

2010 University of the Virgin Islands Extension Annual Report of Accomplishments and Results

Status: Accepted

Date Accepted: 06/22/2011

I. Report Overview

1. Executive Summary

The Virgin Islands Cooperative Extension Services accomplished most of the objectives and goals that were outlined in the 14 programs that were developed as 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 lives of many Virgin Islanders. This summary is group under the five national priorities of the National Institute of Food and Agriculture (NIFA).

Goal 1: Global Food Security and Hunger

Programs under this initiative support agriculture production and improvement in the capacity to meet growing food demands in the Virgin Islands and the fight against hunger by addressing food security issues.

The Small Livestock and Beef Program conducted workshops and training sessions in order to familiarize producers with what is available to them for treatment and techniques to diagnose parasite issues. Due to financial constraints, many farms are not maintaining their identification levels because of a failure to purchase tags and equipment. Training sessions/workshops were conducted for the livestock community to educate them as to the proper use and methods of identification available to them. This initiative saved producers' money by assisting them to identify their animals and having a successful breeding program. Workshops were also conducted to provide producers with information on proper housing and nutrition for livestock and educate them on how to improve their pastures. Participants in workshops demonstrated increase in knowledge of proper livestock management techniques after attending the sessions. Producers are now utilizing recommended forage varieties in re-seeding their pastures and have improved their nutritional program significantly on their farms.

The Sustainable Agriculture Program conducted short courses, workshops, and demonstrations to inform producers about sustainable production practices, including composting, drip irrigation, and soil preparation. Fifteen members of the Virgin Islands Farmers Cooperative participated in sustainable production activities such as proper soil preparation, laying out drip irrigation systems, transplanting, sustainable pest control and other subjects. These producers reported an increase in income of \$500/person. Overall, ninety percent of participants reported an increased awareness of practices that would assist them to make sound production decisions that would ensure sustainability. An equal number of the participants indicated that they plan to seek further information on sustainable crop production practices. Twenty-six farmers and agriculture professionals participated in a discussion of the results of the cover crops research conducted by the Agricultural Experiment Station staff. Ninety-five percent of the participants indicated that they became more aware of the benefits of incorporating cover crops into their management practices. They also reported a significant increase in yield giving them an increase in profit. All of the participants also indicated an increased awareness of the types of cover crops available to be used in sustainable soil management. Two hundred fifty eight young people and thirty two adults increased their awareness of specific safety practices and procedures while participating in the Progressive Agriculture Safety Day. They were also supplied with literature and other resources to augment the learning experience.

The Urban Forestry Program continues to assist local residents in the proper maintenance and use of trees in public places. The annual Woodworkers Exposition was held to show case the economic benefits of recycling trees, and parts of trees that would have otherwise gone into landfills. Approximately six hundred residents became aware of the economic benefits of turning felled trees and parts of trees into potential income generating products. In a survey conducted with the persons who attended the Exposition, ninety- eight percent of them reported that they are now more aware of the economical and environmental benefits of trees. The Woodworkers Exposition yielded an average of \$2,400 per participant. In an attempt to help parents to become more involved with their children's education, the VI Department of Education launched the Parents University. The goal was to provide parents with the necessary tools and information to be able to assist their children with homework. This provided an opportunity to provide parents with information about trees that would augment the lessons learned by the students in the classroom. The nine parents who attended the Parent University class increased their awareness of how trees affect their lives other than by providing shade and modifying temperature. Appearances were made on radio talk shows to get information across to residents whose trees had been damaged by storms. Technical advice was also provided to residents through onsite visits and via telephone. The Urban Forestry Program established partnerships with public and private agencies, community leaders, and groups to provide education, information, and technical advice to the general population. This was achieved through the use of publications, seminars, mass media, field days and exhibits as well as personal contacts. The targeted audiences were public and private landowners and agencies, community leaders and organizations, youth groups, and civic organizations. Educational classes, workshops, and demonstrations were held to educate and inform the public about tree identification, tree pruning, tree care and urban forest management and economic opportunities available through using and or recycling forest resources. Approximately 430 individuals were directly impacted and thousands more indirectly by the display and interaction with Extension staff. They also learned about placing the right tree in the right place during the question and answer session. Seventeen individuals representing two agencies participated in the two day "Pruning Trees for Hurricane Preparedness" workshop. Sixty three youth and eight adults from the St. Croix Waste Management Authority summer cleanup program and sixty youth and eight adults from the St. Thomas Waste Management Authority Clean and Preen summer cleanup program learned about the benefits of trees to the community and the environment. The St. Croix group of sixty students also learned about the fundamentals of pruning trees including a live demonstration. Extension staff provided guidance to the seven member crew of the Department of Public Works and four Water and Power Authority line clearing crew as they worked to upgrade the trees and the rest of the landscape in the Educator's Park.

The Urban Gardening Program conducted classes, workshops, and demonstrations to educate and inform the public about how to create gardens, proper garden management, and low cost efficient technologies practices and principles in gardening. Fifty-one parents increased their level of knowledge of the benefits of gardening for themselves and their children. Approximately ninety-five percent of participants experienced a savings of \$350 in the cost of certain commodities as a result of this program. Extension staff and three volunteers have been integrally involved in the development of a community garden in the Estate Tutu Valley community on St. Thomas. They have been working after hours and on weekends with nine young black males to create a garden made of tires and raised beds constructed with recycled wooden streetlight poles. This program has provided an income of \$1,200 for each participant from the sale of produce. Extension staff continued to work with forty residents throughout the territory in creating and maintaining their gardens as part of the Home Grown gardening project. Extension staff became engaged with The Family Resource Center for a container gardening project. The "Rite of Passage for Boys" gardening project was launched during this period. Twelve boys and three adults are involved in growing tomatoes, eggplants and herbs in containers. The CES' Children Youth and Family at Risk (CYFAR) program, in partnership with the VI Housing Authority have commenced a project designed to expose young people to the joys and benefits of gardening. Fifteen (15) youth from the CYFAR Contant Knolls housing community created their first tire garden. This community lacks areas with open flat soil,

thus a tire garden was an ideal fit for this area. Extension staff led in selecting the site, procuring the tires, and organizing the children to fill the tires with potting soil and transplanting seedlings. A community garden has been produced which yielded produce for the Saturday Farmers' Market.

Goal 2: Climate Change

Projects under this goal generate knowledge to develop an agriculture system that maintains high productivity in the face of climate changes. These programs assist the producers to plan for and make decisions to adapt to changing environments and sustain economic vitality.

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 continues to focus 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, schools, corporate groups, and the general public. Cistern care was also promoted during those presentations and during individual consultations. CES partnered with the VI Department of Planning and Natural Resources and the VI Waste Management Authority on St. Croix to provide Onsite Wastewater Treatment System information to homeowners. A total of 33 individuals were trained and 25 participants passed the licensing test and were certified as septic inspectors. 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.

Goal 4: Childhood Obesity

Programs in this area ensure that nutritious foods are affordable and available and provide guidance so that individuals and families are able to make informed, science-based decisions about their health and wellbeing.

The nutrition program developed culturally sensitive nutrition and health-related education products and resources that were made available to professional, students and the general public. A tropical fruits poster was produced and continued to be distributed throughout the territory. This poster utilizes a five-star scale to indicate the potassium, fiber, and vitamin C content in each of the tropical fruits. A total of 210 posters were distributed to individuals, organizations, and schools in the Virgin Islands. About 60 participants who attended a six-week nutrition and diabetes training adopted and maintained at least one healthy lifestyle. These practices included increased consumption of fruits, vegetables, milk, and the grain group. Basic nutrition information was disseminated to children through a series of lessons in six weeks. This was part of a school enrichment program. In a pre- and post-test that was administered to determine changes in knowledge regarding basic nutrition information, 75% of the participants were able to answer all the basic nutrition questions correctly. A survey of participants in a nutrition training of the relationship between food intake, physical fitness, and stress management was conducted. Participants expressed an increase awareness of the relationship of food intake and disease prevention.

Goal 5: Food Safety

These programs worked to reduce the incidences of food borne illness and provide a safer food supply by addressing and eliminating causes of microbial resistance to contaminants, educating consumers and food safety professionals and developing food processing technologies to improve safety.

The programs under this goal were Basic Food Safety Education, EFNEP and EFNEP Youth. The food safety program focuses attention on the importance of safe food handling and preparation in home kitchens; as well as educating low income families about basic nutrition and behavior change practices. Basic food safety information was disseminated through classes, demonstrations, experiential activities and lectures. The EFNEP Program continues to target low-income at risk clientele. 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. Basic food safety information was disseminated to children through a series of lessons over a six-week period. A pre-post test program measure was administered to summer camp participants. Sixty-five percent of youth answered queries correctly before receiving food safety information. Post test results yielded eighty percent correct.

Other programs that were conducted during this period include 4-H Summer Camp, 4-H Volunteer Developmental and Management, and 4-H Youth Development.

The 4-H Developmental and Management Program continues to recruit and develop volunteers to lead and establish the 4-H clubs in the community. Volunteer leaders received training on leadership styles, strategies and skills. As a result, they were expected and encouraged to model and foster leadership in their respective clubs and programs. A total of 26 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 were a total of ten 4-H projects offered. The two new 4-H clubs established last year, one school and one community based club continues to grow. The Virgin Islands 4-H Summer Program drew students from St. Croix and St. Thomas in a six weeks program. Two hundred and sixty three students enrolled in the program on St. Croix and St. Thomas. Sixty teachers and students were employed. Courses were offered on the science of agriculture, natural resources and environmental education, energy conservation and education, technology applications, entrepreneurship and healthy lifestyles.

