

# 2011 University of the Virgin Islands Extension Annual Report of Accomplishments and Results

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## I. Report Overview

### 1. Executive Summary

The Virgin Islands Cooperative Extension Services accomplished most of the objectives and goals that were outlined in the sixteen (16) programs that were developed as a result of the five year plan of work. The trainings, workshops, seminars, demonstrations, short courses, and educational activities accomplished this year positively impacted and changed lives of many Virgin Islanders. There were a total forty-five (45) workshops, seminars, and short courses that were conducted during this year. Extension staff were able to engage fifteen thousand (15,000) people through training, short courses, workshops, and farm visits during this fiscal year. 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. Training sessions/workshops were conducted for the livestock community to educate them as to the proper use and methods of identification available. Many farmers took advantage of this training and purchased the necessary materials to identify their animals, and thereby, avoiding a fine by the local government. This initiative saved producers' money by assisting them to identify their animals and having a successful breeding program. In collaboration with the Virgin Islands Department of Agriculture, a marketing program was developed called 'Farm Fresh' to promote local agriculture products. This program has made it possible for farmers to sell their local products, and thereby, increasing their income and creating a higher demand for locally produced products. 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. Producers demonstrated increased in knowledge of proper livestock management techniques after attending an eight week training session on Livestock Production and Management Techniques. Producers surveyed showed an increased in productivity and income. Three farmers successfully reseeded and established new pastures. This has solved the problem of overcrowding and increased animal productivity.

The Sustainable Agriculture Program conducted short courses, workshops, and demonstrations to inform producers about sustainable production practices, including composting, drip irrigation, and soil preparation. An eight week Farmers Training and Management Workshop was conducted for beginning farmers and some members of the St. Croix Farmers' Cooperative. CES in collaboration with the Food and Drug Administration sponsored a seminar on the Food Safety Modernization Act (FSMA) and Food Defense for agriculture professionals, farmers, food handlers and safety regulators. A home-grown program was initiated with the local public television station (PBS) and the local Department of Agriculture to promote healthy living, by creating community gardens and also to promote financial savings for residents by assisting them to produce their own backyard gardens. This program was offered to specific participants from all three islands that applied. The airing of this program on the local television station has been influential in having a large population of Virgin Islanders creating their own backyard gardens,

harvesting their products to improve healthy living and saving money on their household income. In a television talk show program that was conducted, ninety-five percent of residents that called stated that they saved an average of one hundred twenty-six dollars (\$126.00) on their monthly grocery bills by creating their own home garden. This has also increased the demand of local residents contacting the Cooperative Extension Service regarding backyard and community gardens. Three hundred twelve (312) young people and forty-seven (47) 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 in St. Thomas and St. John to show case the economic benefits of recycling trees, and parts of trees that would have otherwise gone into landfills. A total of twelve hundred (1200) 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 (98%) of them reported that they are now more aware of the economical and environmental benefits of trees. The Woodworkers Exposition yielded an average of three thousand two hundred dollars (\$3,200) per participant and a total of three new members who participated for the first time made an average of two thousand one hundred dollars (\$2,100). A total of seven (7) radio talk shows were aired 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. Fifty-three (53) youth and eight (8) adults from the St. Croix Waste Management Authority summer cleanup program and seventy-five (75) youth and eight (8) 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 fifty-three (53) students also learned about the fundamentals of pruning trees including a live demonstration. Extension staff continues to provide guidance to the crew of the Department of Public Works and 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 (51) parents increased their level of knowledge of the benefits of gardening for themselves and their children. Approximately ninety-five percent (95%) of participants experienced a savings of three hundred fifty dollars (\$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 (9) young black males to create a garden made of tires and raised beds constructed with recycled wooden streetlight poles. This program continues to provide an income of one thousand four hundred dollars (\$1,400) for each participant from the sale of produce. Extension staff had initiated the Home Grown Garden Program to work with eighty-five (85) residents throughout the territory in creating and maintaining their gardens as part of the Home Grown Gardening project. The "Rite of Passage for Boys" gardening project continues to increase in size attracting more young men from the community. The CES' Children Youth and Family at Risk (CYFAR) program, in partnership with the VI Housing Authority continued to maintained a project designed to expose young people to the joys and benefits of gardening. Twelve (12) youth from the CYFAR Contant

Knolls housing community continued to maintained their tire garden. This community lacks areas with open flat soil, thus the tire garden has been an ideal fit for this area. The Saturday Farmers' Market organized by 'We Grow Food Inc.' in collaboration with the CES staff continues to be a viable venue for selling farmers' products. There has been an increased of fifteen (15) new farmers who have joined the project.

#### 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. CES staff conducted a total of forty-two (42) tours with two thousand four hundred sixty (2,460) people participating. Staff also continued to provide 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. This partnership has yielded increased funding from private taxi operators who have made monetary donations to the Extension Service to continue the program.

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 in conducting Onsite Wastewater Septic Design training on the island of St. Thomas for a total of twenty (27) participants. This training was also videoconference to the CES office on St. Croix. 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 second 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 four hundred fifty-six (456) posters were distributed to individuals, organizations, and schools in the Virgin Islands. One hundred thirty-eight (138) 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, eighty-five percent (85%) of the participants were able to answer all the basic nutrition questions correctly. A Weight Management Workshop was conducted for a total of eighty (80) participants. The Weight Management Training showed the relationship between food intake, physical fitness and stress management. 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. Forty-five percent of youth answered queries correctly before receiving food safety information. Post test results yielded ninety 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 38 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 three new 4-H clubs were established on the island of St. Croix and one club was established on St. Thomas. The Virgin Islands 4-H Summer Program drew students from St. Croix and St. Thomas in a six weeks program. Two hundred and eleven students enrolled in the program on St. Croix and St. Thomas. Sixty-five 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 has been the main highlight of extension activities during this reporting period. Residents continued to take Computer Literacy classes to help them acquire new skills for job placement and to advance in their present careers. Business men and women including taxi and tour operators have also taken advantage of this program to enhance their career opportunities. The graduation rate has been an average of eighty (80), with students taking advantage of the four time periods that the course is offered weekly. This program has also attracted limited resource people looking for skills and training to enter the job market. A total of fifty-six (56) people have gotten jobs this year due to this program. The program continues to conduct a series of eight week Basic Computer Training Courses that teaches participants how to use Microsoft Windows, Microsoft Word, E-mail, and search for information using the World Wide Web. One hundred percent (100%) of individuals that participated in the program indicated that they acquired/increased their knowledge and usage of Microsoft Windows. One hundred percent (100%) of the individuals that participated in the program indicated that they acquired/increased their knowledge and usage of Microsoft Word. Eighty-nine percent (89%) of individuals that participated in the program indicated that they acquired/increased their knowledge and usage of email accounts. Ninety-two percent (92%) of individuals that participated in the program indicated that they acquire/increase their knowledge and usage of the internet. One hundred percent (100%) of individuals that participated in the eight week program indicated that they acquired/increased their knowledge and usage of Microsoft Excel. Ninety percent (90%) of individuals that participated indicated that they acquired/increased their knowledge and usage of Microsoft PowerPoint. A grand total of four hundred (400) students have graduated from this program.

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 three hundred twenty-five (325) 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 five hundred fifteen (515) animals were exchanged through this program. This consisted of seventy (70) White Hair sheep and one hundred ten (110) Purebred Boar goats. Two hundred (200) five-week old broiler chicks and one hundred thirty five (135), five week old layer 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: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	33.5	0.0	0.0	0.0
Actual	0.0	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

<b>1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)</b>			
<b>Extension</b>		<b>Research</b>	
<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
952994	0	0	0

<b>2. Totaled Actual dollars from Planned Programs Inputs</b>				
<b>Extension</b>			<b>Research</b>	
	<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
<b>Actual Formula</b>	952994	0	0	0
<b>Actual Matching</b>	1186515	0	0	0
<b>Actual All Other</b>	216425	0	0	0
<b>Total Actual Expended</b>	2355934	0	0	0

<b>3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous</b>				
<b>Carryover</b>	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
15	Childhood Obesity
16	Food Safety

**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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.5	0.0	0.0	0.0
Actual Paid Professional	2.5	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80000	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**

- A livestock brand registry was maintained to assist farmers and livestock agencies in identifying lost or stray livestock.
- A "Buy Local, Eat Fresh" program continued to promote the purchase and consumption of locally produced animal products
- A parasite monitoring program 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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	325	4250	350	425

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

**Patent Applications Submitted**

Year: 2011  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
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	Actual
2011	5

**Output #2**

**Output Measure**

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

Year	Actual
2011	4

**Output #3**

**Output Measure**

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

Year	Actual
2011	180

**Output #4**

**Output Measure**

- Farms would be visited for parasite monitoring and evaluation

Year	Actual
2011	27

**Output #5**

**Output Measure**

- Farms would be visited to weigh animals to monitor performance

<b>Year</b>	<b>Actual</b>
2011	8

**Output #6**

**Output Measure**

- Animal production would be monitored

<b>Year</b>	<b>Actual</b>
2011	120

**Output #7**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	1

**Output #8**

**Output Measure**

- Provide training to farmers in identification methods

<b>Year</b>	<b>Actual</b>
2011	1

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Establish and/or monitor five(5) sites annually to demonstrate the use of drought-resistant and nutritional forages for pastured livestock
2	Decrease animal losses due to parasites and poor nutrition
3	Increased sales and consumption of locally produced livestock products such as meat, milk, eggs
4	Increased number of livestock herds/flocks using complete identification and recordkeeping practices
5	Increased number of pig farmers that are raising their livestock in recommended facilities

**Outcome #1**

**1. Outcome Measures**

Establish and/or monitor five(5) sites annually to demonstrate the use of drought-resistant and nutritional forages for pastured livestock

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	4

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

This is an issue with the farmers. Better forages would mean better nutrition for the livestock. The income from sale of healthy livestock would increase.

**What has been done**

Farm visits were conducted and recommendations given to farmers. Farmers were also assisted with seed acquisition and planting.

**Results**

Three farms successfully reseeded and established new pastures; one farmer replanted the old pasture.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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 animal losses due to parasites and poor nutrition

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	5

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farmers are looking for an increase in the grade of livestock for sale.

**What has been done**

Improved pastures; demonstration of worming techniques.

**Results**

Healthier animals and less mortality losses.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

Increased 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**

<b>Year</b>	<b>Actual</b>
2011	5

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Farmers need to increase their sales and thereby increasing income. Also, for the consumer there is the need for increased availability of locally produced goods.

##### **What has been done**

Staff has teamed up with the V.I. Department of Agriculture and local farmers to promote locally produced items.

##### **Results**

Demand for locally produce fresh livestock products has increased; therefore, local farmers cannot keep up with the demand for certain products.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
301	Reproductive Performance of Animals
603	Market Economics

### **Outcome #4**

#### **1. Outcome Measures**

Increased 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	Actual
2011	3

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farmers need to improve their records for better farm management. This will allow them to increase their production and profits.

Also, there would be better security for identifying loose animals.

**What has been done**

Conducted workshops and demonstrations.

**Results**

Farmers are identifying their animals and keeping records.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
307	Animal Management Systems

**Outcome #5**

**1. Outcome Measures**

Increased 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**

<b>Year</b>	<b>Actual</b>
2011	1

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The farmers would like to have better facilities for their animals. This would mean animals with less disease and parasites. The farmer's income would also increase. Within the community, the risk of disease would decrease and the quality of product available for sale would increase.

**What has been done**

Conducted workshops and farm visits.

**Results**

Minimal progress has been made in this area due to the depressed economic state of the community.

**4. Associated Knowledge Areas**

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

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

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

**Brief Explanation**

The territory has had serious rainfall and storms resulting in major flooding leading to major structural and economic hardships for farmers. They are struggling to make ends meet and are unable to make necessary improvements.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Participants have demonstrated an increase in knowledge through the programs and have increased their desire to make conditions better.

**Key Items of Evaluation**

Number of livestock and quantity of items for sale  
Quality of sale items

Increase demand for items.

