# 2007 University of the Virgin Islands Extension Annual Report

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2007 University of the Virgin Islands Extension Annual Report

### I. Report Overview

#### 1. Executive Summary

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

In the Sustainable Agriculture Program, a series of shortcourses, workshops, training classes and demonstrations on both horticulture and animal sciences were conducted to disseminate information about recommended research-based sustainable production practices including composting, drip irrigation, and internal parasite control. Publications, factsheets, and newsletter articles were developed and published to disseminate information regarding sustainable production and marketing practices. Two major shortcourses, each conducted over a six-week period, targeted both young crop and livestock farmers. A total of 80 people completed and received certificates for this course. As a result of knowledge received, producers were able to increase production thus increasing income. There were cost savings derived as a result of using mulch and drip irrigation for crop farmers and better internal parasite control for livestock farmers. The participants also received computer literacy and recordkeeping information that helped them improved the efficiency of their operations. Producers now can use their computers for information retrieval and ordering supplies. This has resulted in significant time savings and decreases the producer's dependence on external assistance. Producers implementing sustainable pesticide use practices have seen a 35% reduction in the use of pesticide to control parasites.

The livestock shortcourse assisted producers in making key management improvements in their physical facilities, especially swine producers. Using the knowledge acquired, the swine producers have made changes to their operations giving them cost savings. CES continues to train farmers in animal identification, proper husbandry, and recordkeeping. A special workshop on internal parasite control was conducted for sheep and goat producers. This workshop has helped producers to increase their productivity by decreasing animal loss and increasing animal performance. Farmers' survey indicated that their productivity has increased and they have made more money and have better animals for sale.

Partnerships were established and strengthened with public and private agencies, government agencies, local and executive agencies, along with primary and junior high school students. These partnerships made more people from the local government and policymakers aware of the potential economic, social and environmental contributions of the urban and suburban forests. These partnerships have contributed to the beautification of a main street in St. Thomas which has attracted tourist and local residents to the area. This program has also been instrumental in promoting the local woodworkers organization and more sales have been derived from their products making two woodworkers' businesses profitable for the year.

CES in collaboration with the Department of Planning and Natural Resource conducted shortcourses, workshops and demonstrations in the area of water quality protection. CES also conducted a series of workshops in natural resources and environmental management. CES conducted a non-source pollution workshop and training for persons of Region II in the United States. A total of 42 people attended and participated in this training. CES provided technical assistance to and was a primary participant in numerous government/NGO advisory committees, including the Urban Forestry Council, Virgin Islands Resource Conservation and Development, Great Pond Advisory Committee, St. Croix East End Marine Park Committee, Environmental Association of St. Thomas/St. John, St. Croix Environmental Association, Marine Park Advisory Committee, V.I. Department of Agriculture Forest Stewardship Committee, Urban and Community Forestry Assistance Program, Anti-Litter and Beautification Commission, and the Nature Conservancy. The two publications that were published by staff last year, continues to be very popular with V.I. residents, visitors and international audience. The publication entitled, A Field Guide to the Plant and Marine Communities in the Virgin Islands, was reprinted. This book is used as a resource by developers, contractors, community leaders, and activist on plant and marine live in the Virgin Islands. CES provided the Virgin Islands community with locally oriented outreach materials which contains information on water conservation, drinking water protection, waste water disposal, and best management practices for pollution prevention through the VI\*A\*Syst program. CES continues its collaboration with the Region II Water Quality team in the design of a demonstration animal waste treatment facility which is being constructed on a St. Croix farm.

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CES in collaboration with the V.I. Resource Conservation and Development and the V.I. Department of Agriculture Urban and Community Assistance Program completed the Phase II of the Estate Adventure Trail. The St. Croix Environmental Repository, established in collaboration with EPA, increased in size and is being used frequently by the public. A total of 216 factsheets and information were distributed to the general public from the repository. CES continues to provide technical assistance on exotic, invasive, endangered and threatened, and medicinal plant species. University researchers were also assisted with the selection of native plants for natural products research. Through our Agricultural fairs, meetings, and tours, the Natural Resources program helped facilitate the interaction of community groups and leaders to address natural resources conservation and management issues, pollution prevention, and the establishment of an ecotourism industry based on the incorporation of V.I. natural and cultural history and low impact tourism concepts.