The Computer Training and Technology Program conducted a series of eight week Basic Computer Training Courses that taught participants how to use Microsoft Windows, Microsoft Word, E-mail, and search for information using the Word Wide Web. 100% of individuals that participated in the program indicated that they acquired/increased their knowledge and usage of Microsoft Windows. 100% of the individuals that participated in the program indicated that they acquired/increased their knowledge and usage of Microsoft Word. 89% of individuals that participated in the program indicated that they acquired/increased their knowledge and usage of email accounts. 92% of individuals that participated in the program indicated that they acquire/increase their knowledge and usage of the internet. 100% of individuals that participated in the eight week program indicated that they acquired/increased their knowledge and usage of Microsoft Excel. 90% of individuals that participated indicated that they acquired/increased their knowledge and usage of Microsoft PowerPoint. This program graduated a total of 167 individuals.

CES established professional linkages with other agricultural organizations in the Eastern Caribbean. Short courses, workshops, and training sessions were conducted for agricultural specialists, youth leaders and volunteers. Three regional meetings were held and over 300 scientists attended those meeting. Networks were established among the scientists. Extension specialists provided consultations on food and nutrition programs, sustainable agriculture, horticulture, and livestock production and management. Animal breeding stock was exchanged with other islands through the Breeders Exchange Program. A total of 275 animals were exchanged through this program. This consisted of 55 White Hair sheep and 40 purebred

boar goats. Two hundred five-week old broiler chicks were also exported to the island of St. Eustatius. This assisted producers on the different islands to improve on their animals for breeding thereby increasing productivity. A directory of individuals and institutions in agricultural research and development in the Eastern Caribbean were expanded and updated. UVI/CES telecommunication systems for collaborative training with other regional institutions were utilized to train extension specialists and agents. CES assisted in the planning and execution of international and regional meetings for the Caribbean Food Crop Society.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	32.5	0.0	0.0	0.0
Actual	32.4	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, the Provost, 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
959371	0	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	957371	0	0	0
Actual Matching	1154515	0	0	0
Actual All Other	141619	0	0	0
Total Actual Expended	2253505	0	0	0

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

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Small 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	20%			
302	Nutrient Utilization in Animals	15%			
307	Animal Management Systems	30%			
311	Animal Diseases	10%			
312	External Parasites and Pests of Animals	10%			
315	Animal Welfare/Well-Being and Protection	10%			
603	Market Economics	5%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.5	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
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
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- A "Locally Produced" program was started to promote the purchase and consumption of locally produced animal products
- A parasite monitoring program was continued for all livestock farms to document parasite populations and concentrations, with data being used in tick control programs
- Test sites were set up and monitored for enhanced forage evaluation in pasture and drought conditions
- A program was initiated to demonstrate to producers the health and financial advantages of proper and adequate housing for livestock
- Methods of nutrition evaluation were demonstrated to producers so that they can determine effects on reproduction and performance

2. Brief description of the target audience

- Virgin Islands Livestock Producers
- Virgin Islands Consumers
- Virgin Islands Youth

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	450	4000	550	500
Actual	520	4500	580	650

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	4	13

Output #2

Output Measure

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

Year	Target	Actual
2010	2	5

Output #3

Output Measure

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

Year	Target	Actual
2010	150	152

Output #4

Output Measure

- Farms would be visited for parasite monitoring and evaluation

Year	Target	Actual
2010	25	40

Output #5

Output Measure

- Animals would be visited to weigh animals to monitor performance

Year	Target	Actual
2010	10	15

Output #6

Output Measure

- Animal production would be monitored

Year	Target	Actual
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2010

24

25

Output #7

Output Measure

- Implement a 'Buy Local' campaign with local farmers cooperative for use by producers in the community

Year

Target

Actual

2010

1

1

Output #8

Output Measure

- Provide training per year to farmers in identification methods

Year

Target

Actual

2010

1

2

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

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

Outcome #1

1. Outcome Measures

Continue to work toward selecting 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
2010	2	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

This is an issue for local farmers. Improved pastures allow farmers to spend less money on supplemental feed for their livestock while being able to produce a higher quality product for market and better animals for replacements in their breeding herd.

What has been done

Sections of pastures were re-seeded with improved types of grasses in order to establish better pasturage for the animals.

Results

Farmers' pastures are growing nicely and are ready for the initial grazing by the livestock.

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

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
2010	5	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local farmers and consumers. In order to supply quality product to the consumer, farmers need to be able to control the negative effects of parasites on their animals.

What has been done

Workshops and training sessions have been conducted in order to familiarize farmers with what is available to them for treatment and techniques to diagnose parasite issues.

Results

Moderate attendance at the workshops indicate more work is needed in this area. Those that attended have put the gained knowledge to use in their livestock operations.

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 #3

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
2010	5	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local farmers and consumers.

What has been done

The local farmers cooperative and other livestock farmers have begun to regularly carry meat and eggs to the market on Saturdays.

Results

The meat and eggs sell out regularly. Farmers are producing a superior quality of products.

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics

Outcome #4

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
2010	10	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Better management of herd inventory leads to a more profitable enterprise through reduction of costs associated with herd health and feeding. Non-productive and/or unthrifty animals utilize resources that the farmer can use elsewhere. By culling these animals from the herd/flock, the farmer can save money. The public benefits from the reduced cost of production through better prices at the market. Also, animals running at-large and causing damage can be identified.

What has been done

Two training sessions/workshops were conducted for the livestock community to educate them as to the means and methods of identification available to them. Farm visits were made to train individuals.

Results

Due to financial constraints, many farms are not maintaining their identification levels because of a failure to purchase tags and equipment. Work to help is ongoing.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #5

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
2010	10	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Swine raised in appropriate facilities are healthier and grow faster than others. Farmers can realize more profit with a faster turn around. Improper swine facilities can lead to contamination of public water supplies, disease outbreak from contaminated areas, and adverse environmental impacts.

What has been done

A workshop was conducted including information on proper housing. Site visits were made to aid farmers in determining what was needed on their farms.

Results

Some progress has been made on two farms toward the recommendations. Resistance has been encountered in the old traditional farms for several reasons, including financial. The work is ongoing.

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

- Other ()

Brief Explanation

Participants in workshops demonstrated an increase knowledge of proper livestock management techniques after attending the sessions. Several farmers requested advice on types of identification available to them. Also questions regarding housing were raised. Farmers asked for assistance and recommendations for forage varieties in re-seeding their pastures.

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

- Identifications of animals
- Recordkeeping skills
- Housing
- Pasture Management

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	3.2	0.0	0.0	0.0
Actual	3.2	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
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
11932	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

1. Shortcourses, workshops, and demonstrations were conducted to disseminate information about recommended, research based sustainable production practices, including composting, drip irrigation, etc.

2. Publications (e.g. fact sheets) and newsletter articles were developed and published to disseminate information regarding sustainable production and marketing practices.

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

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

5. Workshops and other projects were conducted in partnership with other entities to implement strategies to increase farm water supply and enhance the efficient use of this resource.

2. Brief description of the target audience

The program's general target audience consisted of crop and livestock producers, outreach professionals from government and academic institutions, students, and young adults who aspire to be farmers. The primary audience 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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	500	7000	300	600
Actual	748	10500	350	1000

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	0	

Actual	0	0	0
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V(F). State Defined Outputs

Output Target

Output #1

Output Measure

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

Year	Target	Actual
2010	10	12

Output #2

Output Measure

- Number of publications

Year	Target	Actual
2010	1	1

Output #3

Output Measure

- Number of announcements through print and electronic media

Year	Target	Actual
2010	7	6

Output #4

Output Measure

- Number of farm visits and telephone contacts

Year	Target	Actual
2010	50	130

Output #5

Output Measure

- Projects to increase farm water supply and water use efficiency

Year	Target	Actual
2010	1	2

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	Increase in the number of farmers who utilize value added strategies
3	Increase in water resources for producers and adoption of practices to enhance water use efficiency
4	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
2010	10	21

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 are not utilizing practices that ensure the longevity of their operation. Providing farmers with opportunities to diversify their operations is also critical in ensuring that their operations will be able to sustain the highs and lows and the periodical economical challenges that occur from time to time.

Each year, thousands of individuals are injured, hurt, or even killed on farms and around the homes from preventable accidents all across the country. Safety education will play a major role in reducing those numbers significantly.

What has been done

A 12-week short course was developed for the Virgin Islands Farmers Cooperative regarding the cultivation of selected crops. With the assistance of AES, the VI Department of Agriculture, and other farming related agencies the theoretical and practical sessions were developed and executed on various farms on St. Croix.

The final 12-week Introduction to Beekeeping Short course was launched in an effort to create a new set of agribusiness entrepreneurs as well as offer an alternative enterprise opportunity to existing farmers.

A seminar and field day was conducted to present the findings of the research on potential cover crops and management practices for use in the Virgin Islands.

CES sponsored the 5th annual Progressive Agriculture Safety Day at two locations in the Virgin Islands. Safety instructors and professionals in various fields provided lectures and hands on demonstrations to enlighten and instruct the participants.

Results

Fifteen (15) members of the Virgin Islands Farmers Cooperative participated in sustainable production activities such as proper soil preparation, laying out drip irrigation systems, transplanting, sustainable pest control and other subjects. Overall, ninety (90%) of participants reported an increased awareness of practices that would help them to make sound production decisions that would ensure sustainability. An equal number of the participants indicated that they plan to seek further information on sustainable crop production practices.

Twenty (20) agriculture professionals, farmers, and residents successfully completed the 12-week beekeeping training course. Forty percent (40%) have actively begun to raise bees and/or are actively engaged in an enterprise related to beekeeping.