**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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	3.2	0.0	0.0	0.0
Actual Paid Professional	3.2	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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
11900	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.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	272	1000	650	1000

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
Actual	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

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

Year	Actual
2011	8

**Output #2**

**Output Measure**

- Number of publications

Year	Actual
2011	0

**Output #3**

**Output Measure**

- Number of announcements through print and electronic media

Year	Actual
2011	23

**Output #4**

**Output Measure**

- Number of farm visits and telephone contacts

Year	Actual
2011	134

**Output #5**

**Output Measure**

- Projects to increase farm water supply and water use efficiency

<b>Year</b>	<b>Actual</b>
2011	0

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Sixty(50) farmers will use sustainable agriculture practices
2	Fifty(50) farmers will utilize value added strategies
3	One hundred twenty five(125) producers will adopt practices to enhance water use efficiency
4	One hundred twenty five(125) farmers will conduct or enhance recordkeeping practices

**Outcome #1**

**1. Outcome Measures**

Sixty(50) farmers will use sustainable agriculture practices

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	98

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Providing farmers with opportunities to diversify their operations is 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.

Food contamination, whether it is deliberate or accidental, will cause disease or people to get sick and/or kills untold numbers of residents in the VI and across the country each year. Millions of dollars are spent to locate the source of the contamination and curtail its spread in to the general population. Farmers, restaurants, supermarkets and all food handling and manufacturing entities should be educated in the development preventative strategies to avoid food contamination and reduce the spread of food borne illnesses. Each year, thousands of individuals are injured, hurt, or even killed on farms and around the homes from preventable accidents in the territory and across the US. Safety education will play a major role in reducing those numbers significantly.

**What has been done**

CES in collaboration with the Food and Drug Administration sponsored a seminar on the Food Safety Modernization Act (FSMA) and Food Defense for agriculture professionals, farmers and food handlers and safety regulators.

An Introduction to Poultry Production and Swine Production seminar was conducted on the island of St. John for farmers and interested residents.

CES sponsored the 6th 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**

Fifty (50) agriculture professionals, farmers, environmental health and licensing enforcement

officers and restaurant owners became more aware of content of the FSMA and how it would their food handling practices. They also became more aware that developing a strategy to prevent accidental and deliberate food contamination is key to reducing the incidents of mass food poisoning that occur periodically.

Eight (8) residents became more aware of the potential for raising chicken and pigs for profit and were provided with information to start a small scale operation.

Six hundred fifty (650) young people and forty (40) 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

Fifty(50) farmers will utilize value added strategies

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Knowledge Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2011	265

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

Because of over planting of crops, and /or the inability to sell all of the crops or livestock, farmers at times have decider what to do with the surplus. They have several options including dumping, giving it away, composting, or adding value to the product and selling it in a different form. The later has the potential of increasing the overall income of that farmer. It also brings to the market place more choices for the consumer.

**What has been done**

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 post harvest processing and handling such as cooking, drink making, baking, preserving and drying of one or more of the featured commodities. Information (recipes, processing procedures) is also provided the entire participant to take home and try at their own convenience. Additionally, Mango Mele, along with two agriculture and food fairs were avenues used for the dissemination and display of value added information, demonstrations and products.

**Results**

At the annual World Food Day event, two hundred sixty-five (265) farmers agriculture professionals, and interested residents became more aware of the potential for increasing income hundreds by converting unsold crops into value added products. Hundreds of other residents including young people gained a greater awareness of the many uses of citrus and tomatoes 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 "Mango Mele and Tropical Fruit Festival." They also became aware of the various flavors of different types of mangoes.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

One hundred twenty five(125) producers will adopt practices to enhance water use efficiency

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	15

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Of all the constraints and limitations on 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

Extension staff conducted an irrigation workshop.

#### Results

Fifteen (15) crop farmers developed an irrigation system on their farm.

### 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

One hundred twenty five(125) farmers will conduct or enhance recordkeeping practices

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual
2011	65

#### 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 from both federal and local, production records of activity prior to the disaster are required 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 record 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.

The Economic Development Authority in conjunction with the VI Department of Agriculture and the UVI Small Business Development Center presented a seminar on the Farmers and Fisherman's loan program.

#### **Results**

Approximately Sixty (65) farmers increased their knowledge of the importance of record keeping to their overall operation. Ninety-five percent (95%) are better informed on the preparation of the Schedule F tax form and how they obtain additional financing for their farm operation.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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)**

##### **Evaluation Results**

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

##### **Key Items of Evaluation**



**V(A). Planned Program (Summary)**

**Program # 3**

**1. Name of the Planned Program**

Natural Resources and Environmental Management

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	35%			
123	Management and Sustainability of Forest Resources	25%			
125	Agroforestry	10%			
134	Outdoor Recreation	25%			
136	Conservation of Biological Diversity	5%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.8	0.0	0.0	0.0
Actual Paid Professional	2.8	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80000	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

- Continued participation with the development and implementation of environmental management master plans for Magens Bay, Estate Adventure Trail, and Great Pond Park recreation areas and a Magens Bay watershed advisory committee. Habitat protection and restoration plans/procedures can also be used 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 in 2004.
- Developed resource conservation education outreach materials to engage the islands' growing immigrant populations and disseminate materials and information utilizing an innovative approach that incorporates and builds upon indigenous knowledge and practices.
- Developed webpages, educational materials, workshops, presentations and demonstrations (informal learning sites) that relay information regarding native plants, ecosystems and habitats; naturalized, exotic, endangered and threatened plant species; urban forestry and other resource conservation issues.
- Utilized the media to promote Natural Resources programs through various methods, including, but not limited to, radio and television PSAs, television video spots, E-education, local talk shows (radio & TV), and presentations.
- Identified and/or developed technical materials related to resource conservation; pollution control practices; and native, medicinal, naturalized, exotic, endangered and threatened plant species for use by researchers, policy-makers and regulatory personnel.
- Provided technical assistance on a variety of topics, including but not limited to, plant identification, selection and maintenance; native, naturalized, exotic, endangered and threatened plant species; natural products development, environmental assessment; ecotourism development and other resource conservation issues to government agencies, community groups, various areas of the private sector, students and the general public.
- Played a lead role in facilitating the interaction of community groups and leaders to address natural resource conservation and management issues, as well as pollution control and prevention.
- Conducted ecotours for local schools and groups (mostly on St. Croix) to stimulate interest in careers in science, ecotourism or environmental management and to provide students and others with a general introduction to VI natural and cultural resources.

## 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.
- Local environmental associations and Rotary Clubs that engage in activities to conserve and manage the VI environment.
- Immigrant populations whose practices (land clearing techniques, littering, etc.) negatively impact

VI natural resources. Efforts will be made to identify contacts.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	250	900	320	550

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

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

Year	Actual
2011	3

**Output #2**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	3

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	190

**Output #4**

**Output Measure**

- Tours of VI natural areas for students and community groups

<b>Year</b>	<b>Actual</b>
2011	46

**Output #5**

**Output Measure**

- E-education - NREM websites updated

<b>Year</b>	<b>Actual</b>
2011	1

**Output #6**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	5

**Output #7**

**Output Measure**

- Demonstration site relating to native plants, environmental management

<b>Year</b>	<b>Actual</b>
2011	3

**Output #8**

**Output Measure**

- PSA's

<b>Year</b>	<b>Actual</b>
2011	0

**Output #9**

**Output Measure**

- Fairs

<b>Year</b>	<b>Actual</b>
2011	2

**Output #10**

**Output Measure**

- TV/Media

<b>Year</b>	<b>Actual</b>
2011	1

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Recommended BMP's in environmental management master plans will be adopted by five 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, number of people who adopt recommended landscaping practices, incorporate native plants into their landscapes, protect and/or enhance soil resources for agriculture, construction, and landscaping.
3	As a result of direct and indirect contacts number of adults and students who adopt practices that protect native plants and their habitats because of their increased understanding of the human effects on native ecosystems.
4	Number of stakeholders (government personnel, developers, community groups and students) who became more aware of the connections between terrestrial and marine communities, how watersheds function, and the importance of watershed protection.
5	Based upon watershed research number of projects within targeted watersheds which protect water quality.
6	Number of Virgin Islands youth who increase their awareness of VI natural and cultural resources, and careers in environmental management and ecotourism. Number of individuals trained as ecohiking guides.

**Outcome #1**

**1. Outcome Measures**

Recommended BMP's in environmental management master plans will be adopted by five 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**

<b>Year</b>	<b>Actual</b>
2011	9

**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 Assoc. and the Nature Conservancy (NGOs), or private landowners with conservation areas manage natural 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[DFW]) develop natural resource management plans. CES provided requested Information to NGOs and CZM permit applicants about BMP's to incorporate into landscape management plans, 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 continued to implement plans to remove invasive plants from two Territorial Parks and worked with MBA to develop Magens Bay short-term arboretum management plan. CZM major permit applicants included recommendations by CES in landscape plans submitted to CZM and DFW. As a VI Dept. of Agriculture Forest Stewardship Program member, CES approved a master plan (i.e. native forest conservation) included in the purchase agreement of a large St. Croix conservation property through the Forest Legacy Program. Landowners enrolled in the Forest Stewardship Program followed master plans approved by CES. CES provided technical assistance to landscape architects contracted by the VI Government to develop a master plan for the renovation of historic downtown St. Thomas, based on the form-based code planning model.

#### 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, number of people who 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	Actual
2011	65

##### 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, comply with the VI government permitting requirements for earth-change operations and construction or to develop urban landscape plans.

###### **What has been done**

Through phone consultations, publications, site visits, volunteer training and the Environmental Repository housed at CES on St. Croix, CES provided clients with information about native plant conservation, environmental landscaping, native plant identification, native forest conservation, native plant selection for urban forests and erosion control. CES increased collaboration with professionals involved with developing plans and outreach programs to introduce native plants into the urban landscape. One environmental group has been promoting the VI's environmental concerns by using copies of CES previous posters, on native plants, and environmental landscaping. DPNR and several teachers were given large posters of the native trees.

###### **Results**

DPNR personnel (CZM, DFW, and Permits) referred permit applicants to CES for assistance with identifying and preserving native plant communities on construction sites, as a result, applicants

selected native trees for projects. CES convinced several individual landowners to preserve or cultivate native plants. DFW increased its ability to develop wildlife and native plant habitat management strategies with the assistance of CES. The League of Women Voters and the VI Environmental Associations shared CES strategies for protecting native plants with specific developers. Landscape architects were assisted with developing lists of suitable native plants for landscaping to be distributed to regulatory agencies and the general public. Native plants were used to restore VI historic sites based on CES recommendations, and plans were developed to expand the introduction of native plants into urban settings.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

**Outcome #3**

**1. Outcome Measures**

As a result of direct and indirect contacts number of adults and students who 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	Actual
2011	335

**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 students, landowners and advisory committees about how humans impact native plant habitats. The VI Public Library developed and distributed native plant factsheets based on CES prototypes and CES books about VI native plants, to VI school libraries. CES is participating in a 2-year project to restore the St. Thomas UVI-CES Diagnostic Herbarium. Tours were conducted to evaluate human impacts on native plant ecosystems and draft 'tree law' legislation was developed.

**Results**

VI 6-12 grade teachers used packages of laminated native plant factsheets and CES books about VI native flora. The UVI Master of Marine and Environmental Science Program and Yale University used the CDC-CES book, Island Peak to Coral Reef, and it was recommended by tour companies and the VI National Park website. Clients indicated that they would implement CES recommendations regarding native plants and invasive plant control. DPNR permit applicants included CES recommendations in landscape plans. Clients often showed increased awareness of the issues affecting terrestrial resources. With funding from the UVI Foundation, UVI students were trained to manage plant specimens in the CES Herbarium. Students learned about VI flora and how to create plant databases. The restoration of the herbarium supports phytochemical research recently initiated by the UVI Science Department and CES as part of a 2-year project to establish the UVI Center for Complementary and Alternative Medicine based on NIH CAM. Youngsters and a few mature clients were shown our herbarium collection.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

**Outcome #4**

**1. Outcome Measures**

Number of stakeholders (government personnel, developers, community groups and students) who became 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	Actual
2011	200

**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 Div. of Fish & Wildlife, Magens Bay Authority and the Yale U. Coastal and Watershed Management Program to investigate land-sea interconnectivity and started a new partnership with the Island Green Builders Assoc. Site visits, informal meetings, seminars, field trips, advisory committee participation, phone consultations and publication distribution provided information relating to watershed protection. Photos of the effects of erosion and sedimentation were taken; shown in a workshop and shared with DPNR.