The nutrition program consisted of basic Food Safety education, EFNEP and EFENP Youth, and a Healthy Well Nourished Population. The food safety program continues to be one of our high priority issues in the Virgin Islands. CES staff continued to provide workshops and seminars for food vendors and others who sell food at different cultural activities and public events in the Virgin Islands. The EFNEP continued to target low income at-risk clientele and food stamp participants. A total of 97 EFNEP clients received information on nutrition value of various foods, budgeting, meal planning, and food preparation. As part of our summer program, the EFNEP program provided assistance to 32 young people teaching them how to select and prepare nutritional diets and to select different foods to avoid obesity.

CES nutrition staff developed culturally sensitive nutrition and health education products and resources that were made available to professions, students, and the public. A fruit and vegetable composition poster was developed and made available for distribution. It included the vitamin, mineral and fiber content of local fruits and vegetables. A total of 1200 posters were distributed to local schools, senior citizens centers, hospitals, and to different government agencies to assist them in promoting the consumption of local fruits and vegetables. Disease specific workshops, shortcourses, seminars, and other educational activities focusing on nutrition education and behavior modification were conducted throughout the Virgin Islands. A special video production was released and distributed to Human Services centers, Food Stamp offices, the local WIC offices to help educate the general public on proper nutrition. CES staff recruited and trained staff and volunteers to deliver nutrition, diet and health relevant information to the community. Staff developed and maintained relationships with partners including government agencies, clinics, places of worship, pubic and private schools, senior citizen centers, and daycare centers. The nutrition staff helped increased awareness among the general public about the relationship between food intake, physical fitness, stress management, and disease prevention. Specific programs targeting diabetics and hypertension patients were conducted for the general public. Other workshops conducted this year focused on childhood obesity, diabetes, and hypertension. Over 2000 people were impacted by this program. The program also assisted participants who attended the workshops in learning about starchy foods, recognizing the appropriate portions of local foods, and reducing the portion size of starchy foods. Participants also increased their consumption of vegetables.

The programs in this area include 4-H Summer Camp, 4-H Volunteer and Management, and 4-H Youth Development. The 4-H program continues to be one of the most popular in the Extension Service. The annual summer camp drew students from all over the three islands to a six-week program enrolling 217 youth and employing 32 high school and college students. In addition to Clover Buds, cultural heritage, agriculture, science and entrepreneurship, the summer camp provided basic computer literacy labs for 165 youth on St. Croix and offered the Mini-Society® program to all campers. In a survey conducted at the end of camp it was found that 100% of campers created at least one product or service for the Mini-Society® market day. Campers also received healthy lifestyle training resulting in a 21% increase in those who reported eating breakfast daily; 80% reported that they watched less television and increased play time; and all campers indicated that they would enroll again next year; 50 of the youth learned how to plant seeds and to transplant seedlings effectively. All summer camp staff received training on team work, leadership, working with multi-age groups, and experiential learning strategies. This year's summer camp program was featured in CSREES/USDA Partners Video Magazine #18.

In Volunteer Development and Management, three new clubs were formed with two clubs receiving their Charter. This program provided orientation, training, and professional development for teen and adult volunteers, partners, 4-H Family & Consumer Sciences/CYFAR staff and CES personnel. Twenty adult and teen leaders demonstrated successful leadership strategies as they successfully organized and led three 4-H clubs, one special interest group club, and seven 4-H projects, enrolling 206 4-H members in non-formal education programs and activities focusing on biotechnology, community service, cultural arts, food and nutrition, gardening, health, and small livestock.

The programs in this area are Marketable Skills and Computer Training and Technology. The marketable skills program provided information through workshops, shortcourses, and seminars to unemployed individuals and people trying to enter the job market. Courses that were taught included clothing construction and marketable skills. The use of recyclable materials was also introduced and clients were assisted in using these materials to create products targeting the tourist market. The program also conducted workshops and shortcourses that helped low income at-risk audiences build knowledge, skills, and attitude that

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positively impacted their quality of live. As a result of programming in this area, 15 people who received skills in the program gained employment. Others in the clothing construction class reported increase in personal income by the establishment of two clothing alteration shops. Some clients in this class made designer pillow covers and towels that were sold as tourist items to the different hotel shops. Three clients reported creating a home based business from knowledge and skills gained from participating in this program. Other clients trained in this program demonstrated their ability to write resumes, increase their interviewing skills, and developed confidence. These clientele in the marketable skills program received computer courses and computer literacy training which helped them acquire basic computer competency skills. CES collaborated with government departments, nonprofit agencies, community based programs and special interest groups to recruit, train and support this program.

The computer training and technology program targeted low income families and the farming community in the Virgin Islands. This program assisted the agriculture program in providing a six-week computer training course in computer technology and recordkeeping for farmers. It also provided assistance with computer literacy to the marketable resources and limited resources program in helping clientele gain knowledge in computer applications and assisting them in finding jobs in the community.

