.

The nutrition programs conducted during this period consisted of Basic Food Safety Education, EFNEP and EFNEP Youth, and a Healthy Well-Nourished Population. The Food Safety Program targeted local food vendors and others who sell food at different cultural activities and public events in the Virgin Islands. Educational materials and training were provided to these vendors to assist them in providing a safe and quality product for the public. In collaboration with the Department of Health, a new policy has been set in place that all persons applying for vendor's license to sell food should go through the CES food safety education program. Based on this, 26 people were trained in the mechanics of food safety. Two hundred and fifty Tropical Fruits poster that were produced last year were distributed throughout the territory. This poster utilizes a five-star scale to indicate the amount of potassium, fiber content, and vitamin C in each of the local tropical fruits. A series of six-week nutrition education classes were conducted to assist the general public in understanding the causes of diseases, such as heart disease, cancer, cerebral vascular disease and diabetes. Eighty percent of participants reported a positive change in their eating behavior by adopting at least one of the healthy lifestyle practices. These practices included increased consumption of fruits, vegetables, milk, and green groups. The EFNEP Program continues to target low-income, at-risk clientele and supplementary nutrition assistance program (SNAP) participants. Eighty-five participants of the EFNEP program reported adopting the practice of buying high quality nutritional foods, budgeting, plan meals, and safe food preparation. This program also taught youth how to select and prepare nutritional foods and different ways to select the right foods to avoid obesity. Ten percent of the youth attending the nutrition classes adopted two of the healthy lifestyle goals.

CES provided leadership and assistance to other countries in the Eastern Caribbean by collaborating in the delivering of workshops and training programs to help them improve the lives of their constituents. Professional linkages were maintained with five agricultural organizations in the Eastern Caribbean. CES extension specialists and agents provided training in sustainable agriculture, livestock production and management, and water quality to agents in the island of Tortola. A total of 32 white hair sheep and 21 purebred boar goats were exported to two islands through the Breeders Exchange Program to assist livestock producers in those islands to improve their breeding stock. This generated a profitable income for livestock producers in the Virgin Islands. CES assisted in the planning and execution of the annual meeting of the Caribbean Food Crops Society held in St. Kitts and also assisted in the annual meeting of the Caribbean Council of Higher Education in Agriculture.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	21.9	0.0	0.0	0.0
Actual	24.9	0.0	0.0	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

The programs that were developed by agents and specialists were sent to the state Program Leaders for their review, input, approval and were then submitted to the Associate Director for his input and budget allocation. After the Associate Director approved the programs, they were sent to the State Director for his review and approval. The programs were then forwarded to the Vice Provost for Research and Public Service and the University's Office of Sponsored Programs for comments and approval. The programs that were accepted were then forwarded to the Extension Advisory Council for its input and approval. Approved programs were shared with specific Commissioners for their comments and inputs. The final programs were sent to the State Director for final approval and implementation.

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
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals
- Survey of the general public
- Survey specifically with non-traditional groups

Brief explanation.

CES encouraged participation by the general public by announcing all its public meetings, listening sessions and town hall meetings through the local radio stations, television stations, and two local newspapers. Information was also sent to the UVI Public Information Specialist for distribution to the general UVI community and the general public bulletin board. Invitations were also sent to various farmers' groups such as St. Croix Farmers Cooperative, We Grow Food Inc., and St. Croix Farmers in Action to encourage their members to participate in all extension programs and activities. Invitations were also sent to individuals who had attended any programs or activities conducted by CES or had contact with a specialist or agent, to participate in extension programs and activities. Volunteer groups, homemakers club, and other focus groups were sent special invitation to participate in extension program activities.

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
- Open Listening Sessions
- Needs Assessments
- Use Surveys

Brief explanation.

Input was received from the CES Advisory Council and the Virgin Islands Farmers Cooperative. Input was also received from the Advisory Council of the Research and Public Service. A needs assessment was conducted on CES clientele. CES evaluated its programs by giving participants of all seminars, meetings, and workshops survey forms to complete. Farm and clientele visits were made to determine the impact of the programs and suggestions made by clientele, were recorded and used to make improvements in CES educational programs and activities. CES conducted listening sessions and public meetings that were used to upgrade programs. These listening sessions and program activities were advertised through local newspapers, the University's Research and Public Service Newsletter, and the local television and radio stations.

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
- Survey specifically with non-traditional groups
- Meeting with invited selected individuals from the general public

Brief explanation.

CES collected information and recommendations from its stakeholders at the Advisory Council's summer meeting. The Research and Public Service Advisory Council also provided recommendations for CES. Surveys of CES stakeholders were conducted by program staff during CES programming to get stakeholders involvement in setting priorities and addressing emerging issues in the community. CES held two general public meetings where information was advertised on the local radio stations, televisions, and newspapers to ensure that the Virgin Islands population has an equal chance of recording their concerns. This enabled CES to upgrade its programs and ensure that community needs were met.

3. A statement of how the input will be considered

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

Brief explanation.

Stakeholders' input was considered in the budget allocation of programs. Stakeholders' involvement helped CES in setting its priorities and addressing emerging issues in the community. During the year, CES strengthen its collaboration with the Virgin Islands Departments of Agriculture, Health, Labor, Education, Human Services, the Virgin Islands Housing Authority, and the Office of the Governor in addressing at-risk issues in the community. Stakeholders' input was also used in redirecting extension programs.

Brief Explanation of what you learned from your Stakeholders

CES stakeholders assisted the Extension Service in focusing on the needs of the community and also helped in focusing CES' activities on emerging issues. They enhanced CES programs and increased the number of participation in CES programs.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
917612	0	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	917612	0	0	0
Actual Matching	1208500	0	0	0
Actual All Other	183500	0	0	0
Total Actual Expended	2309612	0	0	0

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

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Small Livestock and Beef
2	Sustainable Agriculture
3	Natural Resources and Environmental Management
4	Urban Forestry
5	Urban Gardening
6	Water Quality
7	Computer Training and Technology Program
8	4-H Volunteer Development and Management Program
9	A Healthy, Well-Nourished Population
10	Basic Food Safety Education - EFNEP and EFNEP Youth
11	Marketable Skills for Limited Resource Families, Youth and Communities
12	4-H Summer Program
13	4-H/Youth Development
14	Eastern Caribbean Extension Outreach and Interchange

V(A). Planned Program (Summary)**Program # 1****1. Name of the Planned Program**

Small Livestock and Beef

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	10%			
302	Nutrient Utilization in Animals	15%			
307	Animal Management Systems	35%			
311	Animal Diseases	10%			
312	External Parasites and Pests of Animals	10%			
315	Animal Welfare/Well-Being and Protection	15%			
603	Market Economics	5%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	2.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
90000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
90000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
4000	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Livestock workshops were conducted on nutrition management and identification. A six week short course on small livestock was also conducted. Topics covered were pasture poultry, swine production and management, sheep and goat production and management and general nutrition and pasture management.

2. Brief description of the target audience

Livestock producers, consumers, and youth.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	400	4000	450	500
Actual	300	4000	300	500

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Workshops/demonstrations would be conducted on management, nutrition, housing, and identification of livestock

Year	Target	Actual
2009	4	5

Output #2

Output Measure

- Pasture testing and demonstration sites would be set up for forage evaluation

Year	Target	Actual
2009	2	5

Output #3

Output Measure

- Farms would be visited for general evaluation of management techniques and counseling

Year	Target	Actual
2009	150	150

Output #4

Output Measure

- Farms would be visited for parasite monitoring and evaluation

Year	Target	Actual
2009	25	20

Output #5

Output Measure

- Animals would be weighed to monitor performance

Year	Target	Actual
2009	10	10

Output #6

Output Measure

- Animal production would be monitored
Not reporting on this Output for this Annual Report

Output #7

Output Measure

- Develop a "Buy Local" campaign with local farmers cooperative for use by producers in the community
Not reporting on this Output for this Annual Report

Output #8

Output Measure

- Provide training per year to farmers in identification methods

Year	Target	Actual
2009	1	1

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Continue to work toward developing and adopting the use of two drought-resistant and nutritional forages for pastured livestock per year
2	Increase weaning weights of calves in beef herds by 20 pounds
3	Decrease production, performance and animal losses due to parasites and poor nutrition by 5% per year
4	Increase the sales and consumption of locally produced livestock products such as meat, milk, eggs
5	Increase the number of livestock herds/flocks using complete identification and recordkeeping practices
6	Increase the number of pig farmers that are raising their livestock in recommended facilities

Outcome #1

1. Outcome Measures

Continue to work toward developing and adopting the use of two drought-resistant and nutritional forages for pastured livestock per year

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	2	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The farmers and consumers care because of the quality of the product. Quality of forages and pasture management is a problem for livestock producers in the Virgin Islands. Most pastures are not planted with improved species, stocking rates are not adhered to, and proper rotational grazing practices of crossfenced pastures is not followed. Improved animal nutrition will result in better quality meat.

What has been done

Fields were prepared and seeds ordered.

Results

Still working

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
312	External Parasites and Pests of Animals
315	Animal Welfare/Well-Being and Protection

Outcome #2

1. Outcome Measures

Increase weaning weights of calves in beef herds by 20 pounds

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Decrease production, performance and animal losses due to parasites and poor nutrition by 5% per year

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Stakeholders involved are farmers, veterinarians, livestock professionals and consumers. The farmers will increase their profit, the animals will be healthier, and there will be a decrease in the cost of medicine and veterinary services.

What has been done

FAMACHA training and education on proper dosing of medicine with a focus on effective parasite control while monitoring for signs of drug resistance.

Results

Better monitoring of parasite loads.

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems
312	External Parasites and Pests of Animals
315	Animal Welfare/Well-Being and Protection

Outcome #4

1. Outcome Measures

Increase the sales and consumption of locally produced livestock products such as meat, milk, eggs

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Farmers sales will increase therefore their profit will increase as well. Consumers will be able to use fresher products.

What has been done

Assisted a local farmers' cooperative in setting up marketing strategies. Worked in conjunction with the Virgin Islands Department of Agriculture marketing program to promote a buy local eat fresh campaign.

Results

Farmers' market opens every Saturday and there is an increased demand for fresh local eggs and meat.

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics

Outcome #5

1. Outcome Measures

Increase the number of livestock herds/flocks using complete identification and recordkeeping practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	10	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Farmers with better records will have a better management of their herds/flocks and stolen/lost animals will be returned. Roaming livestock will be identified.

What has been done

Demonstrated the types of identification available and assisted farmers in applying the identification to animals.

Results

Farmers tagging and identifying at birth of young animals. Herds are more manageable, especially as it relates to recordkeeping.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #6

1. Outcome Measures

Increase the number of pig farmers that are raising their livestock in recommended facilities

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	10	12

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Farmers with healthier animal's decrease veterinarian visits which increases profits, the animals will have less parasites, and sanitation increases. Public will have less environmental contamination.

What has been done

Individual counseling and advice. Providing information at workshops.

Results

More piglets weaned, less animal loss to disease and increase in profits.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 2****1. Name of the Planned Program**

Sustainable Agriculture

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	20%			
205	Plant Management Systems	20%			
307	Animal Management Systems	20%			
403	Waste Disposal, Recycling, and Reuse	20%			
601	Economics of Agricultural Production and Farm Management	20%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	2.7	0.0	0.0	0.0
Actual	2.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
90000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
120000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
20000	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

1. Shortcourses, seminars and special events were used to disseminate information about recommended research-based sustainable production practices including beekeeping, fruit production and orchard management.

2. Announcements were made through the print and electronic media to promote educational activities and disseminate information about sustainable agricultural practices.

3. Farm visits and telephone contacts were made to address clientele problems and to disseminate information about the program.

4. Special events were conducted to open the lines of communication between the agriculture community and the hospitality industry.

2. Brief description of the target audience

The program's general target audience consisted primarily of agriculture professionals and farm leaders along with crop and livestock producers, students, and young adults who aspire to be farmers. There were farmers who are typically socially disadvantaged, limited resource individuals who lack the necessary technical training, technological tools, and infrastructure for optimum farm production.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	400	7000	1700	900
Actual	230	5000	150	400

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of shortcourses, workshops, demonstrations, annual fairs and exhibits

Year	Target	Actual
2009	10	41

Output #2

Output Measure

- Number of publications
Not reporting on this Output for this Annual Report

Output #3

Output Measure

- Number of announcements through print and electronic media

Year	Target	Actual
2009	20	13

Output #4

Output Measure

- Number of farm visits and telephone contacts

Year	Target	Actual
2009	120	180

Output #5

Output Measure

- Projects to increase farm water supply and water use efficiency

Year	Target	Actual
2009	1	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increased number of farmers who use sustainable agriculture practices
2	Increased number of sustainable agriculture practices conducted by individual producers
3	Increase in the number of farmers who utilize value added strategies
4	Increase in water resources for producers and adoption of practices to enhance water use efficiency
5	Increase in the number of farmers who conduct or enhance record keeping practices

Outcome #1

1. Outcome Measures

Increased number of farmers who use sustainable agriculture practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	10	23

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As the cost of inputs increases, farmers will have to manage their operations in the most efficient manner. Island living poses some unique environmental challenges. All production practices must take into account the unique environment that surrounds most farm operations. Erosion, aquifer contamination, and pollution of the ocean are among the potential problems that can develop if farmers aren't utilizing practices that ensure the longevity of their operation.

What has been done

Two seminars on the National Organic Standards were conducted for farmers in the territory. They were presented by a practicing organic farmer and professor from Southern University in Louisiana.

Through a series of seminars and workshops, crop and livestock farmers and other agriculture professionals were educated and informed of the current best management practices. These educational opportunities included theoretical as well as practical approaches in making their operations sustainable.