**Results**

By frequently interacting with stakeholders in coastal areas, CES was able to learn about conditions impacting coastal waters, including land-based sources of periodic sediment laden stormwater runoff observed by stakeholders. As a result of these contacts, CES was able to report the complaints to resource managers or regulatory personnel who made efforts to eliminate the problems. Watershed 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 continued to participate in the development of long-range strategies to purchase and conserve VI priority watersheds and supported watershed management plans that certain private property owners who enroll in the Forest Stewardship program are required to follow. CES helped direct funds from the Forest Legacy Program to the purchase of St. Croix property in a critical watershed area for conservation in the VI Territorial Park system.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
112	Watershed Protection and Management
123	Management and Sustainability of Forest Resources

**Outcome #5**

**1. Outcome Measures**

Based upon watershed research number of projects within targeted watersheds which protect water quality.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	2

**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 staff co-researched The Landowner Incentive Program project that mapped critical VI watershed habitats and contributed to Yale U. School of Coastal and Watershed Management program's long-term monitoring of guts that in previous studies (co-researched by CES) had been identified as 'impacted'.

**Results**

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

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
112	Watershed Protection and Management

**Outcome #6**

**1. Outcome Measures**

Number of Virgin Islands youth who increase their awareness of VI natural and cultural resources, and careers in environmental management and ecotourism. Number of individuals trained as ecohiking guides.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	45

**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. VI tour company websites advertised and recommended CES natural resource publications. CES continued to assist a major permit applicant with the planning of a St. Thomas cultural and natural history park landscape with native plants and preserved natural habitats. Staff provided a tour of our native plants around our office to a Vice President and a 4-member team from a HBCU funding team and each was given a copy of the from Island Peaks to Coral Reefs book .

**Results**

Taxi tour directors incorporated CES information into their tours and certification curriculum used for training tour directors. Tour directors indicated that the information provided by CES improved the quality and educational value of their tours. The developers of a St. Thomas cultural and natural history park incorporated CES's recommendations regarding the use of native plants in the landscape. CES publications about native plants and ecosystems were used by VI tour companies.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources
134	Outdoor Recreation

**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 the VI government agencies. It is difficult to establish very effective long-term relationships that can result in policy changes and training. Also, many of the employees in these agencies acknowledge the need for more comprehensive enforcement of environmental laws, but they are already overextended and need additional staff support to effectively enforce existing regulations. Recent governmental fiscal cutbacks restrict hiring staff. Some employees are hesitant about enforcing environmental regulations because of various political pressures.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

CES worked closely with Territorial Park managers to plan, implement and evaluate BMPs at various VI Territorial Parks. CES communicated closely with managers during the implementation of BMPs, and managers responded favorably to the informal evaluation

methods used by CES. Standard evaluation forms are used during workshops and training programs. 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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	1.6	0.0	0.0	0.0
Actual Paid Professional	1.6	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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
10000	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

were achieved through the use of publications, seminars, mass media, field days and exhibits as well as personal contacts.

**2. Brief description of the target audience**

The targeted audience were public and private landowners and agencies, community leaders and organizations, youth groups, and civic organizations.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	750	10000	67	150

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

**Patent Applications Submitted**

Year: 2011  
Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
Actual	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of educational classes in tree identification

Year	Actual
2011	3

**Output #2**

**Output Measure**

- Number of workshops/demonstrations in tree pruning

<b>Year</b>	<b>Actual</b>
2011	4

**Output #3**

**Output Measure**

- Number of educational classes in tree care

<b>Year</b>	<b>Actual</b>
2011	4

**Output #4**

**Output Measure**

- Number of one-on-one consultation with residents

<b>Year</b>	<b>Actual</b>
2011	160

**Output #5**

**Output Measure**

- Number of public service announcements

<b>Year</b>	<b>Actual</b>
2011	3

**Output #6**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	1

**Output #7**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
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2011 3

**Output #8**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	2

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Two thousand six hundred twenty five(2625) residents, landowners, policymakers will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest
2	Four thousand three hundred fifty(4350) residents and landowners, public and private agencies, and nonprofit organizations will increase their knowledge of the care and management of the urban forest
3	One thousand three hundred fifty(1350) homeowners, landowners, municipalities will actively reduce, reuse, and recycle yard waste
4	One thousand six hundred fifty(1650) residents will restore urban trees following hurricanes and tropical storms
5	Thirty nine landowners and residents will expand entrepreneurial opportunities from the urban and suburban forest resources

**Outcome #1**

**1. Outcome Measures**

Two thousand six hundred twenty five(2625) residents, landowners, policymakers will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	700

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Sensitizing the next generation of Virgin Islands youth as to the importance of trees in the environment is important for the future of sustainable resource management. Providing age appropriate resources and educational opportunities is the key to increasing awareness of the benefits of trees and effectively communicating best management practices.

As the economy begins to show signs of weakening, VI residents will be looking for opportunities to supplement their income. Trees and tree parts that can be turned into saleable art pieces are sent to the landfill to be destroyed.

**What has been done**

Extension staff set up displays and provided one-on-one consultations with attendees at the Agriculture and Food Fair of the Virgin Islands and the St. Thomas/St. John Agriculture and Food Fair.

The 5th annual Woodworkers Expo was held to showcase the economic benefits of recycling trees and tree parts that would have otherwise gone into the landfill.

The 4-H summer academy provides Extension staff with an opportunity to educate youth with age-appropriate material in a fun and interactive way.

Radio appearances provided information and technical advice to the general public. Educational handout posters and handouts were made available.

**Results**

Fifty-three (53) youth ages 5-8 from the 4-H summer academy were provided with an educational coloring book entitled "Trees are Good?". This coloring book which is produced by the Trees Are Good organization provides basic information regarding the benefits of trees and the role trees

play in the environment.

Approximately four hundred fifty (450) residents became aware of the economic benefits of turning felled trees and tree parts 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.

Approximately two hundred (200) attendees at the agriculture fairs learned of the economic potential for products from tree and tree parts.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

#### Outcome #2

##### 1. Outcome Measures

Four thousand three hundred fifty(4350) residents and landowners, public and private agencies, and nonprofit organizations will increase their knowledge of the care and management of the urban forest

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2011	590

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

The Waste Management Authority conducts a territory wide clean-up each summer utilizing hired youth from the community. One of their responsibilities is to prune shrubs and trees. Many of these young people have never had any training in tree pruning or tree care.

Planting the right tree in the right place reduces the likelihood of trees coming in contact with utility lines and buildings. Correcting the problem can be costly not only to the homeowner but could spell the demise of that tree. Homeowners, businesses, and organizations plant trees for symbolic, therapeutic, environmental, and others reasons. Proper planting of trees increases the likelihood of the root system adapting favorably to the soil environment in which it is growing.

###### **What has been done**

Extension staff conducted a tree planting demonstration for members of UVI faculty, staff, and administration during a tree dedication ceremony. The young people of the VIWMA summer program were given practical hands on exercises in proper pruning techniques to reinforce some of the techniques covered in the class sessions. 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. Trees were randomly placed in odd places around the tent with a sign that posed the question 'Would You Plant this Tree Here?'

Home visit and one-on-one contact with residents, and public and private landscape crews have been used to provide 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.

**Results**

Seventy-five (75) young adults of the VI WMA's summer clean-up program increased their practical knowledge of basic instruction in tool selection, safety, and proper pruning techniques. Approximately eighty-five (85) UVI staff, students, and guests who were present at a tree dedication ceremony increased their awareness of proper tree planting. Approximately four hundred thirty (430) individuals were directly impacted and thousands more indirectly by displays and interaction with Extension staff at the annual agriculture fairs.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources
124	Urban Forestry

**Outcome #3**

**1. Outcome Measures**

One thousand three hundred fifty(1350) homeowners, landowners, municipalities will actively reduce, reuse, and recycle yard waste

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
-------------	---------------

2011

10

**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 5th annual Virgin Islands Woodworkers Expo in St. Thomas and St. John was used as a means educating the public on how trees and tree parts could be recycled and reused.

**Results**

Over four hundred fifty (450) residents became more aware of the options for reusing and recycling tree parts. Ten (10) 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**

One thousand six hundred fifty(1650) residents will restore urban trees following hurricanes and tropical storms

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Actual
2011	10

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Tropical storms are a fact of life in the territory. Trees in general are negatively affected in some way depending on the severity of the storm. Urban trees in particular are adversely affected by storms because generally they are growing in less than ideal conditions thus, predisposing them to a higher risk of failure. If damaged trees are not given corrective measures within a short time or fallen trees 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 individual 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**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources
124	Urban Forestry

**Outcome #5**

**1. Outcome Measures**

Thirty nine landowners and residents 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**

<b>Year</b>	<b>Actual</b>
2011	18

**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. Stems, trunks, and branches, can be reused in arts and crafts. More residents should become more aware of the potential for entrepreneurial

opportunities from recycling the trees and tree parts.

#### **What has been done**

The 5th annual Virgin Islands Woodworkers? Expo was held at the UVI Sports and Fitness Center St. Thomas and the Market Place Shopping Center on St. John. Extension staff coordinated and executed this annual event in cooperation from the National Endowment for the Arts and other local contributors.

#### **Results**

Ten (10) of the best woodworkers in the territory displayed and sold original works of art from wood primarily derived from trees that would have ended up in the land fill. Some of the woodworkers also gave live demonstrations of showing how they turn an ordinary block of wood into a work of art. Also for the first time ever, the participants in the expo held a show on St. John. Eight (8) of the woodworkers participated in the show which was held at the Marketplace complex in Enighed Pond. Approximately three hundred (300) adult residents and forty-five (45) students became more aware of the opportunity to create a fulltime or part-time employment for themselves. The woodworkers sold \$2000.00 worth of products.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources

#### **V(H). Planned Program (External Factors)**

##### **External factors which affected outcomes**

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

##### **Brief Explanation**

#### **V(I). Planned Program (Evaluation Studies)**

##### **Evaluation Results**

One-on-one and small group interviews were administered at the workshops and public events. They provided a good picture of the effectiveness the lectures, poster presentations and publications. 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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.2	0.0	0.0	0.0
Actual Paid Professional	2.2	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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

Educational classes, workshops, seminars, home and on-site visits, demonstrations, and one-on-one consultations were conducted in order to increase awareness and provide best

practices for VI residents.

**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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	610	10000	841	1500

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	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

<b>Year</b>	<b>Actual</b>
2011	10

**Output #2**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	7

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	12

**Output #4**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	75

**Output #5**

**Output Measure**

- Number of public service announcements

<b>Year</b>	<b>Actual</b>
2011	3

**Output #6**

**Output Measure**

- Number of articles/publications on urban gardening management

<b>Year</b>	<b>Actual</b>
2011	0

**Output #7**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	5

**Output #8**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	16

**Output #9**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	0

**Output #10**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	1

**Output #11**

**Output Measure**

- Number of public and private entities and individuals establishing gardens

<b>Year</b>	<b>Actual</b>
2011	26

**Output #12**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	2

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	One thousand five hundred sevety five(1575) residents will become more aware of the benefits of gardening
2	Three thousand two hundred seventy five(3275) residents, nonprofit organizations, youth groups, and public and private entities will increase their knowledge of more efficient low cost technologies, practices, and principles
3	One thousand five hundred fifty(1550) home gardeners will realize a reduction in their cost of living resulting from urban gardening
4	Two thousand tree hundred(2300) residents, nonprofit organizations, youth groups, and public and private entities will establish gardens
5	One thousand six hundred seventy five(1675) residents, nonprofit organizations, youth groups, public and private entitites will start compost.

## **Outcome #1**

### **1. Outcome Measures**

One thousand five hundred seventy five(1575) residents 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**

<b>Year</b>	<b>Actual</b>
2011	1200

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Helping Virgin Islanders to save money and eat healthfully is one of the goals of the CES Urban Gardening Program. The recent increases in gas and utility cost have forced residents to adjust their budgets and change their spending habits accordingly. 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. Many young people are not aware of where their food comes from. Gardening provides an opportunity for young people experience not only the source of their food but the added benefits that come with growing your own food.