Twenty-six (26) farmers and agriculture professionals participated in a discussion of the results of the cover crops research conducted by the Agricultural Experiment Station staff. Ninety-five percent (95%) of the participants indicated that they became more aware of the benefits of incorporating cover crops into their management practices. All of the participants also indicated an increased awareness of the types of cover crops available to be used in sustainable soil management. Sixty five percent (65%) will more than likely incorporate some type of cover crop into their soil management practices within one year.

Two hundred fifty eight (258) young people and thirty two (32) adults increased their awareness of specific safety practices and procedures while participating in the Progressive Agriculture Safety Day. They were also supplied with literature and other resources to augment the learning experience.

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

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
2010	5	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Because farmers occasionally plant more crops than they have a ready market for and/or are unable to sell all of the crops or livestock within a reasonable time, they then, have to decide what to do with the surplus. Their options include dumping, giving it away, composting, or adding value to the product and sellin it in a different form. The latter has the potential of increasing the overall income of farmers. 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. Local chefs have indicated that they would buy local produce if it were available. Successful farmers want to expand market opportunities but often don't know how to access the hospitality market.

What has been done

During the 12-week Introduction to Beekeeping Short Course, participants were introduced to products, other than honey, that could be derived from the hive. Participants sampled products such as lotions, salad dressings, candles, pollen and other by-products from the beehive. Each year the annual World Food Day event is held that usually features a fruit, vegetable, and livestock. 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 postharvest 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 to all participants to take home and try at their own convenience. Additionally, Mango Melee along with two agriculture and food fairs were avenues used for the dissemination and display of value-added information, demonstrations and products. Cooperative Extension Service staff assisted in the sourcing of local crops and products for the annual Ultimate Chef Challenge held during the Virgin Islands Carnival.

Results

Twenty (20) agriculture professionals, farmers, and residents became more aware of possible value added product that could be a source of new or additional income. Three (3) of the twenty are actively pursuing opportunities to develop products from their hives along with the honey production.

At the annual World Food Day event, hundreds of residents including farmers, agriculture professional and young people gained a greater awareness of the many uses of breadfruit and beets as they sampled cookies, breads, dishes and drinks made from those crops.

Thousands of residents increased their knowledge of the various uses and ways of preparing mango at the Mango Melee and tropical fruit festival. They also became aware of the various flavors of different types of mangoes.

During the Ultimate Chef Challenge, six (6) chefs created dishes with ingredients, approximately 40% grown and produced by Virgin Islands farmers. Hundreds of spectators learned of the various uses for honey, and witnessed the creation of various dishes utilizing papaya, pumpkin, and local herbs. That event was a very important step in bridging the gap between the hospitality and agriculture industry.

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 #3

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
2010	25	20

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Of all the constraints and limitations to 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 farmer's management practices. Accessible sources of supplemental water are also vitally important to the successful operation of the farm.

What has been done

The Agricultural Experiment Station researchers displayed a relatively/comparatively inexpensive water storage container called a "Quick Tank". 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.

Results

More farmers and residents are now aware of this new water storage container. However there is no evidence of farmers purchasing a unit as yet. Approximately 4-6 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.

4. Associated Knowledge Areas

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

Outcome #4

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
2010	25	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural and man-made disasters occur each year in the Virgin Islands. In providing assistance, both federal and local agencies require production records of activity prior to the disaster in order to qualify for aid. If a farmer wants to borrow money for expansion, he/she is required to produce documentation of the farms profitability. However, many farmers fail to keep proper records and in some instances no records at all and thus disqualifying them from disaster aid and/or denying them the opportunity to expand their operations.

What has been done

CES partnered with the Virgin Islands Department of Agriculture, the Small Business Development Center and the Internal Revenue Bureau as they conducted two seminars; one on recordkeeping and the other on filling out the Schedule F, IRS form.

Results

Approximately eighty (80) people increased their knowledge of the importance of recordkeeping to their overall operation. Ninety-five percent (95%) are better informed on the preparation of the Schedule F tax form.

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 the instruction or 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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.8	0.0	0.0	0.0
Actual	2.8	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
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) and the Forest Stewardship Advisory Committee to promote the development of a comprehensive environmental management plans for Magens Bay and Smith Bay coastal VI Territorial Parks on St. Thomas and natural resource conservation management plans for property owners and newly acquired VI Territorial Park property in Coral Bay St. John acquired through the use of Forest Legacy Program funding and VI government. Technical assistance with habitat protection and restoration plans/procedures has also been requested by managers and regulators 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, Coral 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. 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 main media outlets used to promote NREM issues were radio and television PSAs, television video spots, local talk shows (radio & TV), presentations and newspaper articles. The CDC/CES book *Island Peaks to Coral Reefs and The Remarkable Big Trees of the Virgin Islands* tree book co-researched by CES, in its second printing, continued to be used by the Yale Coastal and Watershed Management Program, UVI's Master of Marine and Environmental Management program, and local librarians. Local librarians adapted and reprinted portions of the CES laminated VI Native Plant Factsheet series and distributed sets to local schools and senior citizen centers. 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.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	400	1000	500	1000
Actual	0	0	0	0

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: {No Data}

Patents listed

{No Data Entered}

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	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
2010	2	15

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
2010	3	2

Output #3

Output Measure

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

Year	Target	Actual
2010	200	140

Output #4

Output Measure

- Tours of VI natural areas for students and community groups

Year	Target	Actual
2010	7	3

Output #5

Output Measure

- E-education - NREM websites updated

Year	Target	Actual
2010	1	1

Output #6

Output Measure

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

Year	Target	Actual
2010	4	5

Output #7

Output Measure

- Demonstration site relating to native plants, environmental management

Year	Target	Actual
2010	2	2

Output #8

Output Measure

- PSA's

Year	Target	Actual
2010	1	0

Output #9

Output Measure

- Fairs

Year	Target	Actual
2010	2	2

Output #10

Output Measure

- TV/Media

Year	Target	Actual
2010	2	2

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
2010	3	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Magens Bay Authority and other local government agencies, Forest Stewardship Advisory Committee (U.S. Dept. of Forestry), St. Croix Environmental Association and The Nature Conservancy (NGOs), or private landowners with conservation areas are charged with managing these areas but are limited in their management resources. Hotel managers and developers are also responsible for implementing sound environmental management practices to protect their properties and critical natural resource habitats.

What has been done

CES helped partners (MBA, VI Dept. of Agriculture and the Div. of Fish & Wildlife) develop natural resource management plans. CES provided requested Information to NGOs and CZM permit applicants about BMP's to incorporate into landscape management plans, continued to encourage developers and hotel managers to protect mangroves and coastal forest, and contributed to several Forest Stewardship Program management plans that landowners (3+ acres) are required to follow to receive program benefits.

Results

With CES's assistance, MBA developed and implemented plans to remove invasive trees from two Territorial Parks and conducted a post-hurricane tree damage inventory. After CES advised MBA, TNC and adjacent land owners about the possible impacts of a proposed canopy zip line tour installation, the project was rejected. CZM major permit applicants included recommendations by CES in landscape plans submitted to CZM and DFW. In one case, it was determined that rare coastal resources would be severely impacted on a 50+ acre St. Thomas property, and development plans were abandoned. CES participated on the Forest Stewardship Advisory Committee that approved the use of Forest Legacy Program funds to purchase 300+ acres on St. John as a Territorial Park acquisition completed in 2010. A master plan (i.e. native

forest conservation) was included in the purchase agreement. Landowners enrolled in the Forest Stewardship Program followed master plans.

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 #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
2010	200	39

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 earth-change operations and construction.

What has been done

Through phone consultations, publications and site visits, CES provided clients with information about native plant conservation, environmental landscaping, native plant identification, native forest conservation, and erosion control. CES increased its contacts with professionals who are involved with various aspects of construction site planning and earth change operations and distributed the Environmental Protection Handbook (2002) produced by CES to those involved with earth-change operations.

Results

DPNR personnel (CZM, DFW, and Permits) referred permit applicants to CES for assistance with

evaluating, identifying and preserving native plant communities on proposed construction sites. CES helped contacts select native trees for project landscape plans. CES helped DPNR Enforcement officers resolve landowner conflicts related to the clearing of native plants. CES helped DFW specialists evaluate the potential impacts to native plant habitats on large tracts of government land. As a result, one 50 acre+ property was determined to have more value as a conservation area than a development site. DFW increased its ability to develop wildlife and native plant habitat management strategies with the assistance of CES. CES convinced several individual landowners to preserve, restore or cultivate native plants on their properties. The VI League of Women Voters and the Environmental Association of St. Thomas-St. John shared CES strategies for protecting native plants with specific developers.

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
2010	200	120

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 and advisory committees about how humans impact native plant habitats. CES helped the VI public library develop a series of laminated factsheets for schools and nursing homes featuring native plants and their importance. CES conducted tours and site visits to evaluate human alterations to native plant ecosystems, and at the request of the VI Senate, continued to coordinate the drafting VI tree legislation to protect trees and native forests.

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 site visits, tours, presentations and contacts with regulatory agencies. CES recommendations were included in permit applicants' landscape plans required by DPNR. DFW reports pertaining to public land development included BMPs recommended by CES. In two cases, land development was abandoned, in part, because of CES warnings that development would impact sensitive plant habitats. Clients often requested additional information about native plants/native plant communities indicating increased awareness of the issues affecting terrestrial resources.

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
2010	500	150

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Stakeholders (government personnel, developers, community groups, resource managers, educators, students) requested information about the connections between terrestrial and marine communities and watershed protection. Reasons for requests included: concern about environmental degradation, environment management in Territorial Parks, protection of coastal resources on hotel and private properties, DPNR requirements that permit applicants consult CES for technical information, class assignments.