CES continued its international efforts by providing leadership and assistance to other countries in the Eastern Caribbean region. Professional linkages were maintained with five agricultural organizations in the Eastern Caribbean. Also, a directory of individuals and institutions in agricultural research and development in the Eastern Caribbean was expanded and updated. Trainings by UVI specialists were conducted in the British Virgin Islands on proper tree management and maintenance, soil management and water quality. Extension specialists provided consultations on food and nutrition programs, sustainable agriculture, horticulture, and livestock production and management to agents in six Caribbean islands. Pure bred Senepol cattle, pure bred boar goats, and Virgin Islands White Hair sheep were exported to four Caribbean islands to help improve the local livestock population. CES assisted in the planning and execution of international meetings of the Caribbean Food Crops Society (CFCS), the Caribbean Council of Higher Education in Agriculture (CACHE), and Caribbean Association of Researchers and Herbal Practitioners (CARAPA).

### Total Actual Amount of professional FTEs/SYs for this State

| Voor:2007 | Extension | Extension |      | Research |  |
|-----------|-----------|-----------|------|----------|--|
| Year:2007 | 1862      | 1890      | 1862 | 1890     |  |
| Plan      | 20.9      | 0.0       | 0.0  | 0.0      |  |
| Actual    | 20.7      | 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 approval and submission to the Associate Director for his input and budget allocation. The programs were then forwarded to the Vice Provost for Research and Public Service and the University's Office of Sponsored Programs for comments and approval. The programs that were accepted were forwarded to the Extension Advisory Council for its input and approval. Approved programs were shared with specific Commissioners for comments and inputs. The final programs were sent to the State Director for 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

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#### **Brief Explanation**

CES encouraged participation by the general public by announcing all its public meetings and listening sessions through the local radio stations and television stations. 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 Research and Public Service individuals. 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 recommendation from its stakeholders at the Advisory Council's summer meeting. 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 was considered

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

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# **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

They assisted CES 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

| Total Actual Formula dollars Allocated (prepopulated from C-REEMS)      Extension Research |                |       |             |  |
|--|----------------|-------|-------------|--|
| Smith-Lever 3b & 3c  | 1890 Extension | Hatch | Evans-Allen |  |
| 891342   | 0              | 0     | 0           |  |

| _                        | Exte                | nsion          | Research |             |
|--------------------------|---------------------|----------------|----------|-------------|
|                          | Smith-Lever 3b & 3c | 1890 Extension | Hatch    | Evans-Allen |
| Actual<br>Formula        | 891342              | 0              | 0        | 0           |
| Actual<br>Matching       | 961000              | 0              | 0        | 0           |
| Actual All<br>Other      | 245280              | 0              | 0        | 0           |
| Total Actual<br>Expended | 2097622             | 0              | 0        | 0           |

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

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# V. Planned Program Table of Content

| S. NO. | PROGRAM NAME   |
|--------|--|
| 1      | Beef, Dairy and Small Livestock  |
| 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  |
| 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                   |

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# Program #1

# V(A). Planned Program (Summary)

# 1. Name of the Planned Program

Beef, Dairy and Small Livestock

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

# 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area                           | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|--|--------------------|--------------------|-------------------|-------------------|
| 301        | Reproductive Performance of Animals      | 10%                |                    |                   |                   |
| 302        | Nutrient Utilization in Animals          | 15%                |                    |                   |                   |
| 307        | Animal Management Systems                | 40%                |                    |                   |                   |
| 311        | Animal Diseases                          | 10%                |                    |                   |                   |
| 312        | External Parasites and Pests of Animals  | 10%                |                    |                   |                   |
| 315        | Animal Welfare/Well-Being and Protection | 15%                |                    |                   |                   |
|            | Total                                    | 100%               |                    |                   |                   |

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Exter | extension |      | esearch |
|------------|-------|-----------|------|---------|
|            | 1862  | 1890      | 1862 | 1890    |
| Plan       | 2.0   | 0.0       | 0.0  | 0.0     |
| Actual     | 2.0   | 0.0       | 0.0  | 0.0     |

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

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

# V(D). Planned Program (Activity)

1. Brief description of the Activity

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Workshops were conducted for livestock producers in the areas of identification and recordkeeping. Additional workshops were given in the areas of nutrition and the use of different varieties of forages and their production methods and requirements. Species-specific workshops were presented to local producers on goat production, sheep production and swine production as well as reproduction. Also, a workshop focusing on the actual business aspects of livestock farming was presented.