Results

Overall, ninety (90%) of participants in the seminars reported an increased awareness of practices that would help them to make sound production decisions that would ensure sustainability. More than sixty percent (60%) of the participants plan to seek further information on sustainable crop and livestock production practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
307	Animal Management Systems
403	Waste Disposal, Recycling, and Reuse
601	Economics of Agricultural Production and Farm Management

Outcome #2

1. Outcome Measures

Increased number of sustainable agriculture practices conducted by individual producers

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Increase in the number of farmers who utilize value added strategies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Because of the inability to sell all of the crops or livestock, farmers at times have to decide what to do with the surplus. They have several options including dumping, giving it away, composting, or adding value to the product and selling it in a different form. The latter has the potential of increasing the overall income of that farmer. It also brings to the market place more choices for the consumer. Research has shown that one of the many constraints preventing the "perfect union" of the agriculture and hospitality communities is communication. Most of the chefs in the Virgin Islands have indicated that they would buy local produce if it were available. Successful farmers want to expand market opportunities but often do not know how to access the hospitality market.

What has been done

Extension service coordinated two farmer and chef events where a group of farmers provided a selected group of chefs with local produce and meat. The chefs in turn prepared a meal from the items and both groups along with invited guests, sat down and ate together.

Results

Each year annual events such as Agriculture Fair, Mango and Tropical Fruit Festival, World Food Day are held that usually feature fruits, vegetables, and livestock exhibits. Seminars are conducted on the care, culture, and production practices of each commodity. Along with the production seminar, there is usually a class in which participants witness post harvest processing and handling such as cooking, drink making, baking, preserving and drying of one or more of the featured commodities.

Information (recipes, processing procedures) is also provided for all the participants to take home and try at their own convenience.

Of the number of individuals that participated in any of the events or sought information from staff, approximately

ten percent-(10%) have actively begun to utilize value added strategies to reduce waste and increase profitability. A smaller percentage has increased the number value added products they have brought to the market place in the past.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management

Outcome #4

1. Outcome Measures

Increase in water resources for producers and adoption of practices to enhance water use efficiency

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	25	6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Of all the constraints and limitations in farming in the territory, insufficient supplies of supplemental water and erratic rainfall patterns make crop production and animal husbandry a challenge. Water conservation and efficient distribution are key elements in a farmer's management practices. Accessible sources of supplemental water are also vitally important to the successful operation of the farm.

What has been done

Experiment station researchers displayed a relatively inexpensive water storage container called a Quick Tank(tm). For approximately \$2,500.00, a farmer can purchase the largest of the four sizes with a capacity of 20,000 gallon capacity.

Local agriculture officials increased the water holding capacity of two dams thus increasing the available supplemental water available to farmers. Through public education events and one-on-one contacts farmers were encouraged to use current irrigation technologies and other water conservation strategies.

A number of 1,000 gallons of water storage tanks were made available to farmers through the local Department of Agriculture.

Results

More farmers are now aware of this new water storage container. However there is no evidence of farmers purchasing a unit as yet. Six (6) additional farmers now benefit from the increased water holding capacity of the

two dams. Approximately, fifty percent of those farmers are now using current water saving irrigation technology or have enhanced or augmented their existing irrigation capacity. An education campaign within the agriculture community must be undertaken to increase the number of farmers taking advantage of this new water management tool.

Over 50 farmers obtained at least one 1,000 gallon water storage tank to increase their availability of water for agriculture.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
307	Animal Management Systems

Outcome #5

1. Outcome Measures

Increase in the number of farmers who conduct or enhance record keeping practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	20	17

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Farmers have been in need of the knowledge and skills for the preparation of legitimate crop enterprise operation and overall farm overhead operation activities related a) infrastructure layouts, schedules, and budgets and b) financial statements that could meet the criteria of various public and private sector financial loan, grant, insurance, and disaster relief assistance related institutions.

What has been done

As a part of a) the Farm Planning, Management, and Analysis Training Initiative and b) the Farmers Computer and Record Keeping Training Initiative, a twelve-week Farm Planning, Management, and Record Keeping Training Course was offered to 20 Farmers wherein the delivery of instruction in the following modules were featured: 1) Basic Computer Skills, 2) Crop Enterprise Operation and Overall Farm Overhead Operation Activities related financial record keeping exercises (computer based), and 3) Strategic Planning and Problem-Solving Exercises using farm infrastructure layouts, activity schedules, activity budgets, financial statements, and farm plans (computer based).

Results

Increasing their probability to qualify for and be awarded financial and/or technical assistance from various

territorial and federal public and private loan, grant, subsidy, credit, insurance, disaster relief, farm planning, and farm management assistance related institutions, sixteen (16) farmers (or 80% of the 20 participating farmers), by way of farm project related strategic planning and problem-solving exercises and computer based, hands on data entry exercises, were exposed to the knowledge and skills associated with the effective preparation of crop production operation and overall farm overhead operation related a) infrastructure layouts, schedules, and budgets and b) financial statements and farm plans.

4. Associated Knowledge Areas

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

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

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)

Evaluation Results

Post seminar tests were conducted in some of instruction classes in order to measure increase in knowledge, and behavioral changes. Some data was obtained from verbal responses to a series of questions designed to extract knowledge levels, attitudes, as well as past and short term future (three months) behavioral changes. There is a need to develop instruments that will provide information on long term behavioral changes.

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 3****1. Name of the Planned Program**

Natural Resources and Environmental Management

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	20%			
123	Management and Sustainability of Forest Resources	25%			
125	Agroforestry	10%			
134	Outdoor Recreation	25%			
136	Conservation of Biological Diversity	10%			
605	Natural Resource and Environmental Economics	10%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	1.8	0.0	0.0	0.0
Actual	1.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
75500	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
75500	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The NREM Program continued to work closely with the Magens Bay Authority (MBA) to promote the development of comprehensive environmental management plans for Magens Bay and Smith Bay coastal Territorial Parks on St. Thomas. The Estate Adventure Trail plans progressed to the Phase II stage to be funded through collaboration with NRCS (RC&D) and the VI

Department of Agriculture Urban and Community Assistance Program. Technical assistance with habitat protection and restoration plans/procedures has also been requested by managers to restore and/or protect other critical habitats, areas of particular concern in the territory, and areas designated as part of the VI Territorial Park initiative established by the Legislature of the VI including Smith Bay Park, Southgate Park, Great Bay, Annaly Bay and others. Similar technical assistance has been provided to developers and property owners. Some of these privately-owned sites exceed 300 acres and encompass varied threatened habitats and unique natural resources. Attempts have been made through informal contacts to document and build upon indigenous knowledge and practices. Educational materials, displays, workshops, presentations and demonstration sites that relay information regarding native plants, ecosystems and habitats; naturalized, exotic, endangered and threatened plant species; urban forestry and other resource conservation issues were developed and maintained. The St. Croix Environmental Repository established with EPA funding increased in size and is used by the public. The books *'Island Peaks to Coral Reefs'* and *'The Remarkable Big Trees of the Virgin Islands'* continued to be used by the Yale Coastal and Watershed Management Program, UVI's Master of Marine and Environmental Management program, and local librarians. Upon request, native plant inventories and identifications were made and tours and site visits were conducted for resource managers, government agencies, regulatory personnel, researchers, developers, hotels, educators, students, property owners, landscape architects and others during office consultations and site visits. During consultations and advisory committee meetings, technical information was also provided about exotic, invasive, endangered and threatened, medicinal plant species, land management and planning. Researchers were assisted with the selection of native plants for natural products research. Through fairs, meetings, and tours the NREM program helped facilitate the interaction of community groups and leaders to address natural resource conservation and management issues, and pollution prevention. Taxi drivers and tour companies were provided with one-on-one technical consultations to promote the ecotourism industry based on the incorporation of VI natural and cultural history and low-impact tourism concepts.

2. Brief description of the target audience

- Policy-makers and regulatory personnel, community groups, teachers and students, business community, non-governmental organizations, and the general public.
- Those charged with managing public recreation areas including the Magens Bay Authority, VI Territorial Park Advisory Committee, St. Croix East End Marine Park Committee, and Great Pond Park.
 - Hotel managers and private developers.
 - Local environmental associations and Rotary Clubs that engage in activities to conserve and manage the VI environment.
- Immigrant populations whose practices (land clearing techniques, littering, etc.) negatively impact VI natural resources. Efforts will be made to identify contacts.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	400	1000	500	1000
Actual	300	500	400	500

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Education/Classes in natural resources management, VI forest ecosystems

Year	Target	Actual
2009	2	22

Output #2

Output Measure

- Workshops -VI forests, medical plants, environmental landscaping, watershed awareness, VI cultural and natural history, ecotourism, in-door air quality

Year	Target	Actual
2009	3	1

Output #3

Output Measure

- One on One consultation with residents, government employees, students

Year	Target	Actual
2009	200	115

Output #4

Output Measure

- Tours of VI natural areas for students and community groups

Year	Target	Actual
2009	7	5

Output #5

Output Measure

- E-education - NREM websites updated
Not reporting on this Output for this Annual Report

Output #6

Output Measure

- Publications, articles, posters related to natural resources and environmental management

Year	Target	Actual
2009	4	3

Output #7

Output Measure

- Demonstration site relating to native plants, environmental management

Year	Target	Actual
2009	2	3

Output #8

Output Measure

- PSA's
Not reporting on this Output for this Annual Report

Output #9

Output Measure

- Fairs

Year	Target	Actual
2009	2	2

Output #10

Output Measure

- TV/Media

Year	Target	Actual
2009	2	1

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Recommended BMP's in environmental management master plans will be adopted by natural resource managers. Successful plans will be used as prototypes for other critical habitats, parks and areas designated as part of the VI Territorial Park.
2	After attending non-formal education programs, one hundred and fifty (150) people or more will adopt recommended landscaping practices, incorporate native plants into their landscapes, protect and/or enhance soil resources for agriculture, construction, and landscaping.
3	Contacts will be made with at least five (5) members of immigrant populations who can serve as community liaisons to promote the adoption of VI laws protecting natural resources and less littering of public recreational areas.
4	Direct and indirect contacts will cause over (1000) adults and students to adopt practices that protect native plants and their habitats because of their increased understanding of the human effects on native ecosystems.
5	Over 500 stakeholders (government personnel, developers, community groups and students) will become more aware of the connections between terrestrial and marine communities, how watersheds function, and the importance of watershed protection.
6	Watershed research will result in at least three (3) projects within targeted watersheds to protect water quality.
7	Five hundred (500) Virgin Islands youth will increase their awareness of VI natural and cultural resources, and careers in environmental management and ecotourism. At least fifteen (15) individuals will be trained as ecohiking guides.

Outcome #1**1. Outcome Measures**

Recommended BMP's in environmental management master plans will be adopted by natural resource managers. Successful plans will be used as prototypes for other critical habitats, parks and areas designated as part of the VI Territorial Park.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	2	9

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Magens Bay Authority (MBA) has been charged with the management of St. Thomas Territorial parks including Magens Bay and the new Smith Bay Park. These popular conservation areas comprise unique natural coastal ecosystems that attract residents, tourists, schools and scientific researchers. MBA is responsible for developing comprehensive environmental management plans that will protect these areas. Hotel managers and developers of large properties (>300 acres) are also responsible for implementing sound environmental management practices to protect their properties.

What has been done

At the request of MBA management, CES continued to recommend the adoption of various BMPs to promote improved environmental management planning in VI Territorial Parks. CES also encouraged developers and architects involved with the planning and development of a subdivision on a 300+ acre coastal property to adopt various BMPs to protect mangroves and coastal forest. CES also continued to assist landscape architects with the selection of BMPs for a 300+ acre construction site for the Humane Society of St. Thomas.

Results

Based on CES recommendations, MBA agreed to fence off additional sensitive vegetated areas at Smith Bay Park and Magens Bay. Improperly cleared areas of berm are recovering. MBA now routinely consults CES before clearing, disturbing, or planting coastal vegetation. Developers of large sub-divisions agreed to adjust project plans to include CES recommended BMPs to protect mangroves. Landscape architects utilizing CES technical assistance successfully installed over 300 native trees on a large construction site; erosion control measures were also adopted. The Nature Conservancy (TNC) also incorporated CES recommended BMPs in contracts pertaining to the sale of TNC VI properties.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
134	Outdoor Recreation
136	Conservation of Biological Diversity

Outcome #2**1. Outcome Measures**

After attending non-formal education programs, one hundred and fifty (150) people or more will adopt recommended landscaping practices, incorporate native plants into their landscapes, protect and/or enhance soil resources for agriculture, construction, and landscaping.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	37

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Developers, engineers, architects, environmental groups, resource managers, businesses and property owners requested technical information to protect landscapes and the environment and to comply with the VI government permitting requirements for building.

What has been done

Through phone consultations, publications and site visits, clients were provided with information about native plant conservation, environmental landscaping, use of native plants, and erosion control. CES has been increasing and maintaining its contacts with professionals who are involved with various aspects of construction site planning and earth change operations.

Results

More developers, hotel managers, engineers, and architects are regularly requesting CES technical information about native plants, native habitats, habitat restoration, and erosion control. More native plants were selected for landscaping on construction sites. Clients' technical knowledge of native plant species, native habitat protection and restoration increased. As a result of several CES consultations and site-visits, landscape architects and 135 volunteer successfully planted 300 mostly native trees on the Humane Society of St. Thomas campus. At least nine (9) employees and volunteers affiliated with the Magens Bay Authority adopted CES landscaping and conservation practices. CES assisted the directors of a community environmental camp for youth with the selection of native trees for the camp. Developers and architects of a large St. Thomas subdivision (>300 acres) agreed to develop more comprehensive plans to preserve and restore native vegetation. Individual property owners requested and followed CES recommendations regarding plant selection, native plant conservation and soil erosion control.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
136	Conservation of Biological Diversity

Outcome #3

1. Outcome Measures

Contacts will be made with at least five (5) members of immigrant populations who can serve as community liaisons to promote the adoption of VI laws protecting natural resources and less littering of public recreational areas.

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Direct and indirect contacts will cause over (1000) adults and students to adopt practices that protect native plants and their habitats because of their increased understanding of the human effects on native ecosystems.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	160

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Many educators, resource managers, students, environmental groups, developers, environmental professionals, architects, engineers and the general public want to increase their understanding of V.I. native plants/natural ecosystems and the effects of human alterations to natural ecosystems.