#### **What has been done**

Extension staff participated in the annual Agriculture and Food Fair of the Virgin Islands with a display of container gardening and handouts. The display featured several ways of growing vegetables herb and ornamentals. Tires, a window box, and a hanging window box were three featured containers for growing plants. More Virgin Islanders are tuning into the Home Grown gardening series that is currently in its second airing on WTJX channel twelve (12) our local Public Broadcasting System station. Along with the weekly airings, the station has run at least two (2) Home Grown marathons during this past season.

CES partnered with the Frederick Lutheran Church to conduct a health fair in the Emancipation Garden for its members and the general public.

During the Week of the Young Child, Extension staff participated in Read on the Green sponsored by the VI Department of Education. This annual event exposes preschoolers through third graders to reading through various interactive methods.

Extension staff presented lectures on the benefits of gardening and creating container and box gardening to the 4-H summer academy, the Methodist Training and Outreach Center summer program, the Human Services Father-Child Day, Seniors Citizen Center, two (2) Headstart preschools, and the Work-Able summer youth program and the All Saints Episcopal Church.

### Results

At the annual agriculture and food fair of the Virgin Islands, approximately, two hundred (200) residents interacted with extension staff and received handouts pertaining to building a raised beds and tires gardens. Home visits also resulted from contacts made at the fair.

Weekly and sometimes daily, extension staff receive telephone calls or office visits seeking information about a subject that was aired on Home Grown or to request a home visit, or just to express their appreciation for the show.

Extension Agriculture and Natural Resources staff provided gardening information to the approximately one hundred (100) persons from the Lutheran Church and the community that attended the health fair.

During the "Week of the Young Child" and at the Father-Child Activity Day, visits to the senior centers, the Methodist summer program and the Work-Able summer youth program and the 4-H summer academy, approximately one hundred sixteen (116) adults and five hundred five (505) youth increased their knowledge of the benefits of gardening.

Also during that special week, Extension staff returned to the Human Services Head Start program for another workshop on gardening and transplanting.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

### Outcome #2

#### 1. Outcome Measures

Three thousand two hundred seventy five(3275) residents, nonprofit organizations, youth groups, and public and private entities 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	Actual
2011	600

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

Most home owners, youth garden groups, and public and private agencies still use tradition methods of irrigation, cultivation and general growing techniques. These growing practices

usually are not the most efficient or cost effective. With the cost of living being so high, along with the limited water resources, gardeners of all types need to find ways to use the latest technology and most effective gardening practices in order to reduce cost. Even though some of the current technologies such specialized mulch materials, drip irrigation, and digital irrigation timers, have been in existence for at least 18 years, many residents have never seen them or seen them in use before. Some homeowners experiment with practices that they may see in a magazine or have been passed on by a neighbors or family members with inconsistent results which can be frustrating and discouraging. Some home resident are just naturally do-it-yourself persons and just need literature and/or personal contact in order to be successful.

#### **What has been done**

CES partnered with the Virgin Islands Department of Agriculture in showcasing farmers and farm produce during the National Agriculture Week celebration at the Sanderilla Thomas Bungalo on St. Thomas. Extension staff provided information to the farmers and the general public on such topics as grafting and air layering as well as tire and raised bed gardening.

During the 20th annual Bordeaux Rastafari Agriculture and Food Fair, Extension staff provided handouts to residents who were interested in composting and tire gardening. Youth groups from the Methodist Outreach program, Work-Able, and 4-Hsummer Academy visited the CES demonstration garden to see how vegetables and be grown in limited space. 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. Three (3) technical workshops were conducted throughout the territory for homeowners participating in the program. Extension staff displayed three ways of growing vegetables at the annual Agriculture Fair of the Virgin Islands: tires, pots, and box garden, home gardens. Extension staff continued to provide technical support and guidance to for two (2) schools gardens in the St. Thomas district. Some of the participants were visited periodically to check on the progress of their gardens.

#### **Results**

During the National Agriculture Week Celebration, over four hundred (400) residents and visitors interacted with Extension staff throughout the day. Some of the approximately fifteen (15) contacts at the Bordeaux Rastafarian agriculture fair led to home visits and personal tours of the CES demonstration gardens. A group of fourteen (14) young people from the Work-Able Inc. summer program got an opportunity to learn how to construct raised beds and fill tires with soil. Twenty-seven (27) 4-H youth and three (3) adult leaders also learned how box garden can be constructed at their camp site. Seventy-five (75) students and staff of the Methodist Outreach program increased their knowledge of growing in small spaces. Seventeen participants in the Home Grown program increased their knowledge of scouting for pest, improving soil quality, and plant selection among of the subjects.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
205	Plant Management Systems

**Outcome #3**

**1. Outcome Measures**

One thousand five hundred fifty(1550) 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**

<b>Year</b>	<b>Actual</b>
2011	47

**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. With the additional cost of shipping and handling, store owners mark up, and utility cost, Virgin Islands residents pay extremely high cost for food. If there was a way to reduce the cost of food, residents could save money and possibly shift financial resources to other aspects of life.

**What has been done**

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 have reported a savings in the cost of certain commodities as a result of this project.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
205	Plant Management Systems

**Outcome #4**

**1. Outcome Measures**

Two thousand three hundred(2300) residents, nonprofit organizations, youth groups, and public and private entities will establish gardens

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	154

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Virgin Islands residents for the most part have been exposed to gardening either from practical experience in the past or from visiting a neighbors garden. Those who may have had gardens gave up gardening for one reason or another. Those that have never gardened probably have want to but don't know how and where to begin. Youth need to experience the benefits of gardening as well. Obesity in the youth and adults is one of the health concerns of healthcare professionals.

**What has been done**

The Seventh-day Adventist Church Pathfinders club received lecture types of gardens and how insects that are damaging their crops can be controlled. Extension staff provided instruction and hands-on demonstration on creating container and raised beds gardens to several summer youth gardening program in an effort to stimulate an interest in gardening. Extension staff provided material and information on transplanting and plant care to fathers participating in the Human Services Father-Child Activity Day.

**Results**

Five (5) adult Pathfinder leaders and sixteen (16) youth created a large garden consisting of 48 containers. Fourteen (14) young people from the Work-Able Inc. summer program got an opportunity to construct a raised bed box garden and plant seedlings it in. 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 raise at home. Seventy-five (75) students and staff of the Methodist Outreach program created approximately 100 container vegetable gardens. Two (2) elementary schools developed raised bed and tire gardens with the

assistance of extension staff. Forty (40) fathers and approximately eighty (80) children transplanted basil seedling into bowls that would eventually be grown at home.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

#### Outcome #5

##### 1. Outcome Measures

One thousand six hundred seventy five (1675) residents, nonprofit organizations, youth groups, public and private entities will start compost.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2011	3

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

Virgin Islanders discard tons of materials, particularly, 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 in the future 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 pile and maintaining existing piles.

###### **Results**

Approximately one hundred seven (107) students and forty-five (45) 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.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
403	Waste Disposal, Recycling, and Reuse

#### **V(H). Planned Program (External Factors)**

##### **External factors which affected outcomes**

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

##### **Brief Explanation**

#### **V(I). Planned Program (Evaluation Studies)**

##### **Evaluation Results**

Staff shortages have severely hindered the ability to execute plans for the urban gardening projects. The ability the gather follow up behavioral changes 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 project.

##### **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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	1.9	0.0	0.0	0.0
Actual Paid Professional	1.9	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80000	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
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, non-governmental organizations, and the general public.

## **3. How was eXtension used?**

eXtension was not used in this program

## **V(E). Planned Program (Outputs)**

### **1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	520	2350	530	350

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

Year: 2011  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
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	Actual
2011	6

**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	Actual
2011	26

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	205

**Output #4**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	4

**Output #5**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	17

**Output #6**

**Output Measure**

- PSAs

<b>Year</b>	<b>Actual</b>
2011	0

**Output #7**

**Output Measure**

- Fairs

<b>Year</b>	<b>Actual</b>
2011	6

**Output #8**

**Output Measure**

- TV/Media

<b>Year</b>	<b>Actual</b>
2011	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. Sixty five(65) 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. Ten(10) VI Dept. of Public Works roadside maintenance crews 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 five(5) 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**

<b>Year</b>	<b>Actual</b>
2011	2

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

Staff visited 2 home sites and made recommendations.

**Results**

However; even though both clients saw the need to have corrective action taken they are financially unable to do so.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	50

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Developers and architects seek technical information from CES about alternative Onsite Wastewater Treatment Systems (OWTS). The Virgin Islands Department of Planning and Natural Resources (DPNR) referred architects, businesses, developers to CES for specific technical assistance with alternative OWTS installations.

**What has been done**

CES coordinated a VI Septic System Design Training Program conducted by instructors from the University of Rhode Island OWTS. Demonstration Center in partnership with the VI Div. of Environmental Protection and Waste Management Authority. CES provided technical assistance to a developer and architect who decided to install an alternative OWTS in a St. Thomas shopping center under construction. CES provided developers, engineers, homeowners and businesses with alternative OWTS information during site visits.

**Results**

Forty-one septic system installers/service providers and VI government personnel participated in the 3-day Septic System Design Training Program on St. Thomas. Training program evaluations were favorable and participants indicated that the training was useful to them. Based on CES technical assistance a developer and architect decided to install an alternative OWTS in a St. Thomas business center under construction. After a news article, a local St. John developer and the trainers were able to discuss his plans and offer suggestions based on their experiences. 4 individuals took the comprehensive exam.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
----------------	-----------------------

- 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. Sixty five(65) 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	Actual
2011	126

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Through direct and indirect methods, government agencies, NGOs, resource managers, property owners, educators, students, researchers and architects/engineers require basic and technical information about riparian and aquatic ecosystems, including how these ecosystems function within watersheds and are impacted by human activities.

**What has been done**

Information about wetlands, watershed and watercourse studies and a field guide conducted with CES assistance were available on websites. CES co-researched the DFW funded project: Landowner Incentive Program that produced GIS map data layers with detailed modeling of island drainages, and wetlands. CES provided assistance and conducted a tour for Yale School of Coastal and Watershed Management graduate students monitoring WQ in St. Thomas watercourses. Printed and laminated maps were distributed and they were explained to the clients.

**Results**

The VI Wetlands and Watersheds project and the DFW Landowner Incentive Program project provided DPNR-DEP and DFW (funding agencies) 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 available on-line. The partnership and interaction between CES and the Director of the Yale

School of Coastal and Watershed Management and graduate students continued to develop in regards to Yale's long-term project to monitor WQ and sediment loads in St. Thomas watercourses. CES helped one Yale graduate student complete her study and evaluation of how effectively the VI government manages VI watercourses.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management

#### 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	Actual
2011	250

##### 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, BVI government custodians, businesses, maintenance professionals, government agencies and environmental groups. Cistern care also was promoted in these presentations and during individual consultations. The videotaping of such a presentation and its repeated broadcasting has resulted in many requests for materials which were emailed, or mailed to clients.

###### **Results**

The VI\*A\*SYST presentations continue to be very popular with all segments of the VI community. After attending or seeing VI\*A\*SYST presentations, many individuals indicated that they would stop using toxic household products. Several other presentations were made as attendees have referred others to CES for information on non-household products or requested VI\*A\*SYST presentations for various groups. The highlight was taping for a one hour television program and the upcoming taping of a next show on water for home use. Many homeowners chlorinated their cistern water based on instructions provided by CES and now use it for their consumption instead of purchasing.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
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. Ten(10) VI Dept. of Public Works roadside maintenance crews 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	Actual
2011	24

**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, government regulators, resource managers and landscape specialists with information about control practices that mitigate soil erosion and sediment runoff, plant selections for xeriscaping and environmental landscaping. As staff travel around whenever they see contractors doing improper practices we

later present them with our booklet 'Sediment & Erosion Control on Construction Sites Field Guide' and the pamphlet 'VI Beauty Begins with Your Yard'.