On-farm demonstrations, evaluations and counseling were done for both groups and individual farmers in the areas of identification and management techniques and strategies. While on the farms, evaluations and recommendations were given for health care and the different treatments available to the farmers, nutrition of animals, housing, and parasite control and treatment. Discussions were also held regarding forage and pasture management and maintenance including different grazing strategies.

Work was initiated on developing a program designed to promote the purchase and consumption of locally produced livestock products.

### 2. Brief description of the target audience

•Virgin Islands Livestock Producers •Virgin Islands Consumers •Virgin Islands Youth

# V(E). Planned Program (Outputs)

#### 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

|      | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts<br>Youth | Indirect Contacts<br>Youth |
|------|------------------------|--------------------------|--------------------------|----------------------------|
| Year | Target                 | Target                   | Target                   | Target                     |
| Plan | 300                    | 4000                     | 350                      | 500                        |
| 2007 | 420                    | 3500                     | 560                      | 700                        |

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

#### **Patent Applications Submitted**

Year Target

**Plan:** 0 2007: 0

# **Patents listed**

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

# **Number of Peer Reviewed Publications**

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

### **Output Target**

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# Output #1

### **Output Measure**

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

livestock

Year Target Actual 2007 4 6

# Output #2

#### **Output Measure**

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

 Year
 Target
 Actual

 2007
 2
 2

#### Output #3

### **Output Measure**

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

 Year
 Target
 Actual

 2007
 150
 150

# Output #4

# **Output Measure**

Farms would be visited for parasite monitoring and evaluation

 Year
 Target
 Actual

 2007
 25
 30

# Output #5

#### **Output Measure**

Animals would be weighed to monitor performance

 Year
 Target
 Actual

 2007
 10
 12

### Output #6

### **Output Measure**

Animal production would be monitored

**Year Target Actual** 2007 24 0

# Output #7

# **Output Measure**

Develoop a "Buy Local" campaign with local farmers cooperative for use by producers in the community

Year Target Actual 2007 1 1

# Output #8

# **Output Measure**

Provide training per year to farmers in identification methods

Year Target Actual 2007 1 1

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# V(G). State Defined Outcomes

# V. State Defined Outcomes Table of Content

| O No. | OUTCOME NAME   |
|-------|--|
| 1     | Continue to work toward developing and adopting the use of two drought-resistant and nutritional forages for pastured livestock per year |
| 2     | Increase rolling herd averages of dairy producers on St. Croix by 400 pounds   |
| 3     | Increase weaning weights of calves in beef herds by 20 pounds  |
| 4     | Decrease production, performance and animal losses due to parasites and poor nutrition by 5% per year                                    |
| 5     | Increase the sales and consumption of locally produced livestock products such as meat, milk, eggs                                       |
| 6     | Increase the number of livestock herds/flocks using complete identification and recordkeeping practices                                  |
| 7     | Increase the number of pig farmers that are raising their livestock in recommended facilities  |

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# Outcome #1

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 2                   | 0      |

# 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Farmers (livestock producers) are directly affected by feed shortages due to drought conditions because they need to purchase expensive supplemental feeds.

#### What has been done

Research is ongoing.

#### Results

Pending

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                  |
|---------|---------------------------------|
| 307     | Animal Management Systems       |
| 302     | Nutrient Utilization in Animals |

# Outcome #2

# 1. Outcome Measures

Increase rolling herd averages of dairy producers on St. Croix by 400 pounds

# 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 80                  | 0      |

# 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

No active dairy farms. Operations ceased in August 2006.

What has been done

# Results

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### 4. Associated Knowledge Areas

KA Code Knowledge Area

307 Animal Management Systems

# Outcome #3

#### 1. Outcome Measures

Increase weaning weights of calves in beef herds by 20 pounds

### 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 4                   | 2      |

### 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Producers that produce heavier calves at weaning can market the animals sooner thus allowing a faster turnover in their herds and less tim and money spent on each animal therefore increasing profits. Buyers like larger yet younger animals-more tender.

#### What has been done

Periodic weighing of calves.

# Results

Variable. Two farms had an increase in weaning weights.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                  |
|---------|---------------------------------|
| 307     | Animal Management Systems       |
| 302     | Nutrient Utilization in Animals |

# Outcome #4

# 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 3      |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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Livestock producers know that the cost per animal increases when the number of animals decreases. Parasites cause an increase in the cost of medications and feed. Unthrifty animals are not as marketable and are slower growing.

#### What has been done

Monitoring of herds, education of producers in methods, types, and options of control and prevention of parasite and proper feeding types, quantities and management of feeding systems.