What has been done

CES delivered information to stakeholders about how native plant habitats are impacted by humans. The CDC/CES book, Island Peak to Coral Reef-The Plant and Marine Communities of the Virgin Islands, continued to be used as a text-book by educators, students, librarians, and developers. CES assisted UVI students and graduate students with research projects that protect native plants and habitats. CES is coordinating the committee that is drafting legislation to regulate land clearing and the protection of VI native plant communities.

Results

The CDC/CES book Island Peak to Coral Reef continued to be used by the UVI Master of Marine and Environmental Science program and the Yale University Coastal and Watershed Management graduate program as a guide to the interdependence of terrestrial and marine ecosystems. Clients indicated that they would implement CES recommendations regarding native plant protection, cultivation, and invasive non-native plant control as a result of CES tours, workshops and private consultations. In general, clients often requested additional information about native plants/native plant communities indicating increased awareness of the issues affecting terrestrial resources. With UVI CES assistance, students completed inventories and GIS mappings of the vegetation on the STT and STX campuses. Participants in CES-conducted field trips to VI natural coastal habitats indicated that they became more knowledgeable and interested in coastal vegetation and its function and conservation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
136	Conservation of Biological Diversity

Outcome #5

1. Outcome Measures

Over 500 stakeholders (government personnel, developers, community groups and students) will become more aware of the connections between terrestrial and marine communities, how watersheds function, and the importance of watershed protection.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	500	200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Stakeholders (government personnel, developers, community groups, resource managers, VI EPSCoR, UVI MMES faculty and students) requested information relating to the connections between terrestrial and marine communities and watershed protection. Reasons for requests included: curriculum and/or program development compliance with governmental regulations, concern about environmental degradation, management of Territorial Park natural environments, protection of hotel and other private properties, classroom assignments, environmental stewardship initiatives.

What has been done

CES continued partnerships with UVI CDC, VI EPSCoR and science faculty to investigate land-sea interconnectivity and watershed protection needs, as well as the Yale U. Coastal and Watershed Management program whose graduate students are researching VI watersheds. CES partnered with CDC in VI watershed research and provided information to students about watershed analysis techniques. Workshops, site visits, informal meetings, seminars, field trips, advisory committee participation, phone consultations and publication distribution provided information relating to watershed awareness and protection.

Results

Based on the CES/CDC collaborative investigation of VI wetlands and watersheds, priority watersheds in need of protection have been identified. This information was shared verbally with working groups, students, managers and the general public. Resource managers (Magens Bay Authority, Coral Bay Community Council) were able to incorporate information into management strategies. As member of the VI Forest Stewardship committee, CES participated in the development of a long-range strategy to conserve VI priority watersheds. To this end, CES helped obtain funds from the Forest Legacy Program to purchase STX estates in critical watershed areas for conservation in the VI Territorial Park system.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources
136	Conservation of Biological Diversity

Outcome #6

1. Outcome Measures

Watershed research will result in at least three (3) projects within targeted watersheds to protect water quality.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	1	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Those directly and indirectly responsible for watershed management (Magens Bay Authority, National Park Service, UVI, Governmental agencies, property owners, NGOs) require research-based information to be able to make the best decisions regarding watershed protection.

What has been done

CES continues to partner with the Conservation Data Center (CDC) in the VI Wetlands and Watersheds Characterization Phase II: Inventory, Monitoring, Assessment, Management and Education in the USVI project funded by VI DPNR's Division of Environmental Protection. CES is distributing the final report from a project it co-researched, "The Rehabilitation of Guts as Urban Recreational Spaces in the U.S. Virgin Islands". CES is a member of the advisory committee developing the VI Forest Legacy Plan to protect VI watersheds. CES advises watershed managers.

Results

The "U.S. Virgin Islands Stateside Assessment of Forest Resources" report (2009) conducted under the direction of the VI Urban & Community Forestry Program (UCF) cites the usefulness of the CES/CDC-conducted Rapid Ecological Assessment as it relates to vegetation cover and watershed analysis. One of the goals of this report is to support the use of Forest Legacy Program funds to acquire critical watershed property for conservation. The UCF report also acknowledges that the REA analysis was also used in the "Forest Legacy Program Assessment of Need" conducted by the Nature Conservancy (TNC, 2003) and Virgin Islands Fish and Wildlife Plan (Platenberg et. al 2005). Both reports focus on various targeted watersheds. CES provided TNC with the final project report, "Virgin Islands Guts: State of Knowledge" that was incorporated into a TNC-researched document about the ecological value of guts used to prioritize and protect targeted VI watersheds. "Virgin Islands Guts: State of Knowledge" was also used by the Environmental Assoc. of St. Thomas-St. John to plan a debris removal project in a St. Thomas gut and by Yale researchers conducting stormwater analysis in VI guts.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management

Outcome #7

1. Outcome Measures

Five hundred (500) Virgin Islands youth will increase their awareness of VI natural and cultural resources, and careers in environmental management and ecotourism. At least fifteen (15) individuals will be trained as ecohiking guides.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	100	10

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The VI has an economy based on tourism attracted by the natural and cultural resources and scenic beauty of the islands. Both residents and tourists rely on the high-quality presentation and maintenance of these valuable resources to preserve the economy, standard of living and the environment. VI residents, especially VI youth, need guidance into interesting careers in the local economy that support environmental management and protection.

What has been done

CES has supported training for careers in environmental management by serving as an advisor to students in the UVI MMES program. CES provide assisted faculty and graduate students with program and project development. Faculty and students were also referred or introduced to individuals who had careers in environmental management. CES conducted student tours of naturally and culturally important VI locations. CES provided St. Thomas and St. Croix cab drivers/tour operators with information about natural resources.

Results

Tour guides incorporated information provided by CES into their tours and requested additional information. As a result of CES referrals, MMES students gained access to research areas on public and private properties and exposure to the environmental managers of those properties. More VI youth are becoming trained in environmental management and obtaining employment in the VI in fields related to environmental management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
134	Outdoor Recreation

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

CES maintains good relationships with staff in various VI governmental regulatory agencies that affect the VI natural resources including the VI Dept. of Planning and Natural Resources, Waste Management Authority, Dept. of Public Works, and the VI Housing and Finance Authority. There is a high amount of turnover in these agencies, mainly due to political appointments. It is difficult to establish very effective long-term relationships that can result in policy changes. Training is also difficult to conduct effectively because of the high turnover. Also, many of the employees in these agencies acknowledge the need for more comprehensive enforcement of environmental laws, but these employees are already overextended and need additional staff support to effectively enforce existing regulations. Some employees are afraid to enforce environmental regulations because of political pressures.

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

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

CES worked closely with Magens Bay Authority (MBA) to plan, implement and evaluate BMPs at Smith Bay Park and Magens Bay Territorial Parks. CES communicated closely with MBA during the implementation of BMPs. MBA responded favorably to the informal evaluation methods used by CES. CES also successfully used this informal, mostly verbal evaluation method with other clients.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Urban Forestry

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	20%			
124	Urban Forestry	80%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	0.8	0.0	0.0	0.0
Actual	0.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
42000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
42000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
5500	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Partnerships were established with public, private agencies, community leaders and other groups to address the need for developing clear public policy for the management of urban and suburban trees. General information and technical advice was provided through workshops, seminars, radio appearances, expos and one to one contact.

2. Brief description of the target audience

The targeted audiences were policy makers, utility companies, environmental groups, youth, and the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	1050	6000	760	2000
Actual	664	6000	100	600

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational classes in tree identification

Year	Target	Actual
2009	4	10

Output #2

Output Measure

- Number of workshops/demonstrations in tree pruning

Year	Target	Actual
2009	4	10

Output #3

Output Measure

- Number of educational classes in tree care

Year	Target	Actual
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2009 4 1

Output #4

Output Measure

- Number of one-on-one consultation with residents

Year	Target	Actual
2009	125	80

Output #5

Output Measure

- Number of public service announcements

Year	Target	Actual
2009	2	0

Output #6

Output Measure

- Number of articles/publications on tree care and urban forest management

Year	Target	Actual
2009	3	2

Output #7

Output Measure

- Number of fairs and exhibits displaying best management practices and other information pertaining to the Urban Forestry

Year	Target	Actual
2009	2	2

Output #8

Output Measure

- Number of seminars on economic opportunities available through using and/or recycling forest resource

Year	Target	Actual
2009	1	1

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of residents, landowners, policymakers will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest
2	Number of residents and landowners, public and private agencies, and nonprofit organizations will increase their knowledge of the care and management of the urban forest
3	Number of homeowners, landowners, municipalities will actively reduce, reuse, and recycle yard waste
4	Number of residents will restore urban trees following hurricanes and tropical storms
5	Number of landowners and residents will expand entrepreneurial opportunities from the urban and suburban forest resources

Outcome #1

1. Outcome Measures

Number of residents, landowners, policymakers will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	400	600

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Trees in any setting play a major role in creating a certain ambience in that location. Trees in the right location and properly planted help to reduce the ambient temperatures, increase overall well being, and reduce the chances of utility lines interference, sidewalks and pavements being raised, branches severely pruned or worse the tree having to be completely removed. When trees aren't planted properly, they then become targets of poor management practices and mistreatment by utility companies, untrained landscaping crews, home owners, and other municipal and private sector work crews.

What has been done

The annual Woodworkers Expo was held to showcase the economic benefits of recycling trees and tree parts that would have otherwise gone into the landfill. Radio appearances were the primary means of providing information and technical advice to the general public.

Results

Through personal contacts, and anecdotal information, ninety-eight percent (98%) of attendees reported that they are now more aware of the economical and environmental benefits of trees. Three to five percent (3-5%) of attendees plan to seek more information about the subject of woodworking.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #2

1. Outcome Measures

Number of residents and landowners, public and private agencies, and nonprofit organizations will increase their knowledge of the care and management of the urban forest

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	750	663

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Trees in the urban and suburban forest exist under conditions not found in the larger natural forest and thus require more intensive and specialized attention. Most homeowners, and public and private landscape maintenance crews, have not had a lot of formal training in tree care. Poor pruning cuts, or lack of pruning, ill advised tree selection, and other poor management practices are evident throughout many of our communities. Tree ordinances help to guide a community in the proper management of trees in the urban and suburban forest. The absence of such ordinances creates ambiguity, indecision, improper decision making and chaos within the community and among public and private landscape crews.

What has been done

A pruning seminar was conducted at the annual meeting of the Caribbean Association of Electric Companies (CARILEC). Among the attendees were line maintenance crews from around the Caribbean and the Virgin Islands. Public and private agencies, special commissions, environmental organizations and policy makers were invited to a workshop to review existing legislation concerning the management of trees in the territory. The role of each entity in the management of trees within the territory was also presented. Home visits and one-on-one contact with residents, and public and private landscape crews have been used to provide current tree management information. Radio appearances have also been used to provide general information to a broad audience. On-site visits provided an additional opportunity for hands on practical demonstration and information transfer.

Results

The majority of the attendees at the CARILEC conference have had no formal training in tree care. Approximately twenty percent (20%) had pruned trees before. Of that group, all had received the knowledge of pruning from trial and error and/or from neighbors. Approximately eighty-five (85%) of attendees reported an increased awareness of the proper method of pruning and planned to seek more information on the subject. Ninety-nine percent of those attending the public policy/tree ordinance workshop reported that they were more aware of what legislation exists than before the workshop. Three subcommittees were formed to further review the existing legislation and were on drafting the framework for legislation in three areas; street trees, heritage trees, and trees in the suburban forest.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #3

1. Outcome Measures

Number of homeowners, landowners, municipalities will actively reduce, reuse, and recycle yard waste

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The percentage of yard waste in the territories landfills is high. Landfill fires are sustained by the wood piles dumped or stored throughout the facility. Shredded yard trimming makes ideal mulch and reduces the waste stream going into the landfill. Stems, trunks, and branches of trees can be reused in arts and crafts. More residents should become more aware of the benefits of recycling the yard waste.

What has been done

As part of the initiative by the first lady of the US Virgin Islands, Mrs. Cecile DeJongh, a composting workshop was held for schools and invited government employees from throughout the territory. This was part of a "Healthy V.I. Challenge" campaign which included a school gardening and nutrition component.

Results

All participants increased their knowledge as none had any previous training in composting. As a result five (5) compost piles were built, three piles, one each at the respective official government house residence on each island, and two at separate schools in the territory.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #4

1. Outcome Measures

Number of residents will restore urban trees following hurricanes and tropical storms

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Tropical storms are a fact of life in the territory. Trees in general are negatively affected in some way depending on the severity of the storm. Urban trees in particular are adversely affected by storms because generally they are growing in less than ideal conditions thus, predisposing them to a higher risk of failure. If damaged trees are not given corrective measures within a short time and fallen trees are not erected right away, then chances of survival begin to diminish as time goes on.

What has been done

Public service announcements and shows were made via local radio shows.

Results

It is hard to determine with any accuracy the amount of individuals that actively were involved in restoring damaged and/or fallen trees. From observation, public and private maintenance crews, and non profit organizations were actively involved in tree restoration. Through onsite visits and telephone contacts, technical advice was provided to residents, landscapes crews, and any organization that was involved in forest restoration.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #5

1. Outcome Measures

Number of landowners and residents will expand entrepreneurial opportunities from the urban and suburban forest resources

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Evaluation Results

Pre and Post tests were administered at the workshops. They provided a good picture of the effectiveness of the lectures. There is still a need to restructure some of the questions in order to receive the most accurate responses. Follow up surveying at short term (3 months) and long term (6-8 months) will still need to be administered in order to ascertain the level of behavioral changes that have occurred.

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 5****1. Name of the Planned Program**

Urban Gardening

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems	90%			
403	Waste Disposal, Recycling, and Reuse	10%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	1.1	0.0	0.0	0.0
Actual	1.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
50000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
50000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Conducted educational classes, workshops, seminars; developed publications and resource materials; conducted field demonstrations, exhibits and tours; on-site visits; electronic media to familiarize the community about the benefits of urban gardening and get residents involved.