What has been done

CES continued partnerships with UVI CDC, VI EPSCoR and the Yale U. Coastal and Watershed Management Program to investigate land-sea interconnectivity. CES contributed to the VI watershed and wetlands inventory project 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 protection.

Results

As a result of the VI wetlands and watersheds inventory, priority watersheds in need of protection have been identified, and a wetlands field guide has been completed. This information was shared with working groups, students, managers and the general public. Resource managers (Magens Bay Authority, Coral Bay Community Council) incorporated this 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 and supported watershed management plans that certain private property owners are required to follow. CES helped direct funds from the Forest Legacy Program to the purchase of a 300+ acre St. John private property in a critical watershed area for conservation in the VI Territorial Park system. Despite the high demand for property for residential development on St. John, this conservation project was supported by St. John residents and the VI Senate.

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
2010	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 contributed to 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 (completed 2010). CES co-researched the Div. of Fish & Wildlife grant: "The Landowner Incentive Program" project that identified and mapped critical habitats for targeted terrestrial and marine wildlife species and contributed to the final report ""U.S. Virgin Islands Stateside Assessment of Forest Resources." CES served on the advisory committee developing the VI Forest Legacy Plan to protect VI watersheds.

Results

These recent research-based products developed with CES input have provided resource specialists and managers with useful data on which to based management decisions and planning.

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
2010	100	3

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 continued to provide St. Thomas cab drivers/tour operators with information about Virgin Islands natural resources to be used in educational tours with tourists and local school students. At CZM's request, CES assisted a major permit applicant with the planning of a cultural and natural history park on St. Thomas that will showcase VI natural resources for tourists and residents.

Results

Taxi tour directors incorporated information provided by CES into their tours and taxi-driver tour certification curriculum used for training tour directors. Taxi tour directors requested additional information and indicated that the information provided improved the quality and educational value of their tours. The owners of the St. Thomas cultural and natural history park incorporated CES's recommendations into the major permit plan submitted to CZM.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

CES maintained good relationships with staff in various VI governmental regulatory agencies that affect VI natural resources management including the VI Dept. of Planning and Natural Resources, Waste Management Authority, the VI Dept. of Agriculture and the Environmental Protection Agency. There is a high amount of turnover in these agencies, mainly due to political elections. 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 hesitant about enforcing environmental regulations because of political pressures. Nevertheless, DPNR-CZM and Enforcement staff referred DPNR clients to CES for technical assistance. DPNR-DFW and DEP staff has developed long-term relationships with CES that have resulted in partnerships in workshop development, grants and resource management development. CES strengthened its contacts and cooperation with the Environmental Protection Agency.

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 communicates closely with MBA during the implementation of BMPs. MBA responds favorably to the informal evaluation methods used by CES. CES also successfully uses this informal, mostly verbal evaluation method with other clients. CES used similar evaluation methods re: the development of natural resource management strategies or plans in partnership with the Dept. of Agriculture Forest Stewardship and Urban Forestry Programs, Div. of Fish & Wildlife, Coastal Zone Management, Div. of Environmental Protection, and Environmental Protection Agency. Research project reports and publications are peer-reviewed.

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	1.6	0.0	0.0	0.0
Actual	1.6	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
52000	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
10162	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Partnerships were established and strengthened with public and private agencies, and community leaders and groups to provide education, information, and technical advice to the general population. This was achieved through the use of publications, seminars, mass media, field days and exhibits as well as personal contacts.

2010 4 2

Output #3

Output Measure

- Number of educational classes in tree care

Year	Target	Actual
2010	4	4

Output #4

Output Measure

- Number of one-on-one consultation with residents

Year	Target	Actual
2010	130	170

Output #5

Output Measure

- Number of public service announcements

Year	Target	Actual
2010	2	2

Output #6

Output Measure

- Number of articles/publications on tree care and urban forest management
Not reporting on this Output for this Annual Report

Output #7

Output Measure

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

Year	Target	Actual
2010	2	3

Output #8

Output Measure

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

Year	Target	Actual
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2010

1

1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of residents, landowners, policymakers who 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 who will increase their knowledge of the care and management of the urban forest
3	Number of homeowners, landowners, municipalities who will actively reduce, reuse, and recycle yard waste
4	Number of residents who will restore urban trees following hurricanes and tropical storms
5	Number of landowners and residents who will expand entrepreneurial opportunities from the urban and suburban forest resources

Outcome #1

1. Outcome Measures

Number of residents, landowners, policymakers who 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
2010	450	640

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Trees play a major role in creating a certain ambiance in the location where they are growing. Properly planted trees help to reduce the ambient temperatures, increase overall well being of residents. They also reduce the chances of: utility lines interference, sidewalks and pavements being raised, branches being severely pruned or worse the tree having to be completely removed. When trees are not planted properly, they become targets of poor management practices. Branches that touch buildings or are near utility lines are severely pruned. Large sections of the roots are severed in order to install sidewalks or underground utilities. Often this pruning is done by untrained utility company workers, landscape maintenance crews, home owners and public and private sector work crews.

In an attempt to help parents to become more involved with their children's education, the V.I. Department of Education launched Parent's University. This program provides parents with an opportunity to become educated/re-educated about subjects their children are learning in school. Ultimately, the goal was to provide parents with the necessary tools and information to be able to assist their children with homework. One of the broad subjects covered was Science. Current science curricula include the growth and development of trees and other plants as part of the study of the environment. This was an opportunity to provide the parents with information about trees that would augment the lessons learned by the students in the classroom.

What has been done

The annual Woodworkers Expo was held to showcase the economic benefits of recycling trees, and parts of trees, that would have otherwise gone into the landfill. Radio appearances were the primary means of providing information and technical advice to the general public. Educational posters and handouts were made available. Extension staff made a presentation on the subjects of The Benefits of Trees and How Trees Handle Wounds.

Results

Approximately six hundred (600) residents became aware of the economic benefits of turning felled trees and parts of trees into potential income generating products.

Through personal contact, and anecdotal information, ninety-eight percent (98%) of attendees reported that they are now more aware of the economical and environmental benefits of trees.

The nine (9) parents who attended the Parent University class increased their awareness of how trees affect their lives other than by providing shade and modifying temperature.

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 who 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
2010	800	723

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local utilities have been increasing their efforts to reducing power line losses caused in part by tree branches touching the power lines. In some instances the trees were planted below the power lines and eventually grew into the lines. Other situations, the tree canopies were cleared for the installation of new power lines but over time, the branches grew back. Homeowners, businesses, and organizations plant trees for symbolic, therapeutic, environmental, and others reasons. Often extension staff encounter situations where these tree branches are touching the roofs of building or have become entangled in utility lines, and cause upheaval of sidewalks and roads because they were improperly planted. Many trees in the Virgin Islands are being encroached upon by urban expansion and are growing in places that are not conducive to their optimum growth and development. In cases like these, hard decisions have to be made regarding the long term future of the tree(s) or the structure that is being impacted in a negative way by the trees presence.

What has been done

The annual Agriculture and Food Fair of the Virgin Islands provides CES the opportunity to impact a large clientele over a three day period in a concentrated effort. Extension staff provided literature and conducted one on one consultation with attendees on the subject of planting the right trees in the right places. This was accompanied by a display of various situations depicting negative interactions between trees and buildings, utility lines, and plumbing infrastructure. Home visits and one-on-one contacts with residents, and public and private landscape crews have been used to provide them with 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. Extension staff made a presentation to participants of the Parents University educational sessions on the subjects of The Benefits of Trees and How Trees Handle Wounds. Extension staff met with the Pastor and representatives of the Lutheran Church of the Reformation on St. Thomas to provide them with the pros and cons of cutting portions of the roots of a very large mahogany tree that is in the middle of a driveway. Several options of saving the tree were also discussed.

Results

Approximately 430 individuals were directly impacted and thousands more indirectly by the display and interaction with Extension staff. For the nine (9) participants, both subjects were very informative but the subject of how trees handle wounds was an eye opener. This was new information for all of the attendees. They also learned about placing the right tree in the right place during the question and answer session. Seventeen (17) individuals representing two agencies participated in the two day tree Pruning Trees for Hurricane Preparedness workshop. Each participant was also provided with literature for future reference. Sixty three (63) youth and eight (8) adults from the St. Croix WMA summer cleanup program and sixty (60) youth and eight (8) from the St. Thomas W.M.A. Clean and Preen summer cleanup program learned about the benefits of trees to the community and the environment. The St. Croix group of sixty (60) also learned about the fundamentals of pruning trees including a live demonstration. Extension staff provided guidance to the seven (7) member crew of the Department of Public Works and four Water and Power Authority line clearing crew as they worked to upgrade the trees and the rest of the landscape in the Educator's Park.

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 who 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
2010	150	14

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 an ideal mulch and reduces the waste stream going into the landfill. Stems, trunks, and branches, 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

The 4th annual Woodworkers Expo was used as a means educating the public on how trees and tree parts could be recycled and reused.

Results

Over six (600) residents became more aware of the options for reusing and recycling tree parts. Nine (9) woodworkers demonstrated their skill in taking trees destined for the landfill and turning them into works of art.

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 who 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
2010	250	250

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 depending on the severity of the storm. Urban trees in particular are adversely affected by storms because 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 or have fallen trees that are not erected right away, then chances of survival begin to diminish as time goes on.

What has been done

Appearances on local talk shows were the primary means of disseminating general information to residents whose trees were damaged by storms.