**Results**

Clients implemented CES recommendations or indicated that they would adopt recommended practices. Several clients requested additional consultations from CES. CES participation in the VI Dept. of Agriculture Forest Stewardship and Forest Legacy programs contributed to the preservation of large areas of native forest in targeted watersheds. Three St. Thomas architects/landscape architects and three developers in the CZM zone incorporated Best Management Practices recommended by CES. A client has decided on installing a Gabion basket retaining wall and plans to have us cover the installation. Also at one building site when the foreman was spoken to and shown that he had the silt fence installed incorrectly he immediately had the workmen correct the installation.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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	Actual
2011	250

**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 fifth year, CES conducted watershed tours for graduate students. Coastal tours were also conducted for Rotary Club interns. Publications co-authored or co-researched CES publications continued to be used for instruction by educators and librarians. CES designed educational displays to appeal to younger students. Staff featured erosion and sediment control practices in their Agrifest display.

**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. During St. Thomas and St. Croix coastal tours, Rotary Club Young Ambassadors learned about the effects of land-based activities on coastal waters. Many have indicated they may use them in future projects.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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 five(5) 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**

<b>Year</b>	<b>Actual</b>
2011	1

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

CES contributed to the development of GIS technology featuring drainages, basins, watersheds in the Virgin Islands Landowner Incentive Program developed for the VI Division of Fish and Wildlife.

**Results**

The Landowner Incentive Program project conducted a gap assessment and produced significant geodatabases and hydrology maps that provide much more detailed terrestrial and marine geodata than has previously been available locally.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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 Dept. of Planning and Natural Resources, Waste Management Authority, Dept. of Agriculture, 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 or effective training 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 EPA.

**V(I). Planned Program (Evaluation Studies)**

**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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	1.6	0.0	0.0	0.0
Actual Paid Professional	1.6	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

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

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Advertised the Computer Training and Technology Program  
 Conducted eight weeks Basic Computer Training Courses that taught individuals how to use Microsoft Windows, Microsoft Word, E-mail, and search for information using the World Wide Web.

**2. Brief description of the target audience**

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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	245	3470	65	2050

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Conduct a seven-weeks basic computer training course designed to increase the participants' knowledge and usage of computer in Basic Computer Maintenance, Microsoft Word 2000, and E-mail/Internet.

Year	Actual
2011	10

**Output #2**

**Output Measure**

- Conduct two days workshop on Internet communication.

<b>Year</b>	<b>Actual</b>
2011	3

**Output #3**

**Output Measure**

- Conduct four days workshops on Microsoft Excel

<b>Year</b>	<b>Actual</b>
2011	6

**Output #4**

**Output Measure**

- Conduct four days workshops on Microsoft Powepoint

<b>Year</b>	<b>Actual</b>
2011	6

**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**

<b>Year</b>	<b>Actual</b>
2011	145

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is a large population of computer illiterate adults. Some of these individuals need to acquire these computer skills in order to get employment to better their household income and to take advantage of new technology.

**What has been done**

Ten of the University of the Virgin Islands Cooperative Extension Service (UVI-CES) eight weeks Basic Computer Training Courses were conducted. These classes teach how to use Microsoft Windows, Microsoft Word, E-mail, and search for information using the World Wide Web.

**Results**

98% of individuals participated indicated that they acquire/increase their knowledge and usage of Microsoft Window.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	145

**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 acquire or increase their skills in MS Word these individuals will be better equipped to seek employment or a promotion. They can also use MS Word in their day to day lives to make their some task easier.

**What has been done**

Ten of the UVI CES eight weeks Basic Computer Training Courses was conducted these classes teach how to use Microsoft Word.

**Results**

94% of individuals participated indicated that they acquire/increase their knowledge and usage of Microsoft Word.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	145

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is a large population that does not have and/or do not know how to use an e-mail account. These individuals can benefit from learning how to use an e-mail account. They can save money on post stamps and send information faster.

**What has been done**

Ten of the UVI CES eight weeks Basic Computer Training Courses were conducted these classes teaches how to use e-mail account.

**Results**

97% of individuals who participated in the Basic Computer Training Courses indicated that they acquire/increase their knowledge and usage of E-mail.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	192

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is a large population that does not know how to use the internet. The Internet offer a variety of benefits with the huge amount of information available makes the internet a valuable tool in an individual?s life. Individuals also can perform a variety of task using the internet such as shopping, banking and paying bills.

**What has been done**

Ten of the UVI CES eight weeks Basic Computer Training Courses were conducted these classes teaches how to use the internet.

**Results**

90% of individuals participated indicated that they acquire/increase their knowledge and usage of the internet.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	85

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is a large population that does not know how to use the MS Excel. MS Excel is very useful application when creating budgets, keeping track of loan payments, and a number of other useful mathematical calculations.

**What has been done**

Six workshops were conducted that focused solely on the uses of MS Excel.

**Results**

95% of individuals participated indicated that they acquire/increase their knowledge and usage of MS Excel.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	94

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is a large population that does not know how to use the MS PowerPoint. MS PowerPoint is a very useful tool to give presentations and can also be used for learning within the classroom. Individuals who utilize PowerPoint are often more captivating and engaging with their audience versus an individual who uses standard note cards.

**What has been done**

Six workshops were conducted that focused solely on the uses of MS PowerPoint.

**Results**

99% of individuals participated indicated that they acquire/increase their knowledge and usage of MS PowerPoint.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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)**

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 8**

**1. Name of the Planned Program**

4-H Volunteer Development and Management Program

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

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

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.6	0.0	0.0	0.0
Actual Paid Professional	2.6	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
62623	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**

- Continued to work on development of 4-H web page, newsletter, materials, workshops, presentations and demonstrations that provided information about 4-H/Youth Development volunteer leadership opportunities. Set up volunteer recruitment booths at World Food Day, St. Thomas/St. John Agriculture and Food Fair, and the V.I. Agriculture and Food Fair (St. Croix). Specifically produced two volunteer leader fact sheets; authored one fair book article. Conducted thirty-two workshops, presentations and leadership demonstrations regarding 4-H/Youth Development volunteer leadership opportunities. Facilitated volunteer recruitment efforts at three major Extension-wide events: World Food Day, St. Thomas/St. John Agriculture and Food Fair; and the VI Agriculture & Food Fair - St. Croix.
  - Provided orientation, training and professional development for teen and adult volunteers, partners, 4-H/Family and Consumer Sciences/CYFAR staff, and CES personnel.
- Utilized multi-media outlets to promote 4-H/Youth Development programs to attract potential youth and adult volunteers. Appeared on radio programs to highlight 4-H programs, events and activities.
  - Facilitated youth and adult volunteers, and proposed renewed 4-H staff participation in annual Southern Region 4-H Volunteer Leaders' Forum, annual National 4-H Conference, and biannual National 4-H Technology Leadership Conference.
- Collaborated with government departments, non-profit agencies, community-based programs, and special interest groups to recruit, train and support 4-H volunteer development.
  - Established the first Collegiate 4-H Chapter.
- Facilitated establishment of 4-H Volunteer Leader Organization.
  - Facilitated efforts for formation of 4-H Advisory Council and Foundation - to be completed.
- Worked together with CES administration and 4-H leadership locally and nationally to develop 4-H Volunteer Management framework; however the document has not been completed.

### **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.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	275	1800	200	1200

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	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	Actual
2011	3

**Output #2**

**Output Measure**

- Number of workshops, presentations and demonstrations conducted

<b>Year</b>	<b>Actual</b>
2011	32

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	36

**Output #4**

**Output Measure**

- Number of partnerships, collaborations or cooperative agreements formed

<b>Year</b>	<b>Actual</b>
2011	3

**Output #5**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	1

**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**

<b>Year</b>	<b>Actual</b>
2011	4

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The traditional 4-H club provides a safe, nurturing environment where youth can learn, grow and experience new things in partnership with competent caring adults. The club setting fosters the knowledge, skills and attitudes young people need to be more successful in school, more likely to make wise choices, and more caring of their environment and those that they share it with.

**What has been done**

Through funding from the Monsanto 4-H Volunteer Leader Development grant, both teen and adult volunteers were trained on how to develop and manage 4-H clubs using the 4-H 101 curricula.

**Results**

Two (2) new clubs were established one school-based and one community-based club.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	2

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Over and above the traditional 4-H club, special interest, short-term and enrichment projects provide an excellent interest-motivated strategy to recruit both youth and adults. Involvement in 4-H through these avenues can provide a rich and meaningful experience as well.

**What has been done**

Special interest groups have been used successfully to attract adult volunteers and youth members. Being able to advertise the subject matter as opposed to the philosophical basis for 4-H often provides the springboard for greater and continued 4-H involvement.

**Results**

Two exemplary special interest groups include: V.I. Carnival Troupe (St. Thomas) and the 4-H Youth Super Chef Competition which has provided the impetus for the development of an advanced 4-H foods project.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	1

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Previously, the Virgin Islands 4-H Program utilized 4-H program policy and guidelines from other states. Having policies and guidelines that reflect our needs is a critical step to building a culturally relevant and responsive youth development program.

**What has been done**

Materials and manuals have been collected from six states and are currently being reviewed. Content is being compared and relevant information has been noted.

**Results**

We are currently referring to material published by USDA and from the 2011 version of 4-H 101

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	75

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Well-trained volunteers who understand that youth need opportunities to develop critical life skills in a safe, nurturing environment are the most important asset to any exemplary positive youth development program. Helping adults transition from the more traditional role of purveyor of information to that of an exciting and enthusiastic facilitator and partner in the learning process is critical to the program's success.

**What has been done**

Using 4-H 101 with an emphasis on the Essential Elements such as belonging, mastery, independence and generosity. Volunteers have learned new strategies to ensure that their programs reflect these elements in meaningful and tangible ways.

**Results**

Through additional funding from Monsanto, the Virgin Islands 4-H program will continue to develop and expand upon our volunteer leader training. A total of 23 adult volunteers and 12 teen leaders provided leadership for five 4-H clubs and St. Croix, and one 4-H club and one special interest group on St. Thomas.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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 natural disasters can have an adverse effect on program growth. In addition, the current economic climate has present challenges in recruiting adult volunteer leaders. More and more, 4-H and other youth-serving agencies are at the mercy of cost-cutting measures and can often be the victim when potential adults may suddenly become unemployed.

#### **V(I). Planned Program (Evaluation Studies)**

##### **Evaluation Results**

Formal evaluation has not been completed. Anecdotal responses are positive.

##### **Key Items of Evaluation**

Evaluation ongoing.

**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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.7	0.0	0.0	0.0
Actual Paid Professional	2.7	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

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

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

- Developed culturally sensitive nutrition and health education products and resources to be made available to professionals, students, and the public. The following are examples of the products and resources that were 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&mdashit 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.
  - conducted disease specific workshops, short courses, seminars, and other educational activities focusing on nutrition education and behavior change modification.
  - recruited and trained staff and volunteers to deliver nutrition, diet, and health relevant information to the community.
  - developed and/or obtained culturally sensitive nutrition/health curriculum appropriate for school age children at all grade levels.
  - developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizen centers, and day care centers.
  - continued to work on development of 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.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	1127	4900	1190	5000

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
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	Actual
2011	300

**Output #2**

**Output Measure**

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

Year	Actual
2011	2

**Output #3**

**Output Measure**

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

Year	Actual
2011	5

**Output #4**

**Output Measure**

- d. Number of web sites developed and maintained.

Year	Actual
2011	0

**Output #5**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	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.

<b>Year</b>	<b>Actual</b>
2011	10

**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**

<b>Year</b>	<b>Actual</b>
2011	255

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

During the fiscal year 2010-11 over 1000 copies of My Pyramid were distributed to various individuals and organizations

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	142

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

Six to eight week nutrition education classes have been conducted in order to meet this goal with individuals from Head Start age through senior citizens.

**Results**

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

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	1190

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

In order to shape good eating habits at an early age ? emphasis was placed on school age 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 others were conducted during summer programs.

**Results**

All youth participants except for Head Start children were administered a pre and post test to determine changes in knowledge regarding basic nutrition information. Sixty percent of the participants were able to answer the basic nutrition questions prior to the first lesson, by the end of the series, seventy-five percent of the participants answered questions correctly.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	108

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

It is critical for youth to adopt healthy lifestyle practices from an early age especially with the increase in childhood obesity.