2. Brief description of the target audience

Home owners; Horticultural Organizations; Public Housing Residents; Senior citizens homes; School teachers; Policy Makers; Master Gardeners Candidates; Youth groups.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	1050	6000	760	2000
Actual	428	9000	875	3000

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational classes to help residents to plan and create a garden

Year	Target	Actual
2009	4	8

Output #2

Output Measure

- Number of workshops/demonstrations using low cost, efficient, technologies, practices and principles in gardening

Year	Target	Actual
2009	3	10

Output #3

Output Measure

- Number of educational classes in the benefits of proper garden management

Year	Target	Actual
2009	4	8

Output #4

Output Measure

- Number of one-on-one consultation with residents about gardening

Year	Target	Actual
2009	125	260

Output #5

Output Measure

- Number of public service announcements
Not reporting on this Output for this Annual Report

Output #6

Output Measure

- Number of articles/publications on urban gardening management

Year	Target	Actual
2009	3	1

Output #7

Output Measure

- Number of fairs and exhibits displaying best management practices and other information pertaining to the Urban Gardening program

Year	Target	Actual
2009	2	3

Output #8

Output Measure

- Number of seminars or tv media appearances/programs on urban gardening

Year	Target	Actual
2009	1	1

Output #9

Output Measure

- Number of seminars or radio appearances/programs on urban gardening

Year	Target	Actual
2009	4	7

Output #10

Output Measure

- Number of demonstration sites developed using urban gardening principles and practices

Year	Target	Actual
2009	1	2

Output #11

Output Measure

- Number of workshops and public and private entities establishing gardens

Year	Target	Actual
2009	45	12

Output #12

Output Measure

- Number of residents, non-profit organizations, and public and private entities establishing composting projects.

Year	Target	Actual
2009	6	5

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of residents who will become more aware of the benefits of gardening
2	Number of residents, nonprofit organizations, youth groups, and public and private entities that will increase their knowledge of more efficient low cost technologies, practices, and principles
3	Number of home gardeners will realize a reduction in their cost of living resulting from urban gardening
4	Number of residents, nonprofit organizations, youth groups, and public and private entities establishing gardens
5	Number of residents, nonprofit organizations, youth groups, public and private entitites starting compost.

Outcome #1

1. Outcome Measures

Number of residents who will become more aware of the benefits of gardening

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	375	428

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Ninety-nine percent (99%) of the food consumed in the territory is imported. With the increase in energy costs, Virgin Islanders have been paying extremely high prices for food. This has caused VI residents to reevaluate their lifestyles regarding their spending habits and look for ways to cut cost. Combined with the high rates of cancer, heart disease and high blood pressure, Virgin Islanders have been looking for ways to improve their health and lower their medical cost. All this can be controlled and in some instances prevented by lifestyle changes. Gardening can play a major role in contributing to the improvement in overall health and household cost saving.

What has been done

Lectures, seminars, have been the primary means of sharing information on the benefits of gardening to youth groups, adult organizations, and individual residents. Periodic radio appearances have also provided a means of reaching a wider audience.

Results

The majority of adults seventy percent (70 %) indicated that they learned a new benefit of gardening that they were not aware of before the presentation. Ninety-nine percent (99%) of the elementary school aged children surveyed were not aware of most of the benefits derived from gardening. Adults indicated that they would continue to seek more information about gardening as well as visit the CES demonstration gardens

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #2

1. Outcome Measures

Number of residents, nonprofit organizations, youth groups, and public and private entities that will increase their knowledge of more efficient low cost technologies, practices, and principles

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	500	650

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Most homeowners, youth garden groups, and public and private agencies still use traditional methods of irrigation, cultivation and general growing techniques. These growing practices usually are not the most efficient or cost effective. With the cost of living being so high, along with the limited water resources, gardeners of all types need to find ways to use the latest technology and most effective gardening practices in order to reduce cost. Even though some of the current technologies such as specialized mulch materials, drip irrigation, and irrigation timers, have been in existence for over 20 years, many residents are not familiar with them.

What has been done

Tours of the CES demonstration garden was the primary teaching tool. Gardens and farms that use the best management practices were the primary means of educating the public. PowerPoint presentations and public displays were also used to show Virgin Islands residents what is possible.

Results

Approximately ninety-five percent (95%) of residents were exposed to drip irrigation and its benefits. Of the adults participating in the educational events and tour, 80% requested more information, would attend future workshops and seminars on the use of the equipment and practices. Ninety-nine percent (99%) of the young people were also exposed to the current technologies and gardening practices for the first time. One elementary school was also used as an off-site demonstration site for new technology and water conservation practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #3

1. Outcome Measures

Number of home gardeners will realize a reduction in their cost of living resulting from urban gardening

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	150	75

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Ninety-nine (99%) of food consumed in the Virgin Islands is imported. With the additional cost of shipping and handling, store owners mark up, and utility cost, Virgin Islands residents pay extremely high cost for food. If there was a way to reduce the cost of food, residents could save money and possibly shift financial resources to other aspects of life.

What has been done

Home visits, telephone contacts, tours of the CES demonstration gardens and displays at the annual agriculture fairs were the primary of providing information and receiving information from resident.

Results

Only anecdotal information regarding actual cost saving was received by Extension staff. Individuals did save money, however estimates varied widely. An instrument will have to be created in order to capture the average saving cost among the participants.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #4**1. Outcome Measures**

Number of residents, nonprofit organizations, youth groups, and public and private entities establishing gardens

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	77

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Virgin Islands residents for the most part have been exposed to gardening either from practical experience in the past or from visiting a neighbors garden. Those who may have had gardens gave up gardening for one reason or

another. Those that have never gardened probably want to but don't know how and where to begin. Youth need to experience the benefits of gardening as well. Obesity in the youth and adults is one of the health concerns of healthcare professionals.

What has been done

Extension staff provided school administrators and teachers with information on the benefits of gardening through on-site visits and one-on-one contact. Demonstration garden tours provide students and other interested residents with an opportunity to see a developed garden plot. Extension staff and WTXJ worked with 42 residents throughout the territory in preparation to launch the Home Grown gardening project. Extension staff also gave tours of the demonstration to school students and adult residents.

Results

Six (6) elementary schools and one (1) junior high school developed raised bed and tire gardens with the assistance of CES staff. The elementary school gardens were such successes that within some schools other teachers began to involve their students in gardening. Ninety (90) percent of the participants reported that they learned more about gardening from building the actual garden than before the garden project. Twenty percent of the adults that visited the demonstration garden actually created their own garden based on their observations and interaction with staff. Forty-two residents began cultivating a garden with the assistance from Extension staff.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #5

1. Outcome Measures

Number of residents, nonprofit organizations, youth groups, public and private entities starting compost.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	9

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Landfills in the Virgin Islands are on a countdown to closing completely. A large portion of the waste stream consists of yard wastes and other organic material that contribute to fires that at times burn out of control and pollute the atmosphere. Also, some homeowners have been trying to create and cultivate gardens but without much success. One of the problems has been the poor soil quality that is created as a result of improper excavation practices during the construction of the home.

What has been done

Lectures and practical demonstrations were the primary means of providing residents with knowledge of starting a compost pile. Extension staff also partnered with the First lady of the Virgin Islands, Mrs. Cecile DeJongh on a

project called "Healthy V.I. Challenge" to encourage recycling in schools and creating gardens as part of developing a healthy lifestyle. Two composting seminars and demonstrations were conducted; one in St. Croix and one on St. Thomas. A video entitled "How To Build a Compost Pile" was filmed by the local Department of Education in partnership with the First Lady's Healthy VI Challenge, FINTRAC, a agriculture consulting organization, the local Department of Agriculture and Extension Services.

Results

Six elementary schools built compost piles. A video was completed and aired on the local education station. The Governors official residences on all three islands, also now have created compost piles.

4. Associated Knowledge Areas

KA Code	Knowledge Area
403	Waste Disposal, Recycling, and Reuse

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Water Quality

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	10%			
104	Protect Soil from Harmful Effects of Natural Elements	10%			
111	Conservation and Efficient Use of Water	40%			
112	Watershed Protection and Management	20%			
133	Pollution Prevention and Mitigation	20%			
Total		100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	1.8	0.0	0.0	0.0
Actual	1.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
90000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
90000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
42000	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Interest in the popular V.I. Home & Farm Water Quality Assessment (VI*A*Syst) program spread mostly by word-of-mouth. Throughout the year, VI*A*Syst presentations and workshops were regularly conducted by request from schools, community groups, youth groups, churches, scouts, businesses, maintenance professionals, government agencies, and residents of the British Virgin Islands. These presentations, focused on transmitting information about water quality protection and least-toxic household products to the respective audiences so convincingly that many attendees indicated that they would stop using hazardous products. Locally oriented outreach materials were also requested and disseminated related to water

conservation, drinking water protection, waste water disposal and best management practices for pollution prevention through the VI*A*Syst program. Linkages between lifestyle practices, watershed health and water quality were key outreach focuses of the VI*A*Syst program. CES conducted tours and workshops that promoted watershed awareness with a special focus on the health of VI watercourses (guts). Watershed awareness also was promoted through the adoption of the methodology used by the CDC-CES "Pilot Study to Integrate the Effects of Watershed Activity Patterns and Coastal Processes on Near-Shore Coral Reefs" in targeted watersheds by the UVI Master of Marine and Environmental Science program and the UVI Center for Marine and Environmental Studies. This study funded by VI EPSCoR utilized GIS technology to investigate the patterns of sediment delivery and septic system nutrient loading and the impacts on coastal water quality. Study findings are also being utilized in a CDC-CES grant-funded project to develop a field guide of VI wetlands and watersheds for resource managers funded by the VI Div. of Environmental Protection and the VI Dept. of Agriculture. CES promoted the implementation of BMPs to protect water quality at coastal public parks, hotels and large subdivisions with extensive coastal and off-shore resources. During office, phone consultations, and site-visits, clients were provided with technical assistance about erosion and sediment control, storm water control, preserving land cover, xeriscaping, wetlands preservation and restoration, preservation of riparian systems (guts) and alternative waste-water treatment systems.

2. Brief description of the target audience

Policy-makers and regulatory personnel, community groups, teachers and students, business community, non-governmental organizations, and the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	250	1000	200	300
Actual	231	320	117	700

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Education/Classes/Training in water quality protection and VI * A * Syst Program

Year	Target	Actual
2009	2	7

Output #2

Output Measure

- Workshops / Presentations about water quality protection, less toxic household products and NPS BMP's through the VI * A * Syst Program, on-site waste water treatment, cistern care, and watershed protection.

Year	Target	Actual
2009	4	16

Output #3

Output Measure

- One on one consultations with residents, government employees, students

Year	Target	Actual
2009	200	42

Output #4

Output Measure

- Tours of VI natural areas with students, community groups and others to raise awareness about watersheds and water quality protection.

Year	Target	Actual
2009	3	4

Output #5

Output Measure

- Educational/research publications, articles, posters, newsletters, GIS maps related to non-point source pollution, on-site wastewater treatment, watersheds, VI * A * Syst, and protection of VI native plant communities.

Year	Target	Actual
2009	6	5

Output #6

Output Measure

- PSAs
Not reporting on this Output for this Annual Report

Output #7

Output Measure

- Fairs

Year	Target	Actual
2009	2	6

Output #8

Output Measure

- TV/Media
Not reporting on this Output for this Annual Report

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Awareness of the health risks associated with water quality impairment and water and wastewater treatment systems will increase, and 75 homeowners will consider installing or retrofitting their existing septic systems with improved packaged sewage treatment systems or alternative wastewater treatment systems.
2	Fifty (50) homeowners will request technical assistance with the evaluation of old septic systems; 20 homeowners will proactively pump their septic systems, and three (3) businesses will construct alternative wastewater treatment systems based on successful prototypes recommended by CES.
3	Educational materials, workshops, tours and other direct and indirect outreach methods will increase public knowledge of the characteristics and functions of aquatic ecosystems (gulfs, salt ponds, mangrove lagoons, bays and oceans) including their role within a watershed. Five (5) homeowners and/or natural resource managers will protect riparian and wetlands vegetation. Fifty (50) clients will become aware of the VI laws protecting riparian and wetlands vegetation.
4	Requests for site visits and VI*A*Syst assessments and presentations will increase. 75 clients or more will each adopt at least one VI*A*Syst recommended practice such as the use of non-toxic household products, etc. Fifty (50) homeowners will improve cistern water quality by following CES recommendations.
5	At least twenty (20) clients will implement effective stormwater, erosion and sediment control practices and xeriscaping. The VI Dept. of Public Works roadside maintenance crews (10) will improve their roadside clearing methods to prevent soil erosion and sediment runoff.
6	Over 1000 VI youth will become aware of the vital connections between human activities and water quality, how land-based activities affect coastal water quality, why watershed protection is important to them and their well-being. Youth and volunteer involvement in water quality protection and resource conservation will increase.
7	Information from watershed studies utilizing oceanographic and GIS technology will lead to specific recommendations for watershed residents and government agencies about how to reduce sediments and nutrients in stormwater runoff.

Outcome #1

1. Outcome Measures

Awareness of the health risks associated with water quality impairment and water and wastewater treatment systems will increase, and 75 homeowners will consider installing or retrofitting their existing septic systems with improved packaged sewage treatment systems or alternative wastewater treatment systems.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Fifty (50) homeowners will request technical assistance with the evaluation of old septic systems; 20 homeowners will proactively pump their septic systems, and three (3) businesses will construct alternative wastewater treatment systems based on successful prototypes recommended by CES.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Educational materials, workshops, tours and other direct and indirect outreach methods will increase public knowledge of the characteristics and functions of aquatic ecosystems (guts, salt ponds, mangrove lagoons, bays and oceans) including their role within a watershed. Five (5) homeowners and/or natural resource managers will protect riparian and wetlands vegetation. Fifty (50) clients will become aware of the VI laws protecting riparian and wetlands vegetation.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	10	40

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Through direct and indirect methods, resource managers, property owners, educators, students, researchers, etc. require basic and technical information about riparian and aquatic ecosystems, including their roles within watersheds.