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 who will expand entrepreneurial opportunities from the urban and suburban forest resources

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	9	9

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other ()

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 month) 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	95%			
403	Waste Disposal, Recycling, and Reuse	5%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.2	0.0	0.0	0.0
Actual	2.2	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
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 resource materials and curriculum guides

Conducted field days, field demonstrations, exhibits and tours

One-on-one counseling

On-site visits

Use of electronic media

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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	700	6500	500	1500
Actual	808	7500	757	2000

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	4	1

Output #2

Output Measure

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

Year	Target	Actual
2010	3	5

Output #3

Output Measure

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

Year	Target	Actual
2010	4	5

Output #4

Output Measure

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

Year	Target	Actual
2010	130	70

Output #5

Output Measure

- Number of public service announcements

Year	Target	Actual
2010	1	60

Output #6

Output Measure

- Number of articles/publications on urban gardening management
Not reporting on this Output for this Annual Report

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
2010	2	3

Output #8

Output Measure

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

Year	Target	Actual
2010	1	2

Output #9

Output Measure

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

Year	Target	Actual
2010	4	5

Output #10

Output Measure

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

Year	Target	Actual
2010	1	1

Output #11

Output Measure

- Number of workshops and public and private entities establishing gardens

Year	Target	Actual
2010	50	52

Output #12

Output Measure

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

Year	Target	Actual
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2010

7

4

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 entities 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
2010	400	613

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The benefits of gardening are numerous. Exercise, increased flexibility, stress relief, the consumption of fresh fruits and vegetables and the associated money savings are good reasons to garden. Virgin Islands residents are reminded every day of the high cost of living, along with the negative effects poor health practices over many years that is evident in the increased cases of heart disease, diabetes, high blood pressure, and obesity. Virgin Islanders are responding to these situations by seeking information and education on how they can make life style changes that not only benefit them physically, but economically as well. Exposing the youth to the benefits of gardening and actively engaging them in the cultivation of vegetables, herbs and fruits is a sure way of preparing the next generation to make healthy choices.

What has been done

Extension staff and the production team of the local PBS television station, WTJX, concluded the final phase of the videotaping and editing of the 16 part gardening series entitled "Home Grown". The goal is to help Virgin Islanders learn how to grow healthy vegetables and herbs as part of an overall healthy living plan. The first episode previewed the concept behind Home Grown and how residents could benefit from what the program has to offer. It was aired throughout the territory and on the internet.

During National Agriculture Week in March, CES partnered with the VI Department of Agriculture to provide the general public with information about local agriculture. Local farmers along with other agricultural related vendors assembled at the Rothschild Francis Market Square in the Sanderilla Thomas Bungalow.

During the week of the Young Child, Extension staff participated in Read on the Green sponsored by the VI Department of Education. This event is held on the Herman Moore Golf Courses at UVI. This annual event exposes preschoolers through third graders to reading through various interactive methods. The CES' Children Youth and Family At Risk (CYFAR) program, in partnership with the VI Housing Authority have commenced a project designed to teach children

about the benefits of gardening which resulted in the creation of a garden. Extension staff gave seminars to organizations including Ulla F. Muller 4th grade parents, Rotary clubs, and Waste Management Authority's summer youth employee camps on the benefits of gardening. Radio presentations were also used to raise awareness about the benefits of gardening to a large audience.

CES' Urban Gardening program conducted a one day School Gardening Workshop and field tour for teachers and school representatives.

Results

Thus far the reaction from the general public throughout the territory to the first airing of the Home Grown was extremely positive. Calls to the CES offices, WTJX, and the Virgin Islands Department of Agriculture have indicated that the information provided was well received and very encouraging.

During the Week of the Young Child, Extension staff presented the topic, Benefits Of Gardening and taught the staff of the Department of Human Services, Head Start Program how to transplant seedlings. Nine (9) females participated in the demonstration and workshop by successfully transplanting their own seedlings into small containers.

Also during that special week, Extension staff returned to the Human Services Head Start program for another workshop on gardening and transplanting. Twenty (20) Head Start children and five (5) adults learned about gardening and how to transplant basil and sweet pepper seedlings. At the conclusion of that week, Extension staff interacted directly with about 300 children and 90 adults over a two hour period during Read On The Green sponsored by the VI Department of Education. Fifteen (15) elementary aged children in the CYFAR program learned of the joys and benefits of gardening at an afterschool lecture. They all committed to participate in the project.

Fifty-one (51) parents increased their level of knowledge of the benefits of gardening for themselves and their children. They were also encouraged to support the schools plan to create a garden.

Sixty (60) young people of the Waste Management Authority's summer Clean and Preen program gained a greater awareness of the benefits of gardening as they participated in a slide show and a lively discussion afterwards. Seventeen (17) school representatives from the St. Thomas/St. John increase their awareness of the benefits of having a school garden to the educational process.

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
2010	550	540

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Most homeowners, youth garden groups, and public and private agencies still use inefficient and costly growing practices in their landscape. With the high cost of living and 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 woven weed barriers, drip irrigation, and irrigation timers, have been in existence for at least 18 years, many residents have never seen or used them before. Some homeowners experiment with practices that they have seen in a magazine or have been passed on by neighbors or family members. The inconsistent results they experience can be frustrating and discouraging. Some are just do-it-yourself persons and only need literature and/or personal contact in order to be successful.

What has been done

Extension staff continued to work with VI residents who are part of the Home Grown program, a partnership with WTJX, CES, and the VI Department of Agriculture. Visits were made to the home gardens of the forty (40) residents participating in the project to provide technical assistance as they manage their gardens.

Extension staff displayed three ways of growing vegetables, at the annual Agriculture Fair of the Virgin Islands: tires; pots; and box gardens. Extension staff continued to provide technical support and guidance to five (5) schools gardens in the St. Thomas district. Some of the participants were visited periodically to check on the progress of their gardens.

Extension staff gave seminars to organizations including Rotary Clubs and parents of 4th graders at Ulla F. Muller PTA meeting. A unity march and rally was held at the Emancipation Garden during this reporting period. Speakers from across the territory encouraged hundreds of attendees to organize and/or get involved in activities that would help to raise the quality of life for island residents. Extension staff along with other exhibitors were invited to participate by providing information to the community on various subjects. Youth groups were presented with information

on the various types of containers, then challenged to build and maintain the containers. Gardens and farms that use the best management practices were the primary means of educating the public. PowerPoint presentations and public displays and workshops were also used to show Virgin Islands residents what is possible. Radio appearances were used to reach a wide audience. Home and on-site visits were used to make personal contact with individuals and groups involved in gardening.

Extension staff conducted a tour of a model school garden at the Gladys A. Abraham Elementary School

Results

Ninety-eight percent (98%) of the Home Grown participants achieved some meaningful measure of success in managing their respective gardens.

Thousands of fairgoers witnessed the growing of vegetables and herbs and interacted with Extension staff who answered a variety of gardening questions. Over 100 factsheets were provided as a resource for interested residents. Approximately 75 students and 7 teachers are involved growing vegetables, herbs and ornamentals. Extension staff provided at least fifty-two (52) residents with handouts about tire and box gardening. Extension staff taught employees of the Head Start program how to transplant seedlings. Fourteen (14) adults and twenty (20) children participated in the demonstration and workshop by successfully transplanting their own pepper and sweet basil seedlings into a small container. Extension staff also appeared twice on Radio 1 WVWI to discuss a wide range of agriculture topics including gardening. One hundred (100) handouts on grafting and seventy-five (75) handouts on tire and box gardening were distributed at the unity march and public rally. Extension staff continued to work with the youth at the community garden in Tutu. They harvested sweet potatoes for the first time. There were a total of 26 (24 males and 2 females) individuals that visited the garden and interacted with extension staff and the young gardeners. Each year the 4-H summer Academy includes an agriculture component as part of the learning opportunities for the participants. This year, seventeen (17) young people and 3 adults participated in constructing 2 box gardens complete with soil, mulch, and tomato and eggplant seedlings. Each participant also took home a seedling to care for. Eighteen (18) youth and seven (7) adult members of the Superior Court Rising Stars Steel Orchestra participated in a lecture and discussion on container gardening then actively worked to furnish two raised beds with vegetables and herbs. Extension staff continued to provide technical assistance until the program ended.

Approximately forty (40) persons attended the Rotary luncheon meeting and each one received the CES publication on tire and raised bed gardening.

Extension staff also engaged twenty-three (23) youth from the Dober Elementary School in a discussion about gardening during National Agriculture Week.

Twenty (20) school representatives increased their awareness and level of knowledge of building the infrastructure necessary to create and manage a successful school garden.

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
2010	200	52

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Ninety-five (95%) to ninety-nine (99%) of food consumed in the Virgin Islands is imported. Virgin Islands residents pay extremely high prices for food due to the additional cost of shipping and handling, storeowners mark up, and utility costs. Home gardening is a way to reduce the cost of food, whereby residents could save money and possibly shift financial resources to other aspects of their life.

What has been done

Participants in the Home Grown Project received instruction and technical advice and were provided with the materials and supplies for building, maintaining and harvesting crops from their gardens.

Results

Approximately ninety-five to ninety-nine percent (95-99%) of participants experienced a savings in the cost of certain commodities as a result of this project. Surveys will be conducted during the upcoming calendar year 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
2010	250	52

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Virgin Islands residents have been exposed to gardening either from practical experience or from visiting another garden. Some may have had gardens but gave them up for one reason or another. Some who have never gardened, probably wanted to but do not 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 concerns of healthcare professionals.

What has been done

Extension staff provided school administrators and teachers with information on the benefits of gardening through school visits and one-on-one contacts. Demonstration garden tours provided students and other interested residents with an opportunity to see a developed garden plot.