#### Results

Three farms had a decrease in animal losses due to proper parasite control. These farms had an increase in animal weights.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                          |
|---------|---|
| 312     | External Parasites and Pests of Animals |
| 302     | Nutrient Utilization in Animals         |

### Outcome #5

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 3      |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

For the livestock producers more sales equal more money. For the consumers it means fresher more healthier product. Availability of local product leads to a healthier diet; therefore, healthier life.

# What has been done

Program is ongoing.

#### Results

Two farms have been successful in selling local meat every week. One farm is selling fresh eggs daily.

# 4. Associated Knowledge Areas

| KA Code | Knowledge Area                      |
|---------|-------------------------------------|
| 307     | Animal Management Systems           |
| 301     | Reproductive Performance of Animals |
| 302     | Nutrient Utilization in Animals     |

#### Outcome #6

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 10                  | 5      |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Livestock producers can manage herds/flocks better with all animals identified, simplifying reproduction and feeding management. Identified animals can be recognized and recovered when lost or stolen. Public and governement officials can trace lost, strayed or impounded animals to protect general population health and well-being.

#### What has been done

Workshops and on-farm training.

#### Results

Five farms had their animals identified and started a farm recordkeeping system this year.

### 4. Associated Knowledge Areas

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

#### Outcome #7

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 10                  | 3      |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Livestock farmers need the proper facilities for rearing healthier animals which will increase sales, reduce money spent on health care, and increase profit. Also, public and government officials would like to see less pollution and contamination of the environment and a healthier community.

# What has been done

Workshop and training

#### Results

One wastewater treatment facility (digester) under construction.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                           |
|---------|--|
| 315     | Animal Welfare/Well-Being and Protection |

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307

Animal Management Systems

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

### External factors which affected outcomes

Government Regulations

# **Brief Explanation**

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

# 1. Evaluation Studies Planned

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

#### **Evaluation Results**

**Key Items of Evaluation** 

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### Program #2

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

#### 1. Name of the Planned Program

Sustainable Agriculture

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

### 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area   | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|--|--------------------|--------------------|-------------------|-------------------|
| 111        | Conservation and Efficient Use of Water                  | 20%                |                    |                   |                   |
| 205        | Plant Management Systems                                 | 25%                |                    |                   |                   |
| 307        | Animal Management Systems                                | 25%                |                    |                   |                   |
| 403        | Waste Disposal, Recycling, and Reuse                     | 10%                |                    |                   |                   |
| 601        | Economics of Agricultural Production and Farm Management | 20%                |                    |                   |                   |
|            | Total  | 100%               |                    |                   |                   |

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Exter | nsion | Research 1862 1890 |      |  |
|------------|-------|-------|--------------------|------|--|
|            | 1862  | 1890  | 1862               | 1890 |  |
| Plan       | 1.7   | 0.0   | 0.0                | 0.0  |  |
| Actual     | 1.5   | 0.0   | 0.0                | 0.0  |  |

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

| Extension           |                | Research       |                |
|---------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch          | Evans-Allen    |
| 60000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 60000               | 0              | 0              | 0              |
| 1862 All Other      | 1890 All Other | 1862 All Other | 1890 All Other |
| 54280               | 0              | 0              | 0              |

# V(D). Planned Program (Activity)

# 1. Brief description of the Activity

Shortcourses, workshops, training classes and demonstrations were conducted to disseminate information about recommended, research based sustainable production practices, including composting, drip irrigation, etc. Publications (e.g. fact sheets) and newsletter articles were developed and published to disseminate information regarding sustainable production and marketing practices. Announcements were made through the print and electronic media to promote educational activities and disseminate information about sustainable agricultural practices. Farm visits and telephone contacts were made to address clientele problems and to disseminate information about the program. 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.

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### 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 was farmers who are typically socially disadvantaged, limited resource individuals who lack the necessary technical training, technological tools, and infrastructure for optimum farm production.

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

# 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

|      | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target                 | <u>Target</u>            | Target                | Target                  |
| Plan | 200                    | 6000                     | 1200                  | 500                     |
| 2007 | 240                    | 5800                     | 500                   | 600                     |

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

# **Patent Applications Submitted**

Year Target Plan: 0

2007: 0

#### **Patents listed**

# 3. Publications (Standard General Output Measure)

| Numb | er o | of Peer | Reviewed | Publications |  |
|------|------|---------|----------|--------------|--|
|      |      |         | Fytensio | n            |  |