What has been done

CES worked with VI government agencies to stop the illegal clearing of riparian vegetation. The report that CES co-researched, "VI Guts: State of Knowledge" was distributed to NGOs, government, environmental groups. CES provided The Nature Conservancy(TNC) with information about VI drainages for DPNRs Comprehensive Land and Water Use Plan update.

Results

With CES's input, an environmental group implemented BMPs to help restore St. Thomas guts. The illegal clearing of vegetation in one gut was halted by CES's interaction with the VI Division of Environmental Protection. CES continued to help The Nature Conservancy(TNC) revise and improve the quality of information to be incorporated into GIS maps for DPNR's Comprehensive Land and Water Use Plan update. UVI research faculty and students incorporated information re: riparian ecosystems provided by CES into various studies and research projects.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

Outcome #4

1. Outcome Measures

Requests for site visits and VI*A*Syst assessments and presentations will increase. 75 clients or more will each adopt at least one VI*A*Syst recommended practice such as the use of non-toxic household products, etc. Fifty (50) homeowners will improve cistern water quality by following CES recommendations.

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

At least twenty (20) clients will implement effective stormwater, erosion and sediment control practices and xeriscaping. The VI Dept. of Public Works roadside maintenance crews (10) will improve their roadside clearing methods to prevent soil erosion and sediment runoff.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	6	10

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

To protect the V.I. environment, prevent economic loss and comply with governmental regulations, CES clients (resource managers, Public Works personnel, businesses, developers, environmental groups, property owners, etc.) need technical assistance with xeriscaping, stormwater, erosion and sediment control.

What has been done

After an inspection of a new road cut causing erosion at a coastal Territorial Park, CES provided the managers with a report and recommendations (developed by Rutgers U. regional WQ partner) about how to mitigate the

erosion threat. Territorial Park employees were provided with technical assistance during informal meetings and site visits. CES partnered with the UVI Conservation Data Center to convince the VI Dept. of Public Works (DPW) to improve roadside clearing and maintenance.

Results

To prevent erosion and sediment-laden stormwater runoff from a new road cut, Magens Bay Authority (MBA) has taken action to adopt recommendations made in CES report by Rutgers WQ regional partners. Territorial Park employees and management (MBA) continue to request and adopt CES recommendations regarding landscaping to protect coastal waters. During an informal meeting, the DPW director of road crews has agreed to work with UVI to upgrade roadside maintenance and clearing techniques to reduce erosion and sediment runoff.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
104	Protect Soil from Harmful Effects of Natural Elements
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

Outcome #6

1. Outcome Measures

Over 1000 VI youth will become aware of the vital connections between human activities and water quality, how land-based activities affect coastal water quality, why watershed protection is important to them and their well-being. Youth and volunteer involvement in water quality protection and resource conservation will increase.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	42

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

VI youth and those who regularly instruct them need basic scientific information about the unique connections between land and sea and how human activities affect water quality. With the rapid urbanization in the VI, the youthful population will be the most affected by land-use impacts degrading water quality.

What has been done

During several interactions, CES provided nine (9) students enrolled in the UVI Master of Marine and Environmental Science (MMES) program, eight (8) Yale U. graduate students (Coastal and Watershed Management Program), and 25 UVI science students with information about land-based activities that negatively affect coastal water quality.

Results

The UVI MMES is in its third year, both students and faculty have broadened the research focus on interconnectivity between land and sea with assistance from CES. Twenty-five VI youth became more aware of the basic issues affecting coastal water quality in the Virgin Islands evidenced by their verbal responses to CES presentations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

Outcome #7

1. Outcome Measures

Information from watershed studies utilizing oceanographic and GIS technology will lead to specific recommendations for watershed residents and government agencies about how to reduce sediments and nutrients in stormwater runoff.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	1	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Watershed residents, government agencies, resource managers, other partnering academic institutions require scientific information utilizing oceanographic and GIS technology in order to better understand the patterns of stormwater runoff and the impacts of sediment and nutrient-laden runoff.

What has been done

CES provided the Nature Conservancy with information from watershed studies to be incorporated in GIS maps for DPNR's Comprehensive Land and Water Use Plan. The final project report, "VI Guts: State of Knowledge", co-researched by CES was distributed with several GIS maps showing the hydrology of VI drainages, including drainages in priority watersheds. GIS watershed maps were shared with the VI Emergency Management Association to help develop tsunami escape routes.

Results

TNC indicated that GIS information provided by CES will be incorporated in the Comprehensive Land and Water Use Plan updated that TNC is preparing for DPNR.

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

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

Brief Explanation

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

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 7****1. Name of the Planned Program**

Computer Training and Technology Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
903	Communication, Education, and Information Delivery	100%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	1.2	0.0	0.0	0.0
Actual	1.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
60000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
70000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Advertised the Computer Training and Technology Program

- Conducted eight weeks Basic Computer Training Courses that taught how to use Microsoft Windows, Microsoft Word, E-mail, and searched for information using the World Wide Web.
- Conducted three lectures designed to increase participants' knowledge in the area of distance learning.
- Conducted trainings for UVI-CES staff in Microsoft PowerPoint and Microsoft Excel.
- Conducted workshops for members of community in Microsoft PowerPoint and Microsoft Excel.
- Conducted basic computer training courses designed to increase the participants' knowledge and usage of computers in Basic Computer maintenance, Microsoft Word, and e-mail/internet. Conducted pre-evaluations for the basic computer training course.
- Developed and maintained the UVI-CES website.

2. Brief description of the target audience

The target audience consisted mainly of computer illiterate adults in the USVI that are from low income households. Also members of the clothing constructions class.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	80	3000	60	2500
Actual	75	3100	100	3400

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Conduct two days workshops of Microsoft E-mail

Year	Target	Actual
2009	6	5

Output #2

Output Measure

- Conduct two days workshops of Microsoft Word

Year	Target	Actual
2009	6	5

Output #3

Output Measure

- Conduct two days workshops of Microsoft Windows

Year	Target	Actual
2009	6	5

Output #4

Output Measure

- Conduct two days workshops of Microsoft Internet

Year	Target	Actual
2009	6	5

Output #5

Output Measure

- Conduct two days workshops on Microsoft Excel

Year	Target	Actual
2009	6	6

Output #6

Output Measure

- Conduct two days workshops on Microsoft Powepoint

Year	Target	Actual
2009	6	4

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Participants will acquire/increase their knowledge and usage of Microsoft Window by 70%.
2	Participants will acquire/increase their knowledge and usage of Microsoft Word by 70%.
3	Participants will acquire/increase their knowledge and usage of E-mail by 70%.
4	Participants will acquire/increase their knowledge and usage of the Internet by 70%.
5	Participants will acquire/increase their knowledge and usage of Microsoft Excel by 70%.
6	Participants will acquire/increase their knowledge and usage of Microsoft Powerpoint by 70%.

Outcome #1

1. Outcome Measures

Participants will acquire/increase their knowledge and usage of Microsoft Window by 70%.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	80	80

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Due to the speed in which the world is becoming computerized basic computer knowledge is becoming mandatory. In every industry today computers are now been used. In our everyday activities computers are been use in one way or the other. For example from supermarket, post office, to banks. One can also save money be using and time by executing tasks utilizing the computer. Tasks such as sending messages, if someone sends email messages VS mailing them use the post office. The messages will be delivered faster and cost less.

What has been done

Five workshops in MS Window were conducted.

Results

Participants acquired and or increased their knowledge and usage of Microsoft Window.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

Participants will acquire/increase their knowledge and usage of Microsoft Word by 70%.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	120	80

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Microsoft (MS) Word is computer program that gives people the ability to create and share documents. MS Word helps people create professional-looking content more quickly than ever before. With a host of new tools, you can quickly construct documents from predefined parts and styles. MS Word has improved the efficiency of the typewriter. MS Word gives people the ability to edit and revise their work easily. Microsoft Word offers many features such as editing font, spell check, auto fill, and other features which are impossible to do with a typewriter. Also there is a save feature that allows you to save documents to continue to work on later and/or share with other.

What has been done

Five workshops in MS Word were conducted.

Results

Participants acquired and or increased their knowledge and usage of Microsoft Word.

4. Associated Knowledge Areas

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

Outcome #3

1. Outcome Measures

Participants will acquire/increase their knowledge and usage of E-mail by 70%.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	100	90

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Due to the speed in which the world is becoming computerized basic computer knowledge is becoming mandatory. In every industry today computers are now been used. In our everyday activities computers are been use in one way or the other. For example from supermarket, post office, to banks. One can also save money be using and time by executing tasks utilizing the computer. Tasks such as sending messages, if someone sends email messages VS mailing them use the post office. The messages will be delivered faster and cost less.

What has been done

Five workshops on Email were conducted.

Results

Participants acquired and or increased their knowledge and usage of using Email.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

Participants will acquire/increase their knowledge and usage of the Internet by 70%.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	120	90

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The internet is a powerful online communication and research tool. Individuals can have fun surfing the Internet with ease, confidence and efficiency, while gaining an insight into how the Internet can open up online opportunities for learning, business, employment as well as communications and research.

What has been done

Five workshops in Internet usage were conducted.

Results

Participants acquired and or increased their knowledge and usage of the Internet.

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

Participants will acquire/increase their knowledge and usage of Microsoft Excel by 70%.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	80	85

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Microsoft Excel is a computer application you can use to create and format spreadsheets. MS Excel allows individuals to do calculations in a quicker and organized fashion. Individuals can analyze and share these spreadsheets information to make more informed decisions.

What has been done

Two workshops in MS Excel were conducted.

Results

Participants acquired and or increased their knowledge and usage of Microsoft Excel.

4. Associated Knowledge Areas

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

Outcome #6

1. Outcome Measures

Participants will acquire/increase their knowledge and usage of Microsoft Powerpoint by 70%.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	80	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Microsoft (MS) PowerPoint is a computer application that allows individuals to present information in a dynamic way. MS PowerPoint presentations enhance individuals' oral presentation helping to keep the audience attention. MS PowerPoint allows individuals to utilize modern technology such as animation and multimedia.

What has been done

Two workshops in MS PowerPoint were conducted

Results

Participants acquired and or increased their knowledge and usage of Microsoft PowerPoint.

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)**Program # 8****1. Name of the Planned Program**

4-H Volunteer Development and Management Program

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	10%			
802	Human Development and Family Well-Being	65%			
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	10%			
806	Youth Development	15%			
Total		100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	2.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
70000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
90000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

- Developed 4-H web page, newsletter, materials, workshops, presentations and demonstrations that provide information about 4-H/Youth Development volunteer leadership opportunities. Set up volunteer recruitment booths at World Food Day, St. Thomas/St. John Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix).

- Provided orientation, training and professional development for teen and adult volunteers, partners, 4-H/Family and Consumer Sciences/CYFAR staff, and CES personnel.
- Utilized multi-media outlets to promote 4-H/Youth Development programs to attract potential youth and adult volunteers.
- Facilitated youth and adult volunteers, and 4-H staff participation in annual Southern Region 4-H Volunteer Leaders' Forum, annual National 4-H Conference, and biannual National 4-H Technology Leadership Conference.
- Collaborated with government departments, non-profit agencies, community-based programs, and special interest groups to recruit, train and support 4-H volunteer development.
 - Established a Collegiate 4-H Chapter.
 - Facilitated establishment of 4-H Volunteer Leader Organization.
 - Facilitated formation of 4-H Advisory Council and Foundation.
- Worked together with CES administration and 4-H leadership locally and nationally to develop 4-H Volunteer Management framework.

2. Brief description of the target audience

- Current and newly recruited 4-H volunteer leaders,
- Low-income, at-risk, un- or underemployed adults residing in public/federally subsidized housing communities, and CYFAR clientele
 - Public and non-public high school students needing community service hours to fulfill graduation requirements,
 - Clientele and staff being served through fellow UVI, CES and AES programs.
 - Parents of current 4-H club members and summer program participants.
 - University of the VI students,
 - Youth and adults (general public) responding to multi-media 4-H volunteer campaign,
 - Youth and adults indicating interest in 4-H volunteer leadership at World Food Day and fairs.
 - Departments, agencies, clubs, and programs working with 4-H.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	250	2500	150	1500
Actual	255	1650	175	600

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

Patent Applications Submitted

Year: 2009

Plan: 0

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of print media tools such as web pages, newsletters, brochures and fact sheets promulgated

Year	Target	Actual
2009	5	3

Output #2

Output Measure

- Number of workshops, presentations and demonstrations conducted

Year	Target	Actual
2009	25	33

Output #3

Output Measure

- Number youth and adult volunteer leaders, 4-H staff and partners trained

Year	Target	Actual
2009	35	24

Output #4

Output Measure

- Number of partnerships, collaborations or cooperative agreements formed

Year	Target	Actual
2009	5	2

Output #5

Output Measure

- Number of youth and adults volunteers and staff participated in off-island leadership development opportunities

Year	Target	Actual
2009	15	7

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of organized 4-H clubs formed
2	Number of special interest or short-term groups formed
3	Number of organizational and infrastructure tools (policy and procedures manual, 4-H Leader's Organization, 4-H Advisory Council and Foundation) developed
4	Percentage of volunteers and staff adopting, implementing or utilizing effective leadership strategies:

Outcome #1

1. Outcome Measures

Number of organized 4-H clubs formed

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

4-H clubs provide a positive, nurturing environment, positive interaction with adults and a safe place to grow, learn and experience new things as they develop into productive adults with new knowledge, skills and attitudes.

What has been done

Teen and adult volunteers were oriented and trained with regard to the processes and procedures required to organize a 4-H club.

Results

There are two new clubs on St. Croix - one school based and the other community-based.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Number of special interest or short-term groups formed

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Special interest groups attract youth and adults based on interest and motivation. Involvement in a special interest group often results in more formal involvement in 4-H clubs, programs and activities.

What has been done

Based on interest and a desire to become affiliated with 4-H, special interest groups have served as the primary strategy.