Results

Each year the 4-H summer Academy includes an agriculture component as part of the learning opportunities for the participants. This year, seventeen (17) young people and 3 adults participated in constructing 2 box gardens complete with soil, mulch, and tomato and eggplant seedlings. Each participant also took home a seedling to care for as well. Eighteen (18) youth and seven (7) adult members of the Superior Court Rising Stars Steel Orchestra participated in a lecture and discussion on container gardening then actively worked to furnish two raised beds with vegetables and herbs.

Extension staff and three (3) volunteers have been integrally involved in the development of a community garden in the Estate Tutu Valley community on St. Thomas. They have been working after hours and on weekends with nine (9) young black males to create a garden made of tires and raised beds constructed with recycled wooden streetlight poles. Extension staff continued to work with forty (40) residents throughout the territory in creating and maintaining their gardens as part of the Home Grown gardening project. Extension staff became engaged with The Family Resource Center for a container gardening project. The "Rite of Passage for Boys" gardening

project was launched during this period. Twelve (12) boys and three (3) adults are involved in growing tomatoes, eggplants and herbs in containers.

The CES' Children Youth and Family At Risk (CYFAR) program, in partnership with the VI Housing Authority have commenced a project designed to expose young people to the joys and benefits of gardening. Fifteen (15) youth from the Contant Knolls housing community created their first tire garden. This community lacks areas with open flat soil, thus a tire garden was an ideal fit for this area. Extension staff led in selecting the site, procuring the tires, and organizing the children to fill the tires with potting soil and transplanting seedlings.

Six (6) elementary schools and one (1) junior high school developed raised bed and tire gardens with the assistance of CES 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
2010	250	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Virgin Islanders discard tons of materials, including large amounts of yard-waste, each year. That material can be recycled into compost and used to improve the health of the soil and grow better and healthier plants. Exposing young people to this type of information at an early age will help them to make sound decisions regarding the management of natural resources.

What has been done

The Friends of the National Park Inc. and its partners on the island of St. John sponsored the annual Earth Day Celebration in the Cruz Bay little league ball park. Public, private, and parochial schools were invited to attend. Extension staff displayed a model compost pile and

provided written information about composting.
One-on-one consultation was provided to the school garden coordinators about building new compost and maintaining existing piles.

Results

One hundred seventy (170) students and eighty seven (87) adults interacted with Extension staff and received handouts on building a compost pile and types of compost bins. From this event, one school reported building a compost pile.
Three of the six elementary schools built their own 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

- Competing Programmatic Challenges

Brief Explanation

The demands of other competing programs and staff shortages have severely hindered our ability to execute some plans for the urban gardening projects.

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

1. Evaluation Studies Planned

- Before-After (before and after program)

Evaluation Results

The ability to gather follow-up information regarding changes in behavior is lacking and needs to be implemented. Survey instruments for children have to be restructured in order to achieve accurate responses and to plan for future targeted gardening projects.

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	1.9	0.0	0.0	0.0
Actual	1.9	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
43700	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 was evidenced by the increase in requests for VI*A*SYST presentations. Throughout the year, VI*A*Syst presentations and workshops were regularly requested by schools, community groups, youth groups, churches, scouts, businesses, maintenance professionals, and 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 contributed to the *VIWetlands and Watersheds Characterization Phase II: Inventory, Monitoring, Assessment, Management and Education in the USVI* project by conducting site visits, inventories, and attending stakeholder meetings. 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, VI public school librarians and local schools. 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 Division of Environmental Protection and the VI Department 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. Media outreach methods utilized by the WQ Program were PSAs, television video spots, and localtalk shows (radio &TV). 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. Ties with the Region 2 Water Quality team strengthened with the joint coordination and implementation of a training and certification program for waste water treatment system operators in conjunction with the VI Division of Environmental Protection, the University of Rhode Island Onsite Wastewater Treatment Demonstration Center, and the VI Waste Management Authority.

2. Brief description of the target audience

Policy-makers and regulatory personnel, community groups, teachers and students, business community, resource managers, owners/developers of large properties (>300 acres), non-governmental organizations, and the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	250	1000	200	300
Actual	813	2900	1122	1630

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

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	3	12

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
2010	5	19

Output #3

Output Measure

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

Year	Target	Actual
2010	200	500

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
2010	3	13

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
2010	6	14

Output #6

Output Measure

- PSAs

Year	Target	Actual
2010	1	2

Output #7

Output Measure

- Fairs

Year	Target	Actual
2010	2	6

Output #8

Output Measure

- TV/Media

Year	Target	Actual
2010	2	4

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 (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.
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.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	7

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Nutrication and contamination of surface, groundwater and coastal waters from leaking septic systems is considered to be a major problem in the VI. Nonpoint Source Pollution from defective septic systems impacts human health and marine resources.

What has been done

CES partnered with the VI Department of Planning and Natural Resources and the VI Waste Management Authority on St. Croix to provide Onsite Wastewater Treatment System (OWTS) information to homeowners.

Results

Based on this information, seven homeowners were permitted to install improved OWTS home systems.

4. Associated Knowledge Areas

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

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.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	41

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Virgin Islands Department of Planning and Natural Resources (DPNR) has been promoting the installation and maintenance of traditional and alternative wastewater treatment systems (OSDS) in the Virgin Islands. DPNR has referred architects, businesses, developers to CES for specific technical assistance with OSDS installations.

What has been done

CES helped coordinate a Training Program for Septic Inspectors conducted by instructors from the University of Rhode Island Onsite Wastewater Treatment Demonstration Center in partnership with the VI Division of Environmental Protection and the VI Waste Management Authority. This team is planning a Septic System Designer Training Program for March 2011 and exploring the possibility of scheduling a training workshop for sewage plant operators in 2012.

Results

Forty-one septic system installers/service providers and VI government personnel participated in the 3-day Training Program for Septic Inspectors on St. Croix. Training program evaluations were favorable and participants indicated that the training was useful to them. 85% of the participants scored passing grades on the exam to certify them as septic inspectors.

4. Associated Knowledge Areas

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

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
2010	10	55

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 and are impacted by human activities.

What has been done

CES contributed to the project: VI Wetlands and Watersheds Characterization Phase II: Inventory, Monitoring, Assessment, Management and Education in the USVI project by conducting site visits, inventories, and attending stakeholder meetings. A VI watershed/wetlands field guide was produced and will be posted on a UVI website. CES co-researched the DFW funded project, Landowner Incentive Program, that produced GIS map data layers with detailed modeling of island drainages, basins, and wetlands.

Results

The VI Wetlands and Watersheds project provided DPNR-DEP (funding agency) and other key stakeholders with valuable new data about all VI wetlands and priority watersheds. Important information from several informants about wetlands was incorporated into GIS maps; these maps are being used by DPNR and will be available to the general public. The recently completed VI wetlands/watersheds field guide is currently available by request and will be installed on UVI and DPNR websites. Maps and findings of the Landowner Incentive Program project are being made available to wildlife researchers and managers.

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.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	25	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Custodial professionals, business owners, school students, the general public and the natural environment can be exposed to negative effects caused by the use of toxic household products. Many residents rely on maintaining healthy cistern catchments for their water supplies.

What has been done

Through its VI*A*SYST program, CES continues to make numerous presentations to the VI population promoting the use of non-toxic household products for protecting human health and the environment. Presentations were made to school groups, church congregations, scouts, businesses, maintenance professionals, government agencies and environmental groups. Cistern care also is promoted in these presentations and during individual consultations. Saff was able to expose the National Program Leader and his wife to our types of housing and show him our intended revision of the National Healthy Home booklet to one for the Caribbean.

Results

The VI*A*SYST presentations continue to be very popular with all segments of the VI community. After attending VI*A*SYST presentations, many individuals indicated that they would stop using toxic household products. Several attendees have referred others to CES for information on non-household products or requested VI*A*SYST presentations for various groups. At least ten (10) homeowners chlorinated their cistern water based on instructions provided by CES. Retailers have indicated an increase in the sale of Borax and other natural cleaning products.

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation

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
2010	6	42

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

During site visits and phone consultations, CES provided several property owners, Public Works Department, government regulators, and landscape specialists with information related erosion and sediment control practices, xeriscaping and environmental landscaping.

Results

Clients implemented CES recommendations or indicated that they would adopt recommended practices. Several clients requested additional consultations from CES. Drainage systems were installed along a St. Croix highway with technical assistance from CES.

4. Associated Knowledge Areas

KA Code	Knowledge Area
104	Protect Soil from Harmful Effects of Natural Elements

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
2010	200	180

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

VI youth and their instructors 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

For the fourth year, CES conducted watershed tours for graduate students. Publications co-authored or co-researched continued to be used for instruction by educators and librarians. CES gave water quality presentations at ecofairs. CES promoted "land-sea connection" awareness through its participation with the VINE (VI Natural Resources Educators) association in VI schools (K-12).

Results

Coastal and Watershed Management Program graduate students continue to conduct watershed research on St. Thomas, focusing on water quality monitoring in impacted St. Thomas guts. Young volunteers on St. Croix participated in activities to restore a major watercourse with the goal of reducing the polluting effects of sediment-laden stormwater runoff on coastal waters. Students demonstrated greater awareness of the critical interactions between land and sea through their contributions to the annual 2010 NonPoint Source Pollution Conference on St. Thomas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management

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
2010	1	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Residents, government agencies, resource managers, and 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 contributed to the development of GIS technology featuring drainages, basins, watersheds and wetlands produced by the VI Wetlands and Watersheds Characterization Phase II: Inventory, Monitoring, Assessment, Management and Education in the USVI project and the Virgin Islands Landowner Incentive Program..