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

# **Output Target**

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# Output #1

# **Output Measure**

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

 Year
 Target
 Actual

 2007
 10
 12

# Output #2

### **Output Measure**

Number of publications

YearTargetActual200711

# Output #3

### **Output Measure**

• Number of announcements through print and electronic media

 Year
 Target
 Actual

 2007
 20
 24

# Output #4

# **Output Measure**

Number of farm visits and telephone contacts

 Year
 Target
 Actual

 2007
 120
 140

# Output #5

### **Output Measure**

Projects to increase farm water supply and water use efficiency

Year Target Actual 2007 1 1

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# V(G). State Defined Outcomes

# V. State Defined Outcomes Table of Content

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

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# Outcome #1

# 1. Outcome Measures

Increased number of farmers who use sustainable agriculture practices

#### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 10                  | 15     |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Vegetables, tropical fruits, herbs and small livestock producers; members of farming organizations; home gardeners; and residents are interested in the use of sustainable agriculture production practices. The advantages of using these practices are important, especially as it relates to local production and the benefits derived regarding environmental protection and food safety. Producers are interested in instilling confidence in consumers concerning the local food production systems. An enhanced quality of life for producers, residents and visitors is important to everyone.

#### What has been done

A series of 6-week training courses were conducted related to sustainable agriculture production practices for a wide range of vegetable, fruits, herbs and small livestock.

### Results

Producers have increased their knowledge of sustainable agriculture practices and more farmers are now implementing the production practices they have learnt as a part of their farming operations.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                          |
|---------|---|
| 111     | Conservation and Efficient Use of Water |
| 307     | Animal Management Systems               |
| 403     | Waste Disposal, Recycling, and Reuse    |
| 205     | Plant Management Systems                |

### Outcome #2

### 1. Outcome Measures

Increased number of sustainable agriculture practices conducted by individual producers

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

# 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 11     |

### 3c. Qualitative Outcome or Impact Statement

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### Issue (Who cares and Why)

Vegetables, tropical fruits, herbs and small livestock producers; members of farmer organizations; home gardeners; agriculture professionals; and residents all care about increased local food production to meet consumer demands and consumer preferences. Producers and other residents are concerned that production practices are sustainable and environmentally friendly.

#### What has been done

A series of training courses and demonstrations related to sustainable agriculture were conducted, covering a wide range of crops (vegetables, tropical fruits, and herbs) and small livestock production practices.

#### Results

Producers (both crop and small livestock) have not only increased their overall production but have also increased the number of sustainable agriculture practices utilized on their farms. IPM practices, especially for internal parasite of small ruminants, was widely adopted by most small livestock producers who attended the training courses related to that topic. A number of producers have also adopted practices related to the efficient use of nonrenewable resources and on-farm resources.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                          |
|---------|---|
| 307     | Animal Management Systems               |
| 403     | Waste Disposal, Recycling, and Reuse    |
| 205     | Plant Management Systems                |
| 111     | Conservation and Efficient Use of Water |

#### Outcome #3

#### 1. Outcome Measures

Increase in the number of farmers who utilize value added strategies

### 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 5      |

### 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Producers, agriculture professionals, farmer organizations, home gardeners, farm family households, and residents are all concerned about the seasonality of our tropical fruits and the best growing seasons for the production of certain vegetables. This leads to gluts on the market for specific crops during certain predictable times of the year. This results in loss of produce due to spoilage, inadequate handling and storage, low prices, unavailability of markets. Produce not meeting the requirements to be considered market grade is also a concern. The economic viability of farm operations is negatively affected.

#### What has been done

During the major educational and outreach activities - World Food Day, Mango Melee, and the Virgin Islands Agriculture and Food Fair - workshops presentations, demonstrations, and displays were conducted focusing specifically on the opportunities for adding value to agricultural products. The benefits include extending the shelf-life of products, providing additional opportunities for generating income, learning marketable skills, and developing cottage industry businesses.

#### Results

The number of producers getting involved in adopting these strategies is increasing. This is evident by the number of value-added products that are appearing at the farmers markets, roadside-stands, and other agriculture related events.

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### 4. Associated Knowledge Areas

KA Code Knowledge Area

601 Economics of Agricultural Production and Farm Management

### Outcome #4

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 25                  | 17     |

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

#### Issue (Who cares and Why)

Producers, agriculture professional, Virgin Islands Department of Agriculture staff, farmer organizations, residents, other governmental and nongovernmental agencies involved in agricultural and environmental issues, all care about the available water resources and the efficiency of its use. The availability of water is the most limiting constraint to agriculture production in the Virgin Islands. As efforts are continued to increase local food production, efforts must also be made to ensure the availability of water to meet this increased demand. The development of additional water resources is, therefore, something that is of concern to all stakeholders.