Results

On St. Thomas, youth formed a special interest group as part of the 4- H Carnival Troupe. On St. Croix, a Science Olympiad special interest group was formed.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of organizational and infrastructure tools (policy and procedures manual, 4-H Leader's Organization, 4-H Advisory Council and Foundation) developed

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	1	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Formal operating procedures and policies provide a framework and boundaries within which any organization should best function.

What has been done

Efforts continue to be made to collect several policy and procedural manuals from various states; however this process has not been completed. A diverse, compilation of other 4-H program information is the goal.

Results

No conclusive results to report to-date.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #4

1. Outcome Measures

Percentage of volunteers and staff adopting, implementing or utilizing effective leadership strategies:

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	60	62

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The 4-H program recognizes that effective leaders are important to the success of any group, organization or club.

What has been done

Volunteer leaders receiving training on leadership styles, strategies and skills. As a result, they are expected to model and foster leadership in their clubs and programs.

Results

A total of 24 youth and adult volunteers provided leadership for four 4-H clubs and one special interest group on St. Croix and two special interest groups on St. Thomas; there are a total of ten 4-H projects offered.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

Formal evaluation efforts have not been completed; mostly positive feedback from anecdotal accounts.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

A Healthy, Well-Nourished Population

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
701	Nutrient Composition of Food	20%			
703	Nutrition Education and Behavior	60%			
724	Healthy Lifestyle	20%			
Total		100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.0	0.0
Actual	1.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
60000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
80000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Developed culturally sensitive nutrition and health education products and resources that were made available to professionals, students, and the public. The following are examples of the products and resources developed and made available for distribution:
 - o a fruit and vegetable nutrient composition poster, brochure and/or flyer that highlights the nutritional value of local fruits and vegetables; it will include the vitamin, mineral, and fiber content of local fruits and vegetables;
 - o a poster, brochure, and/or flyer detailing the sodium, fat, cholesterol, carbohydrate, and fiber content of commonly consumed local foods;
 - o a diabetes exchange list booklet that includes local foods and beverages; and
 - o a culturally sensitive cookbook using local and familiar produce.

- Conducted disease-specific workshops, short courses, seminars, and other educational activities focusing on nutrition education and behavior modification.
- Recruited and trained staff and volunteers to deliver nutrition, diet, and health relevant information to the community.
- Developed and/or obtained culturally sensitive nutrition/health curriculum appropriate for school age children at all grade levels.
- Developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizen centers, and day care centers.
- Developed a web page that relays information on issues relating to the problem.

2. Brief description of the target audience

This program is directed at all U.S. Virgin Island residents. However, special attention is given to high risk groups such as residents diagnosed with diseases such as diabetes, hypercholesterolemia, hypertension, and obesity; senior citizens; and school age children.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	325	5000	400	5000
Actual	1510	22000	600	3000

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- a. Number of workshops, classes, and demonstrations facilitated or conducted.

Year	Target	Actual
2009	25	28

Output #2

Output Measure

- b. Number of volunteers recruited and trained to deliver nutrition education program.

Year	Target	Actual
2009	4	5

Output #3

Output Measure

- c. Number of fair-type settings in which nutrition/health information will be presented.

Year	Target	Actual
2009	6	9

Output #4

Output Measure

- d. Number of web sites developed and maintained.

Year	Target	Actual
2009	1	1

Output #5

Output Measure

- e. Number of nutrition and health education materials developed and made available to professionals, students, and the public.

Year	Target	Actual
2009	1	2

Output #6

Output Measure

- e. Number of partnerships with agencies and organizations that will assist in improving the health practices of U.S. Virgin Islanders.

Year	Target	Actual
2009	10	6

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of individuals who have indicated benefits from developed educational materials.
2	Percentage of adults adopting and maintaining at least one healthy lifestyle practice
3	Number of school age children learning basic nutrition information.
4	Percentage of children adopting and maintaining at least one healthy lifestyle practice.
5	Increase awareness among the general public of the relationship between food intake, physical fitness, stress management and disease prevention.
6	Number of individuals who report improvement in health status (e.g., lower blood sugar, hemoglobin A1c, and/or cholesterol level).

Outcome #1

1. Outcome Measures

Number of individuals who have indicated benefits from developed educational materials.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	100	78

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The incidence and morbidity rates of chronic diseases such as heart disease, cancer and diabetes continue to be high in the Virgin Islands. It is crucial to increase the general community's access to culturally sensitive nutrition education materials to help reduce the mortality and morbidity rates in the territory.

What has been done

A tropical fruit poster was produced and continues to be distributed throughout the territory. It has been reprinted due to its popularity and usefulness. The poster utilizes a five-star scale to indicate the amount of potassium, fiber and Vitamin C in each tropical fruit.

Results

During fiscal year 2009, over 250 posters were distributed to various individuals and organizations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #2

1. Outcome Measures

Percentage of adults adopting and maintaining at least one healthy lifestyle practice

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	65	63

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In order to decrease the high mortality and morbidity rates from heart disease, cancer, cerebrovascular diseases, and diabetes in the U.S. V.I. It is critical for Virgin Islands to adopt and maintain healthy lifestyle practices.

What has been done

Six to eight week nutrition education classes have been conducted in order to meet this goal, primarily women with young children attended the classes.

Results

Eighty percent of the participants reported a positive change by adopting at least one healthy lifestyle practice. The practices included increased consumption of fruit, vegetables, milk and grain groups.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

Number of school age children learning basic nutrition information.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	400	265

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In order to shape good eating habits at an early age - emphasis was placed on school aged children.

What has been done

Basic nutrition information was disseminated to children through a series of lessons over 6-8 weeks. Some of the series were conducted in the schools as part of a school enrichment programs and the others were conducted during summer programs.

Results

Summer camp participants were administered a pre and post test to determine changes in knowledge regarding basic nutrition information. Sixty percent of the participants were able to answer the basic nutrition questions prior to the 1st lesson, by the end of the series, seventy percent of the participants answered questions correctly.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

Percentage of children adopting and maintaining at least one healthy lifestyle practice.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	55	40

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

It is critical for youth to adopt healthy lifestyle practices from an early age.

What has been done

Youth received information on healthy lifestyle practices through summer camp and a series of targeted sessions.

Results

The majority of youth reported at least one healthy lifestyle practice change as a result of the sessions.

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

Increase awareness among the general public of the relationship between food intake, physical fitness, stress management and disease prevention.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

With high incidences of preventable diseases in the territory, it is critical that the general public be informed regarding the relationship between food intake, physical fitness, stress management and disease prevention.

What has been done

Collaborated with local Human Services and Health Departments to conduct workshops on disease prevention.

Results

Participants expressed an increased awareness of the relationship of physical fitness, food intake and disease prevention.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #6

1. Outcome Measures

Number of individuals who report improvement in health status (e.g., lower blood sugar, hemoglobin A1c, and/or cholesterol level).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	45	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Important to improve health outcomes in virgin Islanders by improving blood pressure, hemoglobin A1c and cholesterol levels.

What has been done

Collaboration with the Health Department and Human Services in providing information sessions.

Results

Anecdotal results to-date.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Other (Cultural Environment)

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)

Evaluation Results

Evaluation data incomplete at this time.

Key Items of Evaluation

Evaluation data incomplete at this time.

V(A). Planned Program (Summary)

Program # 10

1. Name of the Planned Program

Basic Food Safety Education - EFNEP and EFNEP Youth

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	65%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	25%			
724	Healthy Lifestyle	10%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	0.5	0.0	0.0	0.0
Actual	2.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
25000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
25000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
109000	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Identified new locations to conduct classes.
- Recruited and trained staff and volunteers to deliver food safety information to EFNEP participants (adults and youth).
- Developed and/or obtained culturally sensitive food safety curriculum appropriate for EFNEP participants (adults and youth).
- Developed and maintained relationships with partners including government agencies, clinics, places of worship,

public and private schools, senior citizen centers, and day care centers.

- Developed a web page that relays information on issues relating to the program.

2. Brief description of the target audience

The program targets all U.S. Virgin Islanders but especially low income individuals who are responsible for preparing the family's meal, school age children, and pregnant teens and adults.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	75	5000	250	5000
Actual	85	2075	575	2075

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of 6-8 week class series conducted for EFNEP participants (adults and youth)

Year	Target	Actual
2009	20	10

Output #2

Output Measure

- Number of volunteers recruited and trained to deliver food safety program

Year	Target	Actual
2009	4	2

Output #3

Output Measure

- Number of fair-type settings in which food safety information will be presented

Year	Target	Actual
2009	6	4

Output #4

Output Measure

- Number of web sites developed and maintained

Year	Target	Actual
2009	1	1

Output #5

Output Measure

- Number of partnerships with agencies and organizations that will assist in improving the food safety practices of U.S. Virgin Islanders

Year	Target	Actual
2009	5	3

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of adults learning basic food safety information
2	Percentage of adults adopting and maintaining at least one food safety practice
3	Number of school age children learning basic food safety information
4	Percentage of children adopting and maintaining at least one food safety practice
5	Increase awareness among the EFNEP participants about food safety issues related to personal hygiene, food storage, food preparation, and food handling
6	Increase awareness among the EFNEP participants about food safety issues related to eating away from home (e.g., restaurants, mobile food vans, food booths) and purchasing food from street vendors (e.g., fish)

Outcome #1

1. Outcome Measures

Number of adults learning basic food safety information

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	75	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Virgin Islands has many risk factors for food borne illnesses. These risks include the tropical climate, unpredictable power outages, inappropriate home storage, purchasing and preparation practices. Therefore, food safety education programs are needed to decrease the likelihood of food borne illnesses becoming a major health problem.

What has been done

Basic food safety information was disseminated through classes, demonstrations, experiential activities and lectures. Low income individuals enrolled in EFNEP were educated about the importance of proper personal hygiene, food storage and preparation, and food handling to prevent food borne illnesses. During holidays emphasis was placed on importance of thawing meats properly and using a thermometer to check for doneness.

Results

Over 70% of participants correctly stated the proper methods of thawing a frozen turkey post delivery of material.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

Percentage of adults adopting and maintaining at least one food safety practice

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	65	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

To help prevent food borne illnesses, individuals enrolled in EFNEP and those attending food safety lectures, and/or demonstrations needed to adopt and maintain at least one food safety practice, i.e. washing hands and surfaces often, avoiding cross- contamination, refrigerating food promptly and cooking food at the proper temperature.

What has been done

Basic food safety information was disseminated to adults through a series of lessons over 12 weeks. Basic food safety information was also shared at fair-type activities.

Results

Self-report data indicates some adoption of practices learned after the conclusion of instruction.

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 school age children learning basic food safety information

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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2009

250

300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Because school aged youth are highly susceptible to food borne illness, effort is needed to keep children safe by teaching basic food safety information, i.e. importance of washing hands, avoiding cross-contamination, refrigerating food promptly and cooking food to proper temperature.

What has been done

Basic food safety information was disseminated to children through a series of lessons over 6-8 weeks. Some of the series were conducted in the schools as part of a school enrichment program and the others were conducted during summer programs. Basic food safety information was also distributed at fair-type settings through computer game focused on food safety.

Results

A pre-post measure was administered to summer camp participants. Sixty percent of youth answered queries correctly before receiving food safety information. Afterwards, eighty percent answered questions correctly.

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 #4

1. Outcome Measures

Percentage of children adopting and maintaining at least one food safety practice

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	65	55

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Issue (Who cares and Why) Youth enrolled in EFNEP and those attending food safety lectures and/or demonstrations need to adopt and maintain at least one food safety practice such as washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly, and cooking food at proper temperatures.

What has been done

Basic food safety information was disseminated to youth through a series of 6-8 week lessons. In addition, basic food safety information was shared at fair-type settings.

Results

No data is available at this time.

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

Increase awareness among the EFNEP participants about food safety issues related to personal hygiene, food storage, food preparation, and food handling

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	100	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Individuals enrolled in EFNEP and those attending food safety lectures and/or demonstrations need to be aware of the importance of washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly, and cooking food at proper temperatures.

What has been done

Basic food safety information was disseminated through a series of weekly lessons and at fairs.

Results

Increased awareness was expressed by EFNEP participants about food safety issues related to personal hygiene, food storage and preparation, and food handling among adults and youth who attended the 6-8week series of lessons.

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

Increase awareness among the EFNEP participants about food safety issues related to eating away from home (e.g., restaurants, mobile food vans, food booths) and purchasing food from street vendors (e.g., fish)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	100	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The territory has many risk factors for food borne illness outbreaks including the tropical climate, unpredictable power outages, street vendors with no formal food safety training. Food safety education is sorely needed to increase participants' awareness of the food safety issues that may increase their risk of getting a food borne illness.

What has been done

No data is available at this time.

Results

No data is available at this time.

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Other ()

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)

Evaluation Results

No data is available at this time.

Key Items of Evaluation

No data is available at this time.

V(A). Planned Program (Summary)

Program # 11

1. Name of the Planned Program

Marketable Skills for Limited Resource 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	75%			
802	Human Development and Family Well-Being	15%			
806	Youth Development	10%			
Total		100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	2.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
73000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
83000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conducted workshops and demonstrations to promote the different FCS program offerings. Set up volunteer recruitment booths at World Food Day, St. Thomas/St. John Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix).
- Provided orientation, training and professional development for volunteers, partners, 4-H/Family and Consumer Sciences/CYFAR staff, and CES personnel.
- Utilized multi-media outlets to promote FCS programs to attract potential clientele.

- Conducted workshops and short courses that helped low-income, at-risk audiences build knowledge, skills and attitudes that will positively impact their quality of life.
- Collaborated with government departments, non-profit agencies, community-based programs, and special interest groups to recruit, train and support 4-H volunteer development.