**What has been done**

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

**Results**

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

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	12

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

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

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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	Actual
2011	91

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

Anecdotal results to-date.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

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

**Brief Explanation**

- The U.S. Virgin Islands lies in a hurricane prone zone. Natural disasters such as hurricanes do disrupt all aspects of life in the USVI.
- Economy can affect outcomes because an individual's ability to implement certain health practices is often influenced by their discretionary income. Currently the USVI has one of the highest unemployment rates in the nation.
- The cultural environment of the USVI may affect outcomes because current dietary practices (high carbohydrate and high fat diets) are deeply rooted in the community. In the past Virgin Islanders were physically active however now the majority of the population lead quite sedentary lifestyles.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Evaluation data incomplete at this time.

**Key Items of Evaluation**

Evaluation data is 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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.8	0.0	0.0	0.0
Actual Paid Professional	2.8	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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**

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

**2. Brief description of the target audience**

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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	144	5000	735	5000

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	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)

<b>Year</b>	<b>Actual</b>
2011	12

**Output #2**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	1

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	4

**Output #4**

**Output Measure**

- Number of web sites developed and maintained

<b>Year</b>	<b>Actual</b>
2011	0

**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

<b>Year</b>	<b>Actual</b>
2011	10

**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**

<b>Year</b>	<b>Actual</b>
2011	144

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

Over 70% of participants correctly stated the proper method of thawing frozen meats.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	52

**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 a 6-8 week period. Basic food safety information was also shared at fair-type activities.

**Results**

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

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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	Actual
2011	735

**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.

**Results**

A pre-post measure was administered to participants. More than sixty percent of the youth answered queries correctly before receiving food safety information. Afterwards, eighty percent answered questions correctly.

**4. Associated Knowledge Areas**

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

**Outcome #4**

**1. Outcome Measures**

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

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	85

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	300

**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 series of lessons.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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	Actual
2011	100

**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.

**What has been done**

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

**Results**

No data is available at this time.

**4. Associated Knowledge Areas**

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

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

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

**Brief Explanation**

Natural disasters continue to affect program outcomes due to the unpredictability of floods, hurricanes, etc.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

No data available at this time.

**Key Items of Evaluation**

No data available at this time.

**V(A). Planned Program (Summary)**

**Program # 11**

**1. Name of the Planned Program**

Marketable Skills for Limited Resource Families, Youth and Communities

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	75%			
802	Human Development and Family Well-Being	15%			
806	Youth Development	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	1.9	0.0	0.0	0.0
Actual Paid Professional	1.9	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
64000	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 help low-income, at-risk audiences build knowledge, skills and attitudes that will positively impact their quality of life.
- Collaborated with government departments, non-profit agencies, community-based programs, and special interest groups to recruit, train and support 4-H volunteer development.

## **2. Brief description of the target audience**

- Current and newly recruited FCS participants,
- Low-income, at-risk, un- or underemployed adults residing in public/federally subsidized housing communities, and Children, Youth & Families at-Risk clientele.
- Clientele and staff being served through fellow UVI, CES and AES programs.
- Clientele referred from Department of Human Services, Department of Labor - 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.

## **3. How was eXtension used?**

eXtension was not used in this program

## **V(E). Planned Program (Outputs)**

### **1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	700	2450	26	700

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

Year: 2011  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
Actual	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of short courses conducted

Year	Actual
2011	4

**Output #2**

**Output Measure**

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

Year	Actual
2011	22

**Output #3**

**Output Measure**

- Number of special interest workshops conducted

Year	Actual
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2011 3

**Output #4**

**Output Measure**

- Number of youth, volunteers, staff and partners trained

<b>Year</b>	<b>Actual</b>
2011	118

**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**

<b>Year</b>	<b>Actual</b>
2011	67

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

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

#### **What has been done**

Provided workshops, short courses, including summer sessions.

#### **Results**

Participants continued to request more classes, others increased their earning power.

### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	26

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	250

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	38

**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 additional information and inquired regarding future classes.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	140

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	300

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	35

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	35

**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**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	30

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Participants increase their opportunities for employment.

**What has been done**

Workshops and presentations conducted to better prepare residents for employment.

**Results**

All participants completed requirements to prepare for increased probability of self and other employment.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	22

**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 accounts and investing possibilities.

**Results**

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

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	36

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

Most participants indicated that they now utilize healthier eating habits and food preparation techniques.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	12

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Leadership development is important to the entire community.

**What has been done**

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

**Results**

Some participants continue to volunteer in CES programs.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	32

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

Residents are experiencing more confidence in job seeking skills, esp. utilizing computer skills.

**Results**

Some residents have found employment and developed more confidence in pursuing self and other employment.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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 effect on program outcomes.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Pre-post instruments have been used; anecdotal information continues to be favorable.

**Key Items of Evaluation**

Focus continues to be placed on 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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.8	0.0	0.0	0.0
Actual Paid Professional	2.8	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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

- Worked on development of a digital newsletter
- Prepared appropriate curricula and gathered all materials, supplies and equipment needed to carry

out objectives

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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	300	3000	750	6500

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
Actual	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of digital newsletters promulgated

Year	Actual
2011	10

**Output #2**

**Output Measure**

- Number of workshops, presentations and demonstrations facilitated or conducted

Year	Actual
2011	75

**Output #3**

**Output Measure**

- Number of parents attending workshop(s)

Year	Actual
2011	80

**Output #4**

**Output Measure**

- Number of teachers and students employed

Year	Actual
2011	55

**Output #5**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	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 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**

<b>Year</b>	<b>Actual</b>
2011	300

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The UVI-CES 4-H Summer Academy continues to be the summer day camp program of choice for more children than we are able to serve. Maintaining accurate enrollment data helps illustrate the need for this camp as an exemplary positive youth development option for both local and off-island children, parents and families.

**What has been done**

Each summer, enrollment data is compiled and analyzed. Key indicators of program success include a return enrollment rate of over 45% and 16 youth who have attended for at least six consecutive summers. In addition, enrollment data provides a strategy for recruiting new volunteers and 4-H members as evidenced by 12 new 4-H members and 2 new volunteer leaders joining 4-H.

**Results**

The 2011 UVI-CES 4-H Summer Academy provided 211 youth, ages 5-14, residing on St. Croix and St. Thomas with a safe, secure, nurturing environment in which to learn and grow. Additionally, the summer program provided employment for 13 highly-qualified teachers, and over 25 high school and college students hired as Jr. Counselors.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The UVI-CES 4-H Summer Academy and the 4-H program recognize the importance of providing youth the opportunity to develop basic computer skills. As a result, 4-H continues its commitment to offering Computer Literacy as a special for all summer camp participants.

**What has been done**

Using the 4-H CES curricula, all campers receive age-appropriate instruction in basic computer literacy to include parts of the computer, key boarding, software application and Internet safety. For the first time, in 2010, the youngest group of campers, the Super Kids - were also able to take advantage of this offering.

**Results**

In partnership with 4-H and CES staff, the Computer Lab produced a total of 10 weekly newsletters. In addition, Computer Lab counselors facilitated an Internet Safety station as part of Progressive Agriculture Safety Day. Older youth, ages 11-14 (35) used Internet surfing skills to find information regarding their chosen area of interest. This information, along with other software, was used to develop three interactive games, individual Excel spreadsheets and six group Power Point presentations.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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	Actual
2011	211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Entrepreneurship ranks right alongside the national 4-H mission mandates as an area that is very relevant for the Virgin Islands community especially in light of the recent economic downturn.

**What has been done**

Through Mini-Society®, a widely recognized experiential entrepreneurship program supported by the Kaufman Foundation, campers are able to gain first-hand knowledge about being young entrepreneurs. Mini-Society®, like the Computer Lab, is offered as a special focus group so that the entire summer camp population can benefit from this experience.

**Results**

All youth enrolled in the 2011 UVI-CES 4-H Summer Academy took part. During Mini-Society® sessions, campers experienced fundamental entrepreneurial concepts like supply and demand, established unique societies, crafted their own flags, and designed and printed their own currency. In addition, youth became entrepreneurs in their respective communities by researching business opportunities, providing services or producing goods. Youth practiced leadership and decision making by serving in different roles in each society. Marketing and sales came to life at Market Day where businesses advertised and sold their goods and services to an audience that included parents, family and friends and the general public. ? Monies? earned from sales were later used to bid on highly desirable goods and services at the close of the program.

**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**

<b>Year</b>	<b>Actual</b>
2011	211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

In keeping with one of the national 4-H mission mandates ? Healthy Living ? 4-H recognizes the importance of the health and well-being of the whole child. This is particularly important when considering the many serious health challenges (heart disease, diabetes, obesity) confronted by Virgin Islands children, youth and families.

**What has been done**

In partnership with the Expanded Food and Nutrition Education Program (EFNEP) and State Nutrition Assistance Program (SNAP-Ed) staff, the UVI-CES 4-H Summer Academy offers all campers a Healthy Lifestyles program. Using USDA curricula and several locally adapted lessons, campers learn basic nutrition information, how to snack healthy, and the importance of increasing daily activity levels to promote good health.

**Results**

Older youth (35) used their new knowledge and skills to prepare a healthy, well-balanced meal for their parents at the close of camp. In addition, at least five campers developed a business based on new skills learned in this program.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	65

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The 4-H program is keenly aware that gardening promotes good health, increases activity levels, and heightens awareness of the importance of consuming fresh, locally grown produce. It is further understood that gardening provides an excellent platform for promoting science literacy and offering hands-on learning opportunities across curricula.

**What has been done**

Gardening was an integral component of two camps, one on St. Croix, the other on St. Thomas.

**Results**

One community garden bed was established on St. Thomas and, on St. Croix, 12 portable box gardens were constructed, painted and planted out with over 40 assorted vegetable seedlings some of which were propagated by the campers.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	75

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

As an integral component of the Virgin Islands 4-H program, UVI-CES 4-H Summer Academy participants are encouraged to explore and develop critical leadership and life skills in a safe, nurturing environment. Opportunities abound for campers to serve as leaders, hone communications skills, and practice making good decisions. Guest speakers address conflict resolution and other interpersonal communication strategies while others may target substance abuse and resiliency.

**What has been done**

The UVI-CES 4-H Summer Academy staff are trained to ensure that the essential elements of 4-H such as belonging, mastery, independence and generosity are easily recognized in our program.

**Results**

The closing program is a showcase for youth who have explored and strengthened leadership and life skills. Two outstanding individuals served as master/mistress of ceremonies. Each camp decided on, planned and delivered a closing number that celebrated what they learned over the course of the summer. In addition, campers displayed project work and demonstrated their skills as part of the program.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	75

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The UVI-CES 4-H Summer Academy employs over 50 counselors. The skills learned while serving in a lead educator role or working as a member of the team prove to be useful for many employees when they return to 4-H, seek employment elsewhere or when developing a resume.

**What has been done**

Prior to the opening of summer camp, new hires receive training in teamwork and teambuilding, understanding the ages and stages of child development, employing constructive discipline and using the experiential learning model.

**Results**

The 4-H staff is routinely called upon to serve as references for future employment opportunities. In addition, over 65% of staff return from year to year.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The UVI-CES 4-H Summer Academy is committed to promoting academic excellence through experiential learning while at the same time embracing the social and emotional development of the whole child.

**What has been done**

Counselor selection, orientation and training are geared toward assembling a team of educators who understand that providing a positive relationship with an understanding adult provides the foundation for children to grow and learn.