#### What has been done

A pond planning, design, and construction workshop was held to train attendees in improving farm water supply. This educational activity helped build technical capacity, knowledge and awareness about using this strategy as a method to increase farm water supply.

# Results

The availability of water for producers has been augmented, and more importantly the adoption of practices to enhance water use efficiency has shown a tremendous increase. This has taken place particularly through the adoption of microirrigation practices and other water conservation strategies. This leads to enhanced environmental quality through minimized flooding and soil erosion.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                          |
|---------|---|
| 111     | Conservation and Efficient Use of Water |

# Outcome #5

# 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 20                  | 23     |

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

#### Issue (Who cares and Why)

Agricultural funding agencies; USDA NRCS; USDA FSA; producers; agriculture professionals; Small Business Development Center; Virgin Islands Department of Agriculture; Virgin Islands Bureau of Internal Revenue; other governmental and nongovernmental agencies involved in agriculture all care about the importance of producers keeping proper farm financial records. This is important to assist all involved in making decisions regarding profitability, volume and value of production, sales, and the status and potential of agricultural operations in the Virgin Islands. Financing and other agriculture development decisions are made based upon the availability and accuracy of farm financial records.

#### What has been done

A twelve-week training course was conducted for crop and small livestock producers. Enterprise budgets were developed for selected vegetables, herbs and tropical fruits.

#### Results

Farmers and farmer organizations increased their knowledge and improved their crop and small livestock production practices. Farmers are using enterprise budgets and other information gained to develop business plans and secure financing for their farming operations. Farmers developed computer literacy, communication and record keeping skills to the extent that they are now able to perform routine computer related tasks, word processing, communication via email, researching and obtaining information by the use of the internet, and tracking the business aspect of their farming operation through record keeping and financial management.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area   |
|---------|--|
| 601     | Economics of Agricultural Production and Farm Management |

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

### External factors which affected outcomes

Government Regulations

# **Brief Explanation**

The recently passed Sustainable Farming Act of the Virgin Islands has mandated a number of requirements related to production records, agriculture curriculum in the schools and other issues that can affect the sustainable agriculture program.

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

#### 1. Evaluation Studies Planned

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

# **Evaluation Results**

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

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# Program #3

# V(A). Planned Program (Summary)

# 1. Name of the Planned Program

Natural Resources and Environmental Management

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

# 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area                                    | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|---|--------------------|--------------------|-------------------|-------------------|
| 112        | Watershed Protection and Management               | 20%                |                    |                   |                   |
| 123        | Management and Sustainability of Forest Resources | 25%                |                    |                   |                   |
| 125        | Agroforestry                                      | 10%                |                    |                   |                   |
| 134        | Outdoor Recreation                                | 25%                |                    |                   |                   |
| 136        | Conservation of Biological Diversity              | 10%                |                    |                   |                   |
| 605        | Natural Resource and Environmental Economics      | 10%                |                    |                   |                   |
|            | Total   | 100%               |                    |                   |                   |

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Exter | nsion | R    | esearch |
|------------|-------|-------|------|---------|
|            | 1862  | 1890  | 1862 | 1890    |
| Plan       | 1.8   | 0.0   | 0.0  | 0.0     |
| Actual     | 1.8   | 0.0   | 0.0  | 0.0     |

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

| Extension               |                     | Research            |                     |
|-------------------------|---------------------|---------------------|---------------------|
| Smith-Lever 3b & 3c     | 1890 Extension      | Hatch<br>0          | Evans-Allen         |
| 1862 Matching           | 1890 Matching       | 1862 Matching       | 1890 Matching       |
| 80000<br>1862 All Other | 0<br>1890 All Other | 0<br>1862 All Other | 0<br>1890 All Other |
| 0                       | 0                   | 0                   | 0                   |