2. Brief description of the target audience

- Current and newly recruited FCS participants,
- Low-income, at-risk, un- or underemployed adults residing in public/federally subsidized housing communities, and Children, Youth & Families at-Risk clientele.
- Clientele and staff being served through fellow UVI, CES and AES programs.
- Clientele referred from Department of Human Services, Department of Labor &ndash Unemployment Office; V.I. Housing Authority -Tenant Services Office, and other agencies working with similar audiences.
- Parents of current 4-H club members and summer program participants.
- Youth and adults (general public) responding to multi-media 4-H volunteer campaign.
- Youth and adults indicating interest in FCS programs at World Food Day and fairs.
- Departments, agencies, clubs, and programs working with FCS.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	100	2500	25	750
Actual	850	2800	24	600

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of short courses conducted

Year	Target	Actual
2009	5	4

Output #2

Output Measure

- Number of workshops facilitated as part of "Women at the Crossroads" short course

Year	Target	Actual
2009	25	22

Output #3

Output Measure

- Number of special interest workshops conducted

Year	Target	Actual
2009	2	2

Output #4

Output Measure

- Number of youth, volunteers, staff and partners trained

Year	Target	Actual
2009	120	115

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Through participation in Basic Clothing Construction Short Courses, participants will develop knowledge and awareness of sewing machine parts, basic tools and equipment, fabric line and design, measuring techniques, use of patterns, and glossary of terms
2	Through participation in Basic Clothing Construction Short Courses, participants will learn how to baste, stitch, trim and finish seam allowances using a serger, put in hems and waist bands, apply zippers, insert elastic, insert darts, and make button holes. Acquisition of these skills will allow participants to construct at least one simple outfit resulting in personal savings
3	As a result of completing the Basic Clothing Construction Short Course, 75% of participants will enroll in the Intermediate/Advanced level of this course. In addition to using basic skills developed in the basic course, participants will learn how to apply pockets and collars, put in linings, use more detailed patterns, and incorporate more difficult fabrics. Their skills and interest level will allow them to realize a savings and to use their skills to enhance their personal income by sewing for others
4	Through participation in the Crafts, Cultural Arts and Home Decorations Short Courses, participants will become aware of natural resources and recyclable items that can be used to make attractive handiwork and decorations for the home. Skills developed will include heat applications, designing of appliques, use of adhesives, creativity and layout, project finishing, and glossary of terms
5	As a result of their training and interest in this area, participants will provide outreach to and train church, school and youth group members about the personal and financial benefits of using recycled materials
6	Through participation in Crafts, Cultural Arts and Home Decorations Short Courses, participants will learn how to construct or assemble a variety of projects that can be used to beautify the home and serve as gifts. Additional personal income will be generated through either word-of-mouth sales or by establishing their own small home-based business
7	Through 'Women at the Crossroads', participants will develop knowledge of workforce preparation, personal development, personal finances, women's health and wellness issues, leadership and volunteerism
8	Through 'Women at the Crossroads' participants will prepare a letter of application, build a personal resume, conduct a mock interview, complete a job application template and assemble a personal portfolio in preparation for an actual entry level employment interview
9	Through 'Women at the Crossroads', participants will explore the impact that poise, personality, personal appearance, positive attitude and self-confidence have on enhancing family and workforce dynamics. As a result of their experiences, participants will select and model appropriate dress, and prepare and present a personal goals statement:
10	Through 'Women at the Crossroads', participants will develop a personal budget, establish a checking account, develop a living will and explore the benefits of investing
11	Through 'Women at the Crossroads', participants will learn about health issues impacting women, complete personal health screenings, identify nutritious foods and practice healthy eating habits
12	Through 'Women at the Crossroads', participants will build leadership skills needed to become effective volunteer leaders
13	As a result of graduating and being certified through the 'Women at the Crossroads' series, participants will successfully enter the workforce and/or improve their quality of living

Outcome #1

1. Outcome Measures

Through participation in Basic Clothing Construction Short Courses, participants will develop knowledge and awareness of sewing machine parts, basic tools and equipment, fabric line and design, measuring techniques, use of patterns, and glossary of terms

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	70	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community members will enhance their skills and supplement their limited incomes and increase buying power.

What has been done

Provided workshops, short courses, including summer sessions.

Results

Participants requested more classes; some increased their income by 10%.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

Through participation in Basic Clothing Construction Short Courses, participants will learn how to baste, stitch, trim and finish seam allowances using a serger, put in hems and waist bands, apply zippers, insert elastic, insert darts, and make button holes. Acquisition of these skills will allow participants to construct at least one simple outfit resulting in personal savings

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	25	23

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community members will enhance their skills to supplement their incomes and increase their marketability.

What has been done

Staff provided workshops, short courses, summer camp sessions and individual instruction.

Results

20% of participants expressed an eagerness to receive additional courses which can enhance their entrepreneurial efforts.

4. Associated Knowledge Areas

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

Outcome #3

1. Outcome Measures

As a result of completing the Basic Clothing Construction Short Course, 75% of participants will enroll in the Intermediate/Advanced level of this course. In addition to using basic skills developed in the basic course, participants will learn how to apply pockets and collars, put in linings, use more detailed patterns, and incorporate more difficult fabrics. Their skills and interest level will allow them to realize a savings and to use their skills to enhance their personal income by sewing for others

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	300	90

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community participants are interested in increasing their knowledge and skills in clothing construction in order to enhance marketability and increase self-sufficiency.

What has been done

Conducted six-week clothing construction short course.

Results

Participants fulfilled requirements by completing clothing construction projects. Those participants who were enrolled in the beginner's course moved to the intermediate/advanced level. Knowledge and skills were increased by 15%.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

Through participation in the Crafts, Cultural Arts and Home Decorations Short Courses, participants will become aware of natural resources and recyclable items that can be used to make attractive handiwork and decorations for the home. Skills developed will include heat applications, designing of appliques, use of adhesives, creativity and layout, project finishing, and glossary of terms

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	40	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participants were interested in making a variety of items to enhance their creative home decorating skills and income-producing capability.

What has been done

Workshops, short courses were conducted.

Results

Participants requested further information and completed a variety of items. Income was increased by 10%.

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

As a result of their training and interest in this area, participants will provide outreach to and train church, school and youth group members about the personal and financial benefits of using recycled materials

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	200	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community benefits from learning to be more energy efficient by maximizing recyclable materials and products.

What has been done

Participants learned how to recycle materials and to use them in their homes and the greater community.

Results

Participants' knowledge of recycling materials increased by 25%.

4. Associated Knowledge Areas

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

Outcome #6

1. Outcome Measures

Through participation in Crafts, Cultural Arts and Home Decorations Short Courses, participants will learn how to construct or assemble a variety of projects that can be used to beautify the home and serve as gifts. Additional personal income will be generated through either word-of-mouth sales or by establishing their own small home-based business

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	350	245

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community benefits from low-income residents who increased their incomes.

What has been done

Training and educational sessions were provided for participants to acquire skills to increase their income.

Results

Low-income residents acquired a 90% increase in marketable skills to increase their income.

4. Associated Knowledge Areas

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

Outcome #7

1. Outcome Measures

Through 'Women at the Crossroads', participants will develop knowledge of workforce preparation, personal development, personal finances, women's health and wellness issues, leadership and volunteerism

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	45	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community benefits from a better prepared workforce.

What has been done

Participants received workshop and individual instruction on personal development and work preparedness.

Results

Participants increased their ability to interview successfully and enhanced confidence and resume writing skills.

4. Associated Knowledge Areas

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

Outcome #8

1. Outcome Measures

Through 'Women at the Crossroads' participants will prepare a letter of application, build a personal resume, conduct a mock interview, complete a job application template and assemble a personal portfolio in preparation for an actual entry level employment interview

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	45	40

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community benefits from residents being gainfully employed.

What has been done

Workshops and individual assistance were provided to enhance employability of residents.

Results

All participants completed requirements to increase their probability of self or other employment. There was a 10% increase in employment.

4. Associated Knowledge Areas

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

Outcome #9

1. Outcome Measures

Through 'Women at the Crossroads', participants will explore the impact that poise, personality, personal appearance, positive attitude and self-confidence have on enhancing family and workforce dynamics. As a result of their experiences, participants will select and model appropriate dress, and prepare and present a personal goals statement:

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	45	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participants increase their opportunities for employment.

What has been done

Workshops and presentations conducted to better prepare residents for employment.

Results

All participants completed requirements to prepare for employment. There was a 10% increased probability of self and other employment

4. Associated Knowledge Areas

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

Outcome #10

1. Outcome Measures

Through 'Women at the Crossroads', participants will develop a personal budget, establish a checking account, develop a living will and explore the benefits of investing

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	30	26

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participants will increase self-sufficiency as they better understand personal finances.

What has been done

Presentations were conducted on budgeting, checking and investing possibilities.

Results

Participants started a checking account and expressed an interest in other financial management information.

4. Associated Knowledge Areas

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

Outcome #11

1. Outcome Measures

Through 'Women at the Crossroads', participants will learn about health issues impacting women, complete personal health screenings, identify nutritious foods and practice healthy eating habits

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	45	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Knowledge and skills relative to good nutrition practices diminishes the incidence of chronic disease

What has been done

Workshops and presentations on healthy eating habits, diabetes and identification of nutritious foods.

Results

50% of participants indicated that they now utilize healthier eating and food preparation practices in general.

4. Associated Knowledge Areas

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

Outcome #12

1. Outcome Measures

Through 'Women at the Crossroads', participants will build leadership skills needed to become effective volunteer leaders

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	20	12

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Leadership development is important to the entire community.

What has been done

Young women were exposed to the importance of good leadership skills and volunteerism.

Results

15% of participants continue to volunteer in CES programs.

4. Associated Knowledge Areas

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

Outcome #13

1. Outcome Measures

As a result of graduating and being certified through the 'Women at the Crossroads' series, participants will successfully enter the workforce and/or improve their quality of living

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	45	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Enhanced quality of life through gainful employment impacts the entire community.

What has been done

Residents are experiencing more confidence in job searches and related skills, especially utilizing computer skills.

Results

Three persons have found employment and developed more confidence to pursue self and other employment.

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Other (Peer Evaluation)

Evaluation Results

Pre-post data instruments have been used. Anecdotal information has been favorable.

Key Items of Evaluation

Focus continues to be placed on adequate pre-post measures, informal methods of data collection and follow-up interviews.

V(A). Planned Program (Summary)

Program # 12

1. Name of the Planned Program

4-H Summer Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	2.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
250000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
3000	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Developed digital newsletter
- Prepared appropriate curricula and gathered all materials, supplies and equipment needed to carry out objectives
- Promoted other 4-H/Youth Development opportunities.
- Provided orientation and training for summer camp staff and volunteers.
- Provided computer technology, sign language, sewing, mathematics, science and nutrition.
- Conducted parenting workshops to assist parents in developing nurturing relationships with their children, improved communications and supported their development as a whole child.
 - Utilized multi-media outlets to promote 4-H/Youth Development programs to attract potential youth.
 - Supported summer counselors/staff in implementation of selected programs.
 - Facilitated closing program to showcase program accomplishments.

2. Brief description of the target audience

- School-aged youth residing in the Virgin Islands,
- 4-H members, volunteer leaders and their parents
- Public and non-public high school students needing community service hours to fulfill graduation requirements,
- Clientele and staff being served through fellow UVI, CES and AES programs
- High school and college students seeking summer employment
- Educators interested in summer employment

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	200	2500	350	5000
Actual	300	3010	775	6200

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

Patent Applications Submitted

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of digital newsletters promulgated

Year	Target	Actual
2009	5	9

Output #2

Output Measure

- Number of workshops, presentations and demonstrations facilitated or conducted

Year	Target	Actual
2009	25	80

Output #3

Output Measure

- Number of parents attending workshop(s)

Year	Target	Actual
2009	40	131

Output #4

Output Measure

- Number of teachers and students employed

Year	Target	Actual
2009	40	65

Output #5

Output Measure

- Number of students completing/meeting community service requirements as counselors in training

Year	Target	Actual
2009	4	8

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of children enrolled and reported on ES-237 as 4-H members in summer camp programs
2	Number of youth learning basic computer competencies
3	Number of youth building entrepreneurship skills
4	Percentage of youth adopting healthy lifestyles strategies
5	Percentage of participants constructing container or small gardens
6	Percentage of youth demonstrating leadership and life skills
7	Percentage of employees reporting successful use of counselor training and experience in future employment endeavors
8	Number of youth demonstrating knowledge gained, skills learned, positive attitudes

Outcome #1

1. Outcome Measures

Number of children enrolled and reported on ES-237 as 4-H members in summer camp programs

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	400	250

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Enrollment data helps all entities deliver quality programs and appropriate enrollment criteria.

What has been done

4-H enrollment information is maintained by the state/territory's 4-H Office.

Results

Summer program enrolled 250 youth, ages 5-14 on St. Croix.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Number of youth learning basic computer competencies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	250	275

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Acquisition of computer skills by youth increases their ability to compete in a global marketplace and will prepare them for more effective contributions in their future.

What has been done

Computer technology is offered as an educational session for all summer camp program youth.

Results

Computer labs developed 12 weekly newsletters; all youth were exposed to the internet and e-mail skills, net etiquette and word processing. Older youth were introduced to Excel, PowerPoint and personal web pages.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of youth building entrepreneurship skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	400	398

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

One of the major goals of 4-H locally and nationally is to encourage and promote entrepreneurship.

What has been done

Mini-Society, an experiential entrepreneurship program of the Kauffman Foundation, is offered to all participants.

Results

All youth enrolled in the program created products or services to be displayed during the program's Market Day. In addition, they created their own community and served in a variety of leadership positions in their community and developed other entrepreneurship skills, knowledge and attitudes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #4

1. Outcome Measures

Percentage of youth adopting healthy lifestyles strategies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	90	250

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a strong correlation between healthy youth and their sense of self-worth and success which is fostered through the 4-H program philosophy and activities.

What has been done

Youth participated in activities focused on healthy lifestyles specifically good nutrition practices and food safety.

Results

Youth participated in activities focused on healthy lifestyles, specifically good nutrition practices and food safety.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5

1. Outcome Measures

Percentage of participants constructing container or small gardens

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	35	56

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

4-H recognizes that gardening increases activity levels, heightens awareness of fresh, locally grown produce, and gets young people involved in hands on science, mathematics and other academic areas in a fresh and exciting way.

What has been done

Youth enrolled in two camp groups planned and implemented gardening components in their programs.