**Results**

Every child enrolled in the UVI-CES 4-H Summer Academy had ample opportunity to demonstrate knowledge gained, skills learned and attitudes changed. This is often showcased during Parents? Day and again at the closing program.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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 disasters can severely disrupt programming.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Incomplete data collected 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%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual Paid Professional	2.0	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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**

- Continued to work on development of the 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.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	430	2650	1590	6000

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

**Patent Applications Submitted**

Year: 2011  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	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

<b>Year</b>	<b>Actual</b>
2011	2

**Output #2**

**Output Measure**

- Number of workshops, presentations and demonstrations conducted

<b>Year</b>	<b>Actual</b>
-------------	---------------

2011 24

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	50

**Output #4**

**Output Measure**

- Number of partnerships, collaborations or cooperative agreements formed

<b>Year</b>	<b>Actual</b>
2011	2

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of children enrolled and reported on ES-237 as 4-H members in organized clubs, special interest or short-term projects groups and school enrichment programs
2	Percentage of units fulfilling 4-H charter guidelines and receiving official charters
3	Number of youth enrolled in special interest or short-term projects formed as a result of program development committee work groups
4	Percentage of clubs adopting, implementing or utilizing effective leadership strategies
5	Percentage increase in male enrollment
6	Percentage of youth adopting leadership and life skills
7	Percentage of clubs or units engaging in community service activities
8	Number of 4-H members volunteering to serve as club officers, committee members, junior leaders or teen leaders, or advisory council representatives
9	Number of youth demonstrating knowledge gained, skills learned, positive attitudes adopted by taking part in fairs, 4-H Project Expo and other events designed to showcase individual achievement and accomplishments
10	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**

<b>Year</b>	<b>Actual</b>
2011	601

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Enrollment data assists 4-H locally and nationally in delivering quality, positive youth development programs. Several studies have documented that youth involved in organizations like 4-H do better in school, are more motivated to help others, feel safe trying new things, build a strong sense of self-worth, and develop lasting friendships. The Virgin Islands 4-H Program continues to promote the national community-based 4-H club model to achieve similar lasting benefits for local youth enrolled in 4-H.

#### **What has been done**

According to enrollment data reported on the most recent ES-237, the Virgin Islands 4-H Program enrolled over 600 youth, ages 5-18 in a variety of 4-H delivery modes; however the largest 4-H membership was in organized 4-H clubs (177 youth). Young people also participated in 4-H via organized in-school clubs (14); after-school 4-H clubs (146); and military 4-H groups (22). In addition to the traditional 4-H club model, 169 youth experience 4-H as part of short-term or special interest groups.

#### **Results**

In 2010, the Virgin Islands 4-H Program recognized seven (7) 4-H clubs on St. Croix, and one (1) 4-H club and one (1) special interest group on St. Thomas enrolling 600 school-aged youth. Although no data has been collected on the general 4-H membership in 2010, the Children, Youth and Families-at-Risk, Sustainable Communities Program (CYFAR-SCP) did collect baseline data measuring self-efficacy, decision-making and belongingness among over 70 youth enrolled in two CYFAR afterschool programs. In addition to core homework assistance, CYFAR youth explored agriculture, nutrition and entrepreneurship using 4-H curricula and were further engaged in 4-H through establishment of 4-H units in each center. Preliminary results indicate significant gains in

two of the three areas with moderate gain in the third.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	75

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The charter process helps ensure uniformity between 4-H clubs and helps fulfill national 4-H mission mandates. By definition, a 4-H club is an organized group of at least five youth from three different families who meet regularly with adult volunteers or 4-H staff for a lasting, progressive services of educational experiences. The purpose of a 4-H club is to provide positive youth development opportunities designed to meet the needs of Virgin Islands youth to experience the essential elements of 4-H ? belonging, mastery, independence and generosity ? and to foster educational opportunities tied to UVI as an integral part of the land grant university knowledge base. Hallmarks of a vibrant club system include: caring, trained adult volunteer leaders; youth/adult partnerships; youth leadership and engagement; a yearly club plan that guides decision-making; opportunities for members to be involved in age-appropriate, and interest-based learning through 4-H projects. In applying for and receiving an official club charter, 4-H clubs employ the experiential learning model by bringing caring , compassionate adult leaders together with interested youth to make decisions, put together a yearly club plan, conduct project work and implement club and personal goals.

**What has been done**

Although not all Virgin Islands clubs have fully completed the charter process, clubs have been fully engaged in the process. Both adult and teen leaders have been trained using the 4-H 101 curricula to guide them through the club development process. Staff have also been trained on how to effectively incorporate the essential elements of 4-H into after-school, in-school and special interest programs. Project selection is often framed by culturally relevant experiences as evidenced by the continued success of the 4-H Carnival Troupe ? a short term, experiential learning opportunity for youth to engaged in costume design and choreography resulting in an award winning entry in the annual Virgin Islands Carnival Parade.

### Results

Five of seven (71%) of Virgin Islands 4-H clubs have successfully met the following 4-H club charter minimum requirements: identified at least two adult volunteer leaders; enrolled at least five members from three different families; elected youth officers; conducted at least six meetings annually; and provided educational programming via 4-H project work based on member interest. In addition, based on observation and participation in 4-H workshops, events and activities throughout the year, these clubs successfully: use experiential learning effectively; provide a safe, healthy physical and emotional environment for members; include as part of their yearly club plan, opportunities to learn and apply life skills such as leadership, citizenship, community service, and public speaking; utilize juried 4-H curricula to support individual project experiences representing the 4-H mission mandates (science, engineering and technology, citizenship and healthy living); offer projects relevant to UVI as a land grant institution; and foster youth/adult partnerships that encourage involvement in planning of activities.

## 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	Actual
2011	65

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

In many regions, using the traditional 4-H club model has provided increasing challenges. Even though this model still remains the preferred 4-H delivery mode in the Virgin Islands, short-term or special interest programming have also served as an effective tool to engage youth in positive youth development opportunities.

#### What has been done

Specific areas of interest are often one of the major motivational factors in determining whether a young person will want to join. The 4-H Carnival Troupe is a good example of interest-motivated involvement. Other special interest or short-term project include: robotics (technology & engineering); 4-H Christmas Ornament Festival (communications and expressive arts); citizenship and leadership (community service); and foods (4-H Youth Super Chef Competition). High school youth continue to provide a lucrative target audience interested in pursuing a variety of interest areas to meet community service requirements.

#### Results

Over 160 youth enrolled in short-term or special interest projects. Examples of special interest programming success includes: receipt of funding to purchase lego robotics kits utilized by three junior high schools; 28 youth representing seven schools enhancing their knowledge of the culinary arts; and 65 youth taking part in the award winning 4-H Carnival Troupe.

### 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	Actual
2011	50

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The 4-H program locally and nationally is dedicated to helping young people develop the knowledge, skills and attitudes that will enable them to become competent, caring leaders. In partnership with caring adults, youth are provided a safe, nurturing environment where they can feel comfortable practicing leadership skills in a variety of ways. In addition, teens needing community service hours, provides a great target audience.

**What has been done**

Workshops focusing on leadership for both youth and adults continue to be an integral component of training initiatives. Clubs are expected to foster youth leadership by electing club officers, supporting youth involvement in committees and engaging youth in decision making. Teens are frequently engaged in planning major 4-H events such as World Food Day, 4-H Christmas Ornament Festival, Ag Olympics, and Easter Family Fun Day where, with guidance from staff and partners, they are tasked with planning, implementing and evaluating major events.

**Results**

This past 4-H year, there were a total of 27 elected 4-H club officers representing five clubs. Club officers presided over a total of over 45 monthly business meetings. Twenty-three teens earned just under 1,000 community service hours for their leadership efforts in event planning.

**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	Actual
2011	2

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

It has been quite challenging recruiting and maintaining increased male involvement. Yet many of the territory's ills and challenges are related to males who disproportionately drop out of school and often become entangled in the criminal justice system. Those who can find employment find that they are working at low level jobs due to limited opportunities. Many have some affiliation with the legal system. The limited number of young people in the university system reflects the myriad of difficulties males experience in the school system. Emphasis must continue on efforts to meet this difficult challenge.

**What has been done**

Efforts have been made to work with the university sponsored special program to engage young men in youth development efforts. Also, efforts continue through the Children, Youth and Families at Risk Program and the 4-H Summer Academy.

**Results**

As indicated earlier, results are not as fruitful as desired, but some slow minimal progress is occurring as indicated above.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	75

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Developing positive life skills continues to be the primary focus of 4-H programming. Helping 4-H members become caring, contributing and conscientious members of their community provides a common thread woven into 4-H clubs, programs, events and activities.

**What has been done**

Both youth and adults receive training on how to effectively promote belonging, mastering, independence and generosity ? the essential elements ? in their 4-H initiatives.

**Results**

Over 250 4-H members completed educational displays, gave illustrated talks, showed animals at the fair and demonstrated that they learned at major events such as World Food Day, the V.I. Agriculture and Food Fair, and 4-H Project Expo. This past year two 4-H members used what they learned in the 4-H gardening project to develop award winning science project for their school science fair.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	100

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Youth need to feel their lives have meaning and purpose. By taking part in community service and citizenship projects, youth people connect to their communities and learn the importance of giving back. These experiences provide the foundation that helps them see the "big picture" of life and find purpose and meaning for their own lives.

**What has been done**

The 4-H club charter process requires that clubs plan and implement at least one (1) community service project as part of their yearly club plan. In addition, volunteer leaders, members and 4-H clubs and groups are invited to partner with the 4-H office to citizenship and community service outreach efforts.

**Results**

Youth, schools and 4-H clubs joined hands to collect two tons of non-perishable foods for our annual World Food Day ?Kids CAN Make a Difference? Food Drive. In partnership with the V.I. Department of Human Services, one club enrolled and supported six youth from two at-risk families in their 4-H club.

**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	Actual
2011	28

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

One benchmark of program success is the willingness of older youth to step up and assume leadership roles. The Virgin Islands 4-H Program has a rich history of teen leadership that has been bolstered by the current community service hour requirement for graduation from local high schools.

**What has been done**

Teens continue to volunteer for a wide array of leadership responsibilities in their clubs, on committees, or with extracurricular organizations and groups.

**Results**

Currently, there are 12 teens serving in various roles. In partnership with adult volunteers, three teens leaders provided leadership for Robotics, Cloverbuds and Beginning Foods projects.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	359

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Speaking in front of an audience, whether it be parents, fellow club members or a panel of judges helps young people build self confidence, poise and critical communication skills. Preparing a project demonstration, presenting an educational display or exhibiting their work provide an excellent means for a 4-H member to reflect on their accomplishments and to celebrate all that they have learned.

##### **What has been done**

The 4-H office facilitates 4-H member displays during major events such as National 4-H Week and World Food Day in the fall, 4-H Project Expo in the spring, and district agriculture and food fairs.

##### **Results**

During the V.I. Agriculture and Food Fair, five youth presented project demonstrations at 4-H booth; 12 members took part in rabbit and poultry fitting and showmanship and presented five small animal handling demonstrations. Over 35 4-H members conducted a variety of educational displays, illustrated talks and hands on demonstrations during National 4-H Week, National 4-H Youth Science Day, World Food Day, and 4-H Project Expo.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

**Outcome #10**

**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**

<b>Year</b>	<b>Actual</b>
2011	5

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Philanthropy is a project that continues to develop for 4-H programming is an exciting addition.

**What has been done**

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

**Results**

Large amounts of canned goods were collected to give to organizations that feed the hungry on the island.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

Unexpected power outages, water shortages, government worker lay-offs and cuts in salaries adversely affected the program progress in this past year.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Incomplete evaluation data to-date.

**Key Items of Evaluation**

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

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

Eastern Caribbean Extension Outreach and Interchange

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

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

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

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	1.2	0.0	0.0	0.0
Actual Paid Professional	1.2	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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. A workshop on Healthy Homes and On-Site Waste Management Training were conducted. 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. A Production and Management workshop and training were conducted for farmers, extension personnel, and local veterinarians in Lebanon.

**2. Brief description of the target audience**

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

**3. How was eXtension used?**

A presentation on eXtension was made to extension professionals in the Eastern Caribbean region attending the Caribbean Food Crops Society Meeting in Barbados. The presentation received very good reviews.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	1000	2000	250	1900

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	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	Actual
2011	5

#### Output #2

##### Output Measure

- International and regional workshops will be coordinated.

Year	Actual
2011	5

#### Output #3

##### Output Measure

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

Year	Actual
2011	1

#### Output #4

##### Output Measure

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

Year	Actual
2011	1

#### Output #5

##### Output Measure

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

Year	Actual
2011	515

**Output #6**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	5

**Output #7**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	300

**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	Actual
2011	5

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Agricultural scientists in the Caribbean need to establish a good network to promote agriculture and find solutions to agricultural problems.