Results

Both of these projects conducted gap assessments and produced significant geodatabases and hydrology maps that provided much more detailed terrestrial and marine geodata than has previously been available locally.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

CES maintained good relationships with VI governmental/federal regulatory agencies and NGOs that affect VI natural resources management including the VI Dept. of Planning and Natural Resources, Waste Management Authority, the VI Dept. of Agriculture, the Environmental Protection Agency, and the Nature Conservancy. Turnover is high in some VI Government agencies, mainly due to political elections. It is difficult to establish very effective long-term relationships that can result in policy changes because of the high turnover. Employees in these agencies acknowledge the need for more comprehensive enforcement of environmental laws, but they are overextended and need additional staff support to effectively enforce existing regulations. Political pressures can impede with enforcement. DPNR-DFW, DEP and CZM have developed long-term partnerships with CES resulting in workshops, grants, client referrals and resource management initiatives. CES strengthened its cooperation with the EPA.

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 communicated closely with VI governmental partners, NGOs, environmental groups and the business community. These clients responded favorably to the informal, mostly verbal, evaluation methods used by CES during all stages of program implementation. Post workshop evaluations were distributed, and evaluations were favorable. Research project reports and publications are peer-reviewed.

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	1.6	0.0	0.0	0.0
Actual	1.6	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
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 through Print, Radio, and TV.

Conducted nine eight weeks Basic Computer Training Courses that taught clientele how to use Microsoft Windows, Microsoft Word, E-mail, and searching for information using the World Wide Web.

2. Brief description of the target audience

The population consist mainly of computer illiterate adults in the USVI that are from low income households. People who need computer skills for employment.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	60	3000	60	2500
Actual	217	3570	72	2730

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	10	9

Output #2

Output Measure

- Conduct two days workshops of Microsoft Word

Year	Target	Actual
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2010 10 9

Output #3

Output Measure

- Conduct two days workshops of Microsoft Windows

Year	Target	Actual
2010	10	9

Output #4

Output Measure

- Conduct two days workshops of Microsoft Internet

Year	Target	Actual
2010	10	9

Output #5

Output Measure

- Conduct two days workshops on Microsoft Excel

Year	Target	Actual
2010	10	5

Output #6

Output Measure

- Conduct two days workshops on Microsoft Powepoint

Year	Target	Actual
2010	10	5

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
2010	140	158

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a large population of computer illiterate adults in the USVI. These individuals need to acquire computer skills as a means of increasing their chances of gaining employment which can better their household income and/or help them take advantage of new technology.

What has been done

Conducted nine 8-week Basic Computer Training Courses that taught students how to use Microsoft Windows, Microsoft Word, E-mail, and how to search for information using the World Wide Web.

Results

100% of individuals participated indicated that they acquired/increased their knowledge and usage of Microsoft Windows.

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
2010	160	104

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a large population that does not know how to use MS Word. Microsoft Word is the most widely used word processing software. By acquiring or increasing the participants' skills in MS Word, they will be better equipped to gain employment or a promotion. They can also use MS Word in their day to day lives to make some their task easier.

What has been done

Conducted nine 8-week Basic Computer Training Courses that taught students how to use Microsoft Windows, Microsoft Word, E-mail, and how to search for information using the World Wide Web. Two of the weeks in the eight weeks training were dedicated to teaching the basic functions of Microsoft Word.

Results

100% of the individuals that participated in the program indicated that they acquired/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
2010	140	146

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a large population of individuals in the V.I that do not know how to use e-mail accounts. Sending an e-mail message is a faster and more cost effective way to send a message than using postal mail.

What has been done

Conducted nine 8-week Basic Computer Training Courses that taught students how to use Microsoft Windows, Microsoft Word, E-mail, and how to search for information using the World Wide Web. Two of the weeks were dedicated to teaching the functions of email accounts.

Results

89% of individuals that participated in the program indicated that they acquired/increased their knowledge and usage of email accounts.

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
2010	160	157

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a large population of individuals in the V.I that does not know how to use the internet. The Internet is a great benefit to those who understand how to access the huge amount of useful information available. Individuals can also perform a variety of tasks on the internet such as shopping, banking, and paying bills.

What has been done

Conducted nine 8-week Basic Computer Training Courses that taught students how to use Microsoft Windows, Microsoft Word, E-mail, and how to search for information using the World Wide Web. Two of the weeks in the eight weeks training were dedicated to teaching how to navigate the internet.

Results

92% of individuals that participated in the program indicated that they acquire/increase 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
2010	140	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a large population of individuals in the V.I that does not know how to use the MS Excel.

What has been done

Conducted six 2-day workshop on the use of MS Excel.

Results

100% of individuals that participated in the eight week program indicated that they acquired/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
2010	80	52

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is a large population of individuals in the V.I that do not know how to use Microsoft PowerPoint.

What has been done

Conducted six 2-day workshops on Microsoft PowerPoint.

Results

90% of individuals that participated indicated that they acquired/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

Participants usage of Microsoft Windows, Microsoft Word, E-mail, and search of information using World Wide Web.

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.6	0.0	0.0	0.0
Actual	2.6	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

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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	250	2500	150	1500
Actual	260	2000	176	800

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	5	4

Output #2

Output Measure

- Number of workshops, presentations and demonstrations conducted

Year	Target	Actual
2010	25	34

Output #3

Output Measure

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

Year	Target	Actual
2010	35	25

Output #4

Output Measure

- Number of partnerships, collaborations or cooperative agreements formed

Year	Target	Actual
2010	5	3

Output #5

Output Measure

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

Year	Target	Actual
2010	15	8

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
2010	5	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

4-H clubs provide a positive, nurturing environment and 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

The two new clubs established last year continue to grow and develop - one school and one 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
2010	5	2

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

Special interest groups have served as a primary strategy in recruiting new members to 4-H affiliation.

Results

One such special interest group is the St. Thomas Carnival Troupe; another is the Science Olympiad on St. Croix.

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
2010	1	0

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 to collect policy and procedure manual from various states are on-going.

Results

No result 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
2010	65	65

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

It is undeniably critical to understand that effective leaders are important to the success of the 4-H

program.

What has been done

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

Results

A total of 26 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

The unpredictability of hurricanes, floods, earthquakes can have an adverse affect on program outcomes.

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 has not been completed, but received very positive anecdotal response.

Key Items of Evaluation

Evaluation incomplete.

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: 2010	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
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

Develop culturally sensitive nutrition and health education products and resources to be made available to professionals, students, and the public. The following are examples of the products and

resources to be developed and made available for distribution:

A beverage poster, brochure and/or flyer that lists the sugar and calorie content of commonly consumed beverages in the territory;

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.

A poster, brochure, and/or flyer detailing the sodium, fat, cholesterol, carbohydrate, and fiber content of commonly consumed local foods;

A diabetes exchange list booklet that include local foods and beverages; and

A culturally sensitive cookbook using local and familiar produce.

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

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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	350	5000	450	5000
Actual	1550	2500	600	3500

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

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	25	26

Output #2

Output Measure

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

Year	Target	Actual
2010	5	5

Output #3

Output Measure

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

Year	Target	Actual
2010	6	9

Output #4

Output Measure

- d. Number of web sites developed and maintained.

Year	Target	Actual
2010	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
2010	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
2010	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
2010	100	75

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. Another version is being reprinted due to its popularity and usefulness. The posters utilize a five-star scale to indicate the potassium, fiber, vitamin C content in each of the tropical fruits.

Results

During 2010 over 100 posters were distributed to various individuals and organizations with plans to distribute those being reprinted.

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
2010	70	59

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In order to decrease the high mortality and morbidity rates attributed to heart disease, cancer, cerebrovascular diseases, and diabetes in the USVI, it is critical for Virgin Islanders to adopt and maintain healthy lifestyle practices.

What has been done

Six to eight week nutrition education classes were conducted; along with presentations made by two medical personnel targeting the general community.

Results

Seventy-eight percent of the participants reported a positive change in at least one healthy lifestyle practice. Those practices include increased consumption of vegetables, fruit, 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
2010	450	275

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

To shape good eating habits at an early age emphasis must be 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 program and the others during summer sessions.

Results

Summer camp participants were administered pre and post tests to determine changes in knowledge regarding basic nutrition information. Seventy percent of the participants were able to answer the basic nutrition questions by the end of the series demonstrated by answering 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
2010	60	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

It is very important 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
2010	5	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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

What has been done

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

Results

Participants expressed an increased awareness of the relationship of food intake, physical fitness 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
2010	50	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Important to improve health outcomes in the Virgin Islands by improving blood pressure, hemoglobin A1c and cholesterol levels.

What has been done

Collaboration with the Health Department, Human Services and private providers improved knowledge of health outcomes.

Results

Self-report information gleaned 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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.8	0.0	0.0	0.0
Actual	2.8	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
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
72825	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Recruited and trained staff and volunteers to deliver food safety information to EFNEP participants (adults and youths).
- Developed and /or obtained culturally sensitive food safety curriculum appropriate for EFNEP participants (adults and children).
- Developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizens centers, and day care centers.
- Develop a web page that relays information on issues relating to the program.
- Identified new locations to conduct classes.

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 meals, school age children, pregnant teens and adults.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	100	5000	300	5000
Actual	150	2100	550	2200

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	25	15

Output #2

Output Measure

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

Year	Target	Actual
2010	5	4

Output #3

Output Measure

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

Year	Target	Actual
2010	6	4

Output #4

Output Measure

- Number of web sites developed and maintained

Year	Target	Actual
2010	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
2010	5	4

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
2010	100	75

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There are many risk factors for food borne illnesses in the Virgin Islands. 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 become 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 the importance of thawing meats properly and using a thermometer to check for doneness.

Results

Over 75% of all 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
2010	70	48

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 during the 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
2010	300	310

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 games focused on food safety.