Results

All youth successfully planted over 325 vegetable seeds resulting in each person taking home seedlings to begin their home garden. Four individuals indicated that they had transplanted their seedlings.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6

1. Outcome Measures

Percentage of youth demonstrating leadership and life skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	75	111

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Youth are encouraged to become caring, contributing members of the community through development of life skills in the 4-H Program.

What has been done

All summer program volunteers and staff were trained to incorporate life skills development through experiential learning in the summer program.

Results

All youth enrolled had the opportunity to demonstrate or display what they learning during Open House and Closing Program activities.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #7

1. Outcome Measures

Percentage of employees reporting successful use of counselor training and experience in future employment endeavors

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	60	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Good decision making skills are crucial to positive youth development and helping people develop the necessary coping skills to be successful later in life.

What has been done

Throughout the summer program, guest speakers discussed the importance of learning refusal skills, conflict resolution strategies and sound decision making skills with focus on knowledge, skills and attitudes.

Results

Youth employed conflict resolution strategies learned in the summer program to defuse potentially volatile situations. Positive feedback was received by parents and guest speakers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #8

1. Outcome Measures

Number of youth demonstrating knowledge gained, skills learned, positive attitudes

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	400	425

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participation in the summer program provided youth with an opportunity to learn and grow in a safe, nurturing environment for six weeks during the summer.

What has been done

There are several opportunities during the summer program where youth can share the knowledge learned, skills gained, and healthy attitudes developed. Youth often volunteer in other 4-H activities throughout the year.

Results

Participants took part in planning and implementing program activities, Open House and the Closing Program. Youth served as Masters and Mistress of Ceremony for the closing program and played other critical roles.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

Revisions being made to data collection instruments.

Key Items of Evaluation

Revisions being made to pre-post measure instruments and end program evaluation.

V(A). Planned Program (Summary)

Program # 13

1. Name of the Planned Program

4-H/Youth Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	5%			
724	Healthy Lifestyle	5%			
801	Individual and Family Resource Management	5%			
802	Human Development and Family Well-Being	15%			
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	5%			
806	Youth Development	65%			
Total		100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	2.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
70000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
90000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Developed 4-H web page, newsletter, materials, workshops, presentations and demonstrations that provided information about 4-H/Youth Development opportunities. Set up 4-H information booths at World Food Day, St. Thomas/St. John

Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix).

- Provided orientation, training for teen and adult volunteers, and 4-H members to effectively work with club officers and program committees.
- Conducted parenting workshops to assist parents in developing nurturing relationships with their children, improving communications and supporting their development as a whole child.
- Utilized multi-media outlets to promote 4-H/Youth Development programs to attract potential youth.
- Facilitated formation of program/project development committees charged with reviewing needs assessment, prioritized program initiatives within designated interest clusters, identifying potential volunteers, identifying program resources, serving as trainers, mentors and evaluators, and acting as 4-H program advocates.
- Collaborated with government departments, non-profit agencies, community-based programs and foundations, and special interest groups to support 4-H program/project development.
- Oriented, trained and utilized collegiate 4-H members and teens as vibrant, dynamic and competent leaders.
- Established a 4-H Honor Club program to encourage active involvement in all aspects of the 4-H program.
- Ensured that all 4-H units fulfill 4-H Club Charter guidelines as promulgated by the National 4-H Office.

2. Brief description of the target audience

- School-aged youth residing in the Virgin Islands,
- Current and newly recruited 4-H volunteer leaders,
- Public and non-public high school students needing community service hours to fulfill graduation requirements,
- Clientele and staff being served through fellow UVI, CES and AES programs.
- Parents of current 4-H club members and summer program participants.
- UVI students,
- Youth and adults (general public) responding to multi-media 4-H volunteer campaign,
- Youth and adults indicating interest in 4-H volunteer leadership at World Food Day and fairs.
- Departments, agencies, clubs, and programs working with 4-H.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	400	2500	1500	5000
Actual	490	2850	2200	6218

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

Year: 2009
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of print media tools such as web pages, newsletters, brochures and fact sheets promulgated

Year	Target	Actual
2009	5	4

Output #2

Output Measure

- Number of workshops, presentations and demonstrations conducted

Year	Target	Actual
2009	25	30

Output #3

Output Measure

- Number youth and adult volunteer leaders, and 4-H members trained in club leadership, organization and management

Year	Target	Actual
2009	80	30

Output #4

Output Measure

- Number of partnerships, collaborations or cooperative agreements formed

Year	Target	Actual
2009	5	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of children enrolled and reported on ES-237 as 4-H members in organized clubs, special interest or short-term projects groups and school enrichment programs
2	Percentage of units fulfilling 4-H charter guidelines and receiving official charters
3	Number of youth enrolled in special interest or short-term projects formed as a result of program development committee work groups
4	Percentage of clubs adopting, implementing or utilizing effective leadership strategies
5	Percentage increase in male enrollment
6	Percentage of youth adopting leadership and life skills
7	Percentage of clubs or units engaging in community service activities
8	Number of 4-H members volunteering to serve as club officers, committee members, junior leaders or teen leaders, or advisory council representatives
9	Number of youth demonstrating knowledge gained, skills learned, positive attitudes adopted by taking part in fairs, 4-H Project Expo and other events designed to showcase individual achievement and accomplishments

Outcome #1

1. Outcome Measures

Number of children enrolled and reported on ES-237 as 4-H members in organized clubs, special interest or short-term projects groups and school enrichment programs

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	900	525

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Enrollment data helps all entities deliver quality programs and meet appropriate enrollment criteria.

What has been done

4-H enrollment information is maintained by the state 4-H office.

Results

There are five organized 4-H clubs on St. Croix; and one special interest group on St. Thomas enrolling 225 youth; volunteer leadership is provided by 18 adults and three teens.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Percentage of units fulfilling 4-H charter guidelines and receiving official charters

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	90	75

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The charter process helps 4-H clubs fulfill national 4-H mandates and maintains the 4-H image.

What has been done

Based on cultural relevance of Carnival in the Virgin Islands and the Caribbean Region, interested youth and adults formed a 4-H troop.

Results

Three community based clubs have partially completed the charter process for the current program year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of youth enrolled in special interest or short-term projects formed as a result of program development committee work groups

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	160	85

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

With leadership from interested adults, special interest groups attracted youth based on interests. This approach often leads to more formal involvement in 4-H clubs, programs and activities.

What has been done

Based on cultural relevance of Carnival in the Virgin Islands and the Caribbean region, interested youth and adults formed a 4-H Carnival Troupe.

Results

Thirty-two youth and five adults discovered the history and cultural relevance of Carnival. Their marketing, costume design and choreography skills resulted in a local sponsorship.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #4

1. Outcome Measures

Percentage of clubs adopting, implementing or utilizing effective leadership strategies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	90	75

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The 4-H program recognizes that effective leaders are important to the success of any group or club.

What has been done

Leadership styles, strategies and skills were emphasized during leader training; club officers also received training.

Results

With adult leadership, five 4-H clubs were led by a team of elected club officers who practiced their leadership skills.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5

1. Outcome Measures

Percentage increase in male enrollment

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	10	22

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Young black males continue to face many challenges in the Virgin Islands. Involvement in positive programs, i.e. 4-H has been proven to be a successful coping strategy that helps them meet these challenges.

What has been done

Specific 4-H projects that would attract males have been developed.

Results

The Science Olympiad Special Interest Group was introduced at another school. Twenty youth enrolled; 15 were male. Male enrollment in the 4-H programs increased by 5% from the previous year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6

1. Outcome Measures

Percentage of youth adopting leadership and life skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	75	102

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Developing good life skills was the central focus of all 4-H programs - to help young people become caring, contributing and conscientious members of the community.

What has been done

Volunteers were trained to incorporate life skill development as an integral part of club programming.

Results

Over 200 youth completed displays or illustrated talks, showed animals at the fair and demonstrated what they learned as a result of their involvement in 4-H.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #7

1. Outcome Measures

Percentage of clubs or units engaging in community service activities

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	100	125

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community service helps youth define and connect to their community and give back to those who support them.

What has been done

As a part of their clearly club plan, each club is expected to assist the local 4-H office with community service outreach projects. In addition, each club is required to plan at least one community service project.

Results

4-H clubs helped collect over 2,500 of food during World Food Day, provided Thanksgiving baskets to needy families, presented Christmas gifts to orphans, and picked up bags of trash at local beaches. Three new 4-H members were

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #8

1. Outcome Measures

Number of 4-H members volunteering to serve as club officers, committee members, junior leaders or teen leaders, or advisory council representatives

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	15	28

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Program success is partially exemplified by members being willing and able to assume leadership roles.

What has been done

Youth were given opportunities to take part in various leadership responsibilities with their clubs, on committees or with different extracurricular organizations or groups.

Results

One teen served on the CES Advisory Council, there are three teen leaders, nine club officers, and over nine teens involved in various committees within and beyond the 4-H Program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #9

1. Outcome Measures

Number of youth demonstrating knowledge gained, skills learned, positive attitudes adopted by taking part in fairs, 4-H Project Expo and other events designed to showcase individual achievement and accomplishments

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	450	245

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Youth participation in these events helps 4-H members bring together all the skills they have gained as a result of their involvement in 4-H programming.

What has been done

The 4-H office facilitated member participation in the annual VI Agriculture and Food Fair in February and World Food Day program in the fall.

Results

Club members successfully completed educational exhibit booth; 16 members exhibited 22 small livestock projects; 30 participated in a 4-H Carnival and Troupe and received 1st place.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
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
- Government Regulations
- Competing Public priorities

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

No evaluation to date, but pre-post measures are being explored.

Key Items of Evaluation

Planned evaluation includes pre/post test measures and informal methods.

V(A). Planned Program (Summary)**Program # 14****1. Name of the Planned Program**

Eastern Caribbean Extension Outreach and Interchange

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
603	Market Economics	10%			
606	International Trade and Development	10%			
903	Communication, Education, and Information Delivery	80%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.0	0.0
Actual	1.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
42112	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
53000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Professional linkages were established with other agricultural organizations in the Eastern Caribbean. Shortcourses, workshops, and training sessions were conducted for agricultural specialists, youth leaders and volunteers. Extension specialists provided consultations on food and nutrition programs, sustainable agriculture, horticulture, and livestock production and management. Breeding animals were exchanged with other islands through the Breeders Exchange Program. A directory of individuals and institutions in agricultural research and development in the Eastern Caribbean was expanded and updated. UVI/CES telecommunication systems for collaborative training with other regional institutions were utilized to train extension specialists and agents. Proceedings, newsletters and other publications were published for CFCS, CACHE, and CARAPA. CES assisted in the planning and execution of international and regional meetings for CFCS, CACHE, and CARAPA.

2. Brief description of the target audience

The target audience of this program were extension specialists, extension agents, district supervisors, extension educators and research scientists in the Eastern Caribbean. Producers and farm operators were also targeted for this oprogram. Regional institutions, homemakers and youth were also targeted.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	700	2000	300	1500
Actual	600	2000	350	1000

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

Patent Applications Submitted

Year: 2009

Plan: 0

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Agricultural linkages will be established with five organizations in the Eastern Caribbean countries.

Year	Target	Actual
2009	5	5

Output #2

Output Measure

- International and regional workshops will be coordiinated.

Year	Target	Actual
2009	5	5

Output #3**Output Measure**

- Proceedings, newsletters and other publications will be published for CFCS, CACHE, and CARAPA.

Year	Target	Actual
2009	3	1

Output #4**Output Measure**

- Update and expand directory of individuals and institutions in agricultural research in the Eastern Caribbean.

Year	Target	Actual
2009	1	1

Output #5**Output Measure**

- Animal breeding stock will be exchanged between countries in the Eastern Caribbean.

Year	Target	Actual
2009	40	45

Output #6**Output Measure**

- Extension specialists will provide consultation on sustainable agriculture, horticulture and livestock production and management.

Year	Target	Actual
2009	5	7

Output #7**Output Measure**

- Provide forum for training youth leaders and volunteers (amount of youth trained).

Year	Target	Actual
2009	300	150

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Agricultural linkages established with regional organizations
2	Interantional and regional workshops coordinated
3	Amount of animal breeding stock exported to Eastern Caribbean countries
4	Directory of individuals and institutions in agricultural research in the Eastern Caribbean
5	Proceedings, newsletters and other publications published for CFCS, CACHE, and CARAPA

Outcome #1

1. Outcome Measures

Agricultural linkages established with regional organizations

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Agricultural scientists and administrators in the Caribbean region.

What has been done

Network and linkages continued to be strengthened and collaborations are ongoing.

Results

Network has made communication and collaboration easier. More linkages has been established.

4. Associated Knowledge Areas

KA Code	Knowledge Area
606	International Trade and Development
903	Communication, Education, and Information Delivery

Outcome #2

1. Outcome Measures

Interantional and regional workshops coordinated

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	5	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Scientists, administrators and communities.

What has been done

Workshops and training were coordinated in three countries.

Results

CFCS held its annual meeting in St.Kitts with CACHE.

4. Associated Knowledge Areas

KA Code	Knowledge Area
606	International Trade and Development
903	Communication, Education, and Information Delivery

Outcome #3

1. Outcome Measures

Amount of animal breeding stock exported to Eastern Caribbean countries

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	40	45

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Livestock producers, Department of Agriculture, breeding centers and purebred producers.

What has been done

Breeding animals were shipped to St.Martin, Tortola and St. Eustatius.

Results

This helped breeders improve their genetic pool.

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics
606	International Trade and Development

Outcome #4

1. Outcome Measures

Directory of individuals and institutions in agricultural research in the Eastern Caribbean

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	1	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Caribbean scientists, administrators, Caribbean organizations, Caribbean governments.

What has been done

Directory updated.

Results

The directory was used by Caribbean scientists and producers who were looking for assistance.

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

Proceedings, newsletters and other publications published for CFCS, CACHE, and CARAPA

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy

Brief Explanation

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)

Evaluation Results

Evaluations have not been completed

Key Items of Evaluation