**What has been done**

Regional meetings were held for CFCS and CACHE.

**Results**

Regional networks were established among scientist.

**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**

<b>Year</b>	<b>Actual</b>
2011	5

**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**

Five regional meetings were held.

**Results**

Over three hundred and seventy-five agricultural scientists were able to get together with their peers.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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	Actual
2011	515

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

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

#### What has been done

Five hundred and fifteen improved breeding stocks were shipped to St. Eustatius, St. Martin, Dominica, and the British Virgin Islands.

#### Results

The high quality breeding stock has been instrumental in the improvement of breeding stock on three Caribbean Islands, thereby, 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	Actual
2011	1

#### 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 Eastern Caribbean.

**What has been done**

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

**Results**

This has made it easier for people in the Caribbean to find other scientists working on projects that they are interested in, finding results, and the proper personnel to find solutions to their problems.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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**

<b>Year</b>	<b>Actual</b>
2011	1

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

Proceedings were digitized and provided to members.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
903	Communication, Education, and Information Delivery

#### **V(H). Planned Program (External Factors)**

##### **External factors which affected outcomes**

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

##### **Brief Explanation**

Economic downturn affected coordination of programs on most islands.

#### **V(I). Planned Program (Evaluation Studies)**

##### **Evaluation Results**

Complete formal evaluation is still in progress.

##### **Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 15**

**1. Name of the Planned Program**

Childhood Obesity

**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	80%			
724	Healthy Lifestyle	20%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	0.5	0.0	0.0	0.0
Actual Paid Professional	0.5	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
27000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
27000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
40000	0	0	0

**V(D). Planned Program (Activity)**

1. Brief description of the Activity

- Identified new locations to conduct classes.
- Recruited and trained staff and volunteers to deliver child nutrition information to SNAP-ED and

EFNEP participants (adults and youth)

- Developed and/or obtained culturally sensitive childhood nutrition curriculum appropriate for SNAP-ED and EFNEP participants (adults and youth).
- Developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizen centers, and day care centers.
- Worked on development of a web page that relays information on issues relating to the program.

**2. Brief description of the target audience**

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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	1127	500	1190	600

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of 6-8 week class series conducted for SNAP-ED and EFNEP participants (adults and

youths)

<b>Year</b>	<b>Actual</b>
2011	138

**Output #2**

**Output Measure**

- Number of volunteers recruited and trained to deliver nutrition education as related to prevention of childhood obesity

<b>Year</b>	<b>Actual</b>
2011	0

**Output #3**

**Output Measure**

- Number of fair-type settings in which nutrition education - prevention of childhood obesity information will be presented

<b>Year</b>	<b>Actual</b>
2011	3

**Output #4**

**Output Measure**

- Number of websites developed and maintained

<b>Year</b>	<b>Actual</b>
2011	0

**Output #5**

**Output Measure**

- Number of partnerships with agencies and organizations that will assist in improving the eating and physical exercise habits of U.S. Virgin Islands children and youth

<b>Year</b>	<b>Actual</b>
2011	10

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of adults learning information about the prevention of childhood obesity
2	Percentage of adults helping children and youth to practice healthy lifestyles in order to prevent childhood obesity
3	Number of school-age children learning basic nutrition and physical fitness
4	Percentage of children adopting and maintaining at least one healthy eating habit
5	Increase awareness among the SNAP-ED and EFNEP participants about childhood obesity and its prevention and the issues related to poor nutrition, lack of daily physical activity and overeating
6	Increase awareness among the SNAP-ED and EFNEP participants about prevention of childhood obesity issues related to eating away from home (e.g., restaurants, mobile food vans, food booths, fast food establishments, vending machines)

**Outcome #1**

**1. Outcome Measures**

Number of adults learning information about the prevention of childhood obesity

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	206

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The Virgin Islands Government and the Department of Health are concerned because of the high rate of childhood obesity and overweight among Virgin Island children.

**What has been done**

Nutrition workshops were given to educate the population on the prevention of childhood obesity. A partnership was formed between the Cooperative Extension Service at the University of the Virgin Islands, WTJX a local T.V. station, Department of Education and several other groups in this effort.

**Results**

There were positive indications made as related to the children and their families awareness of healthy life styles in the prevention of childhood obesity.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #2**

**1. Outcome Measures**

Percentage of adults helping children and youth to practice healthy lifestyles in order to prevent childhood obesity

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	103

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The Virgin Island Government and the Department of Health are concerned because of the high rate of childhood obesity and overweight among Virgin Island children. The entire community needs to be concerned because obese youth often become obese adults with the concomitant health related issues and expenditures which potentially diminish the quality of life of residents.

**What has been done**

Workshops have been conducted on good nutrition with the focus on increased fruits, vegetables and whole grains and decrease on fats, protein, sugar and portion sizes.

**Results**

There were positive indications made as related to children and their families awareness of healthy life styles in the prevention of childhood obesity.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #3**

**1. Outcome Measures**

Number of school-age children learning basic nutrition and physical fitness

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	469

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The welfare of the entire community is at stake unless school-age children learn basic nutrition practices and physical fitness habits. They serve as a conduit to their families.

**What has been done**

Nutrition sessions were provided to children Head Start through high school age. The focus of the sessions was on eating healthy and exercise and to decrease the amount of food that individuals are consuming.

**Results**

There are positive indications that children are aware of eating healthy and the importance of physical activity.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #4**

**1. Outcome Measures**

Percentage of children adopting and maintaining at least one healthy eating habit

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	505

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Public health organizations and the government are concerned because of the high rate of childhood obesity and overweight among Virgin Island children and youth.

**What has been done**

Six eight week nutrition lessons have been conducted in the schools throughout the territory.

**Results**

Nutrition educators have seen a positive increase knowledge in the children and youth of the territory as related to their knowledge of healthy eating and the importance of physical activity.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #5**

**1. Outcome Measures**

Increase awareness among the SNAP-ED and EFNEP participants about childhood obesity and its prevention and the issues related to poor nutrition, lack of daily physical activity and overeating

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	675

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The Virgin Islands Government, Department of Health, Department of Education and the general public are concerned about the obesity issue among the territories children and youth.

**What has been done**

Workshops have been conducted as related to the prevention of childhood obesity.

**Results**

There have been positive indications that EFNEP and SNAP-Ed participants are aware of the issue of childhood obesity and are concerned about it.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #6**

**1. Outcome Measures**

Increase awareness among the SNAP-ED and EFNEP participants about prevention of childhood obesity issues related to eating away from home (e.g., restaurants, mobile food vans, food booths, fast food establishments, vending machines)

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	675

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The Virgin Islands Government, Department of Health, Department of Education and the general public are concerned about the obesity issue among the territories children and youth.

**What has been done**

Education on eating healthy when eating out. This has been done through workshops.

**Results**

Clients are more aware of the importance of trying to select healthy foods and beverages and to control the amounts when eating away from the home.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

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

**Brief Explanation**

- The U.S. Virgin Islands lies in a hurricane prone zone. Natural disasters such as hurricanes do disrupt all aspects of life in the USVI
- Economy can affect outcomes because an individual's ability to implement certain health practices is often influenced by their discretionary income. Currently the USVI has one of the highest unemployment rates in the nation.
- The cultural environment of the USVI may affect outcomes because current dietary practices (high carbohydrate and high fat diets) are deeply rooted in the community. In the past Virgin islanders were physically active however now the majority of the population lead quite sedentary lifestyles.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Data incomplete at this time.

**Key Items of Evaluation**

Data is incomplete at this time.

**V(A). Planned Program (Summary)**

**Program # 16**

**1. Name of the Planned Program**

Food Safety

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	100%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	0.5	0.0	0.0	0.0
Actual Paid Professional	0.5	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
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
35000	0	0	0

**V(D). Planned Program (Activity)**

1. Brief description of the Activity

- Identified new locations to conduct classes

- Recruited and trained staff and volunteers to deliver food safety information to public
- Developed and/or obtained culturally sensitive food safety curriculum appropriate for participants (adults & youth)
  - Developed and maintained relationships with partners including government agencies, clinics, places of worship, public and private schools, senior citizen centers and day care centers.
- Continued to work on development of a web page that relays information on issues relating to the program.

**2. Brief description of the target audience**

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

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	260	500	1190	500

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

**Patent Applications Submitted**

Year: 2011

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2011	Extension	Research	Total
<b>Actual</b>	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of 2 week class series conducted for Food Safety participants (adults and youth)

<b>Year</b>	<b>Actual</b>
2011	3

**Output #2**

**Output Measure**

- Number of volunteers recruited and trained to deliver food safety education as related to prevention of foodborne illnesses

<b>Year</b>	<b>Actual</b>
2011	0

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2011	3

**Output #4**

**Output Measure**

- Number of web sites developed and maintained

<b>Year</b>	<b>Actual</b>
2011	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 Island children, youth and adults

<b>Year</b>	<b>Actual</b>
2011	1

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Number of adults learning information about the prevention of food borne illnesses
2	Percentage of adults helping children and youth to practice healthy food safety practices
3	Number of school age children learning basic food safety practices
4	Percentage of children adopting and maintaining at least one good food safety practice
5	Increase awareness among community participants about food safety education and information and the prevention of food borne illnesses.
6	Increase awareness among the adult and youth participants about prevention of poor food safety practices related to eating away from home (e.g., restaurants, mobile food vans, food booths, fast food establishments, vending machines)

**Outcome #1**

**1. Outcome Measures**

Number of adults learning information about the prevention of food borne illnesses

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	206

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

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

**What has been done**

Basic food safety information was disseminated through classes, demonstrations, experiential activities and lectures. The public was 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 meat thermometer to check for doneness.

**Results**

The public indicated more awareness of the risk factors for food borne illnesses.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

**Outcome #2**

**1. Outcome Measures**

Percentage of adults helping children and youth to practice healthy food safety practices

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	56

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

To help prevent food borne illnesses, individuals 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 and youth through formal and informal education settings. Basic food safety information was shared at fair-type activities.

**Results**

Adults gained knowledge about basic food safety information.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

**Outcome #3**

**1. Outcome Measures**

Number of school age children learning basic food safety practices

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	469

**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 schools as part of a school enrichment program and others were conducted during summer programs. Basic food safety information was distributed at fair-type settings.

**Results**

A pre-post measure was administered to children

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

**Outcome #4**

**1. Outcome Measures**

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

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	60

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Youth attending food safety lectures, classes 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 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 was conducted in the schools as part of a school enrichment program and the others were conducted during summer programs. Basic food safety information was distributed at fair-type settings.

**Results**

A pre-post measure was administered to children

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

**Outcome #5**

**1. Outcome Measures**

Increase awareness among community participants about food safety education and information and the prevention of food borne illnesses.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2011	223

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Individuals attending food safety lectures, classes 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**

Increase in knowledge as indicated through pre-post evaluation instruments used with clients.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

**Outcome #6**

**1. Outcome Measures**

Increase awareness among the adult and youth participants about prevention of poor food safety practices related to eating away from home (e.g., restaurants, mobile food vans, food booths, fast food establishments, vending machines)

## 2. Associated Institution Types

- 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2011	675

### 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, and 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

Information on food borne illness was presented through various workshops and classes and demonstrations.

#### Results

Pre-post evaluation instruments were used with clients.

## 4. Associated Knowledge Areas

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

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

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

#### Brief Explanation

- The U.S. Virgin islands lies in a hurricane prone zone. Natural disasters such as hurricanes do disrupt all aspects of life in the USVI.
- Economy can affect outcomes because an individual's ability to implement certain health practices is often influenced by their discretionary income. Currently the USVI has one of

the highest unemployment rates in the nation.

- The cultural environment of the USVI may affect outcomes because current dietary practices (high carbohydrate and high fat diets) are deeply rooted in the community. In the past Virgin Islanders were physically active however now the majority of the population lead quite sedentary lifestyles.

### **V(I). Planned Program (Evaluation Studies)**

#### **Evaluation Results**

Data is incomplete at this time.

#### **Key Items of Evaluation**

Data is incomplete at this time.