Results

A pre-post measure was administered to summer camp participants. Sixty-five percent of youth answered queries correctly before receiving food safety information. Post test results yielded eighty percent correct.

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
2010	70	60

3c. Qualitative Outcome or Impact Statement

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
2010	100	0

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 6-8 week 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
2010	100	60

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.)
- null

Brief Explanation

{No Data Entered}

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 Entered}

Key Items of Evaluation

{No Data Entered}

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	1.9	0.0	0.0	0.0
Actual	1.9	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
79903	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 positively impacted 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 & and 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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	100	2500	25	750
Actual	800	2700	23	650

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of short courses conducted

Year	Target	Actual
2010	5	3

Output #2

Output Measure

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

Year	Target	Actual
2010	25	23

Output #3

Output Measure

- Number of special interest workshops conducted

Year	Target	Actual
2010	2	2

Output #4

Output Measure

- Number of youth, volunteers, staff and partners trained

Year	Target	Actual
2010	120	114

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
2010	75	65

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community members enhanced their skills and supplemented their limited incomes and increased purchasing power.

What has been done

Provided workshops, short courses, including summer sessions.

Results

Participants requested more classes, some increased their earning power.

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
2010	25	24

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community members enhanced their skills to supplement their incomes and increased their marketability.

What has been done

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

Results

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
2010	350	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community participants enrolled in the clothing construction course increased their knowledge and skills to enhance their marketability and increased self-sufficiency.

What has been done

Community participants who enrolled in the beginner's course moved to the intermediate/advanced level.

Results

Participants completed requirements by completing clothing construction projects.

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
2010	45	35

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participants made a variety of items to enhance their creative home decorating skills and income-producing ability.

What has been done

Participants participated in all of the requirements for completion of items.

Results

Participants requested further information and completed a variety of items.

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
2010	250	150

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 continued to request additional information to share with family and friends.

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
2010	400	301

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

General 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 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
2010	45	36

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community benefits from a better prepared workforce.

What has been done

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

Results

Participants increased their ability to interview successfully and enhanced their 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
2010	45	38

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

General 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 possibility of self or other 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
2010	45	32

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participants increase their opportunities for employment.

What has been done

Workshops and presentations were conducted to better prepare residents for employment.

Results

All participants completed requirements to prepare for 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
2010	30	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Participants establish increased 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
2010	45	39

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 were conducted.

Results

Most 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
2010	20	14

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

Some 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
2010	45	36

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 especially utilizing computer skills.

Results

Some residents have found employment and developed more confidence to pursue 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

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

The overall downturn in the nation's economy has had an adverse affect on program outcomes.

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 instruments have been used; anecdotal information remains very 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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.8	0.0	0.0	0.0
Actual	2.8	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
80000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
200000	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 gather all materials, supplies and equipment needed to carry

out objectives

- Promoted other 4-H/Youth Development opportunities
- Provided orientation and training for summer staff and volunteers.
- 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.
- 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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	200	2500	350	5000
Actual	310	3000	748	6158

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of digital newsletters promulgated

Year	Target	Actual
2010	5	8

Output #2

Output Measure

- Number of workshops, presentations and demonstrations facilitated or conducted

Year	Target	Actual
2010	25	81

Output #3

Output Measure

- Number of parents attending workshop(s)

Year	Target	Actual
2010	45	140

Output #4

Output Measure

- Number of teachers and students employed

Year	Target	Actual
2010	45	60

Output #5

Output Measure

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

Year	Target	Actual
2010	5	9

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
2010	450	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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

What has been done

Information regarding 4-H enrollment is maintained by the territory's 4-H office.

Results

Summer program enrolled 263 youth, ages 5-14 on St. Croix and St. Thomas.

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
2010	300	325

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In order to narrow the digital divide, acquisition of computer skills by youth is critical. It increases their ability to compete in the 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, Power point 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
2010	450	350

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 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
2010	95	290

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 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
2010	40	48

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

4-H recognizes that gardening creases 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 350 vegetable seeds resulting in each person taking home seedlings to begin their home garden. Five 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
2010	75	190

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 learned 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
2010	65	75

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
2010	450	460

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Summer camp participation 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, especially 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

Unanticipated natural disorders, i.e. hurricanes, floods, etc. always have the potential of affecting program outcomes.

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

Incomplete data collection at present.

Key Items of Evaluation

Incomplete data collection at present.

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: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.6	0.0	0.0	0.0
Actual	2.6	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
75259	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 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 indicated 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

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	400	2500	1500	5000
Actual	459	2600	2000	6050

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	5	4

Output #2

Output Measure

- Number of workshops, presentations and demonstrations conducted

Year	Target	Actual
2010	25	32

Output #3

Output Measure

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

Year	Target	Actual
2010	80	40

Output #4

Output Measure

- Number of partnerships, collaborations or cooperative agreements formed

Year	Target	Actual
2010	5	3

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
10	Percentage of youth reporting an increase in decision-making skills reflected in core character values.
11	Number of youth learning and applying principles outlined in 4-H Philanthropic giving curricula

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
2010	1400	900

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 230 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
2010	95	75

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The charter process helps in making sure 4-H clubs are uniform and fulfill national 4-H mandates and image.

What has been done

Based on cultural relevance of Carnival in the VI and the Caribbean Region interested youth and adults formed a 4-H Carnival troupe.

Results

Three community based clubs have partially completed the charger 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
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2010 200 95

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

With leadership from interested adults, special interest groups attracted youth based on interests.

What has been done

Interested youth and adults were recruited based on special interests, i.e. Carnival troupe.

Results

Thirty youth and four 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
2010	95	80

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The 4-H program understands and recognizes that effective leaders are important to the success of the program.

What has been done

Leadership styles, strategies and skills were emphasized during leadership 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
2010	10	20

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Young black males are increasingly facing many challenges in the Virgin Islands. Involvement in 4-H has proven to be a successful strategy in developing successful coping strategies for youth.

What has been done

Projects that might especially attract males have been developed.

Results

The Science Olympiad special interest group has been established at another school. Ten youth enrolled; eight were male. Male enrollment increased over the past year by 2% in the 4-H Program.

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
2010	75	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Developing positive life skills was and continues to be the central focus of the 4-H Program - 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 210 youth completed displays or illustrated talks, showed animals 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
2010	100	130

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 the 4-H programming, each club is expected to assist the local 4-H office with community service outreach projects.

Results

4-H clubs helped collect over 4,000 lbs. 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.

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
2010	20	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Program success is exemplified in part by members' willingness and ability 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 clubs.

Results

One youth continues to serve on the CES Advisory Council; there are three teen leaders, nine club officers, and ten 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
2010	700	246

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; 15 members exhibited 24 small livestock projects; 30 participated in a 4-H Carnival 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

Outcome #10

1. Outcome Measures

Percentage of youth reporting an increase in decision-making skills reflected in core character values.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Good decision-making skills are crucial to positive youth development and helping youth become competent, productive citizens.

What has been done

Volunteer leaders and 4-Hers were encouraged to participate in any opportunity provided through 4-H to hone their good decision-making skills.

Results

In the yearly club plan, 4-Hers indicated increased confidence in their decision-making as a result of the educational and experiential opportunities afforded them during the year.

4. Associated Knowledge Areas

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

Outcome #11

1. Outcome Measures

Number of youth learning and applying principles outlined in 4-H Philanthropic giving curricula

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Philanthropy is a new project for 4-H programming and has been an exciting addition.

What has been done

The 4-H Program worked with youth to gather food for the youth of Haiti as a result of recent floods.

Results

Youth collected hundreds of pounds of canned goods through 4-H involvement in World Food Day that was disseminated to the Haiti Relief efforts.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
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

Key Items of Evaluation

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: 2010	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
42112	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
52112	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 were 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 will be extension specialists, extension agents, district supervisors, extension educators and research scientists in the Eastern Caribbean. Producers and farm operators will also be targeted for this program. Regional institutions, homemakers and youth will also be targeted.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	800	2500	350	2000
Actual	950	2000	225	1800

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	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
2010	5	5

Output #2

Output Measure

- International and regional workshops will be coordinated.

Year	Target	Actual
2010	5	3

Output #3

Output Measure

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

Year	Target	Actual
2010	3	1

Output #4

Output Measure

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

Year	Target	Actual
2010	1	1

Output #5

Output Measure

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

Year	Target	Actual
2010	50	275

Output #6

Output Measure

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

Year	Target	Actual
2010	5	7

Output #7

Output Measure

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

Year	Target	Actual
2010	400	250

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
2010	5	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Agricultural scientists in the Caribbean need to establish a sharp network to promote agriculture and help each other solve problems.

What has been done

Regional meetings were held for CFCS and Cache.

Results

Networks were established among scientists.

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
2010	5	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Agricultural scientists in the Caribbean need a forum for exchange of information.

What has been done

Three regional meetings were held.

Results

Over 300 Agricultural scientists were able to get together with their peers.

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
2010	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Improved breeding stock is needed to improve agricultural development in the Caribbean.

What has been done

275 improved breeding stock were shipped to B.V.I, St.Eustatius and St.Martin.

Results

Producers on the different islands have improved on their animals for breeding therefore increasing productivity.

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
2010	1	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An updated regional directory of individual and institutions in agricultural researchers is needed in the E.C.

What has been done

A directory of scientists and institutions has been established and maintained.

Results

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

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Assistance is needed by regional organizations in publishing news letter, proceedings and other publications.

What has been done

Assistance was provided to CFCS in the publication of their annual proceedings.

Results

Proceedings was digitized and provided to members.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Economic down turn affected coordination of programs

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

1. Evaluation Studies Planned

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

Evaluation Results

Formal evaluation of programs has not been completed.

Key Items of Evaluation