# V(D). Planned Program (Activity)

1. Brief description of the Activity

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The NREM Program continued to work closely with the Magens Bay Authority to implement recommendations made in the 2005 Magens Bay Arboretum Master Plan. The Estate Adventure Trail plans progressed to the Phase II stage to be funded through collaboration with NRCS (RC&D) and the VI Department of Agriculture Urban and Community Assistance Program. Technical assistance with habitat protection and restoration plans/procedures has also been requested by managers to restore and/or protect other critical habitats, areas of particular concern in the territory, and areas designated as part of the VI Territorial Park initiative established by the Legislature of the VI including Smith Bay Park, Southgate Park, Great Bay, Annaly Bay and others. Similar technical assistance has been provided to developers and property owners. Some of these privately-owned sites exceed 300 acres and encompass varied threatened habitats and unique natural resources. Attempts have been made through informal contacts to document and build upon indigenous knowledge and practices. Materials, displays, workshops, presentations and demonstration sites that relay information regarding native plants, ecosystems and habitats; naturalized, exotic, endangered and threatened plant species; urban forestry and other resource conservation issues were developed and maintained. The St. Croix Environmental Repository established with EPA funding increased in size and is used by the public. The main media outlets used to promote NREM issues were radio and television PSAs, television video spots, local talk shows (radio & TV), presentations and newspaper articles. The CDC/CES book Island Peaks to Coral Reefs and The Remarkable Big Trees of the Virgin Islands tree book co-researched by CES continued to demand attention and requests for presentations and additional information from educators, students, businesses, tourists and the general public. Native plant inventories and identification were made and tours and site visits were conducted for resource managers, government agencies, regulatory personnel, researchers, developers, hotels, educators, students, property owners and others during office consultations and site visits. During consultations and advisory committee meetings, technical information was also provided about exotic, invasive, endangered and threatened, and medicinal plant species. Researchers were assisted with the selection of native plants for natural products research. Through fairs, meetings and tours the NREM program helped facilitate the interaction of community groups and leaders to address natural resource conservation and management issues, pollution prevention, and the establishment of an ecotourism industry based on the incorporation of VI natural and cultural history and low-impact tourism concepts.

### 2. Brief description of the target audience

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

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

# 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts<br>Adults<br>Target | Indirect Contacts Adults Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Plan | 400                                 | 1000                            | 500                                | 1000                                 |
| 2007 | 320                                 | 500                             | 450                                | 500                                  |

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

#### **Patent Applications Submitted**

Year Target

**Plan:** 0 2007: 0

#### **Patents listed**

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# 3. Publications (Standard General Output Measure)

**Number of Peer Reviewed Publications** 

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

**Output Target** 

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# Output #1

# **Output Measure**

Education/Classes in natural resources management, VI forest ecosystems

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 0      | 5     |

# Output #2

#### **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 3      |

#### Output #3

# **Output Measure**

One on One consultation with residents, government employees, students

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 150    | 50     |

### Output #4

# **Output Measure**

Tours of VI natural areas for students and community groups

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 6      | 3      |

# Output #5

#### **Output Measure**

E-education – NREM websites updated

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 1      | 0      |

### Output #6

### **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 4      | 9      |

# Output #7

# **Output Measure**

Demonstration site relating to native plants, environmental management

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 1      | 4      |

# Output #8

# **Output Measure**

PSA's

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 0      | 0      |

### Output #9

# **Output Measure**

Fairs

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 3      |

# Output #10

# **Output Measure**

TV/Media

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 2      |

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# V(G). State Defined Outcomes

# V. State Defined Outcomes Table of Content

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

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### Outcome #1

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 1                   | 2      |

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

### Issue (Who cares and Why)

Magens Bay Authority (MBA) and the UVI Physical Plant/Campus Administration (CEA) are entities responsible for the management of publicly accessible areas with unique natural ecosystems. MBA manages Magens Bay, the VI's most popular natural destination, and is also responsible for developing a management plan for Linquist Beach, a new acquisition in the VI Territorial Park system. VI residents and tourists expect that VI natural recreational areas will be protected for current and future use through environmental management planning.

#### What has been done

CES has partnered with MBA to develop an environmental master plan for portions of the park. BMP,'s have been introduced to protect native plant communities and natural habitats. CES has also helped MBA identify environmentally sensitive habitats at Linquist Beach and has worked closely with UVI's St. Thomas Physical Plant and CEA to identify and protect UVI's native forest habitats and marine resources. Native plants have been planted and labeled on campus to promote informal learning opportunities for students and the general public.

#### Results

BMPs recommended by CES and implemented by MBA and UVI are improving native plant habitats near and behind the beaches and Magens Bay wetlands. Invasive non-native plants are being removed. MBA has requested further assistance with the development of more extensive master plans for Magens Bay and Linguist Beach Parks. UVI's Physical Plant has become more aware of the importance of integrating the campus native and non-native landscapes. Protection of UVI's non-native landscapes, especially coastal ecosystems, has become more accepted as part of the overall campus plan.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                      |
|---------|-------------------------------------|
| 112     | Watershed Protection and Management |

# Outcome #2

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 200                 | 60     |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

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

#### What has been done

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

#### Results

More developers, engineers, and architects are regularly requesting CES technical information about native plants, native habitats, habitat restoration, and erosion control. More native plants were selected for landscaping on construction sites. Clients' technical knowledge of native plant species and native habitats increased.

# 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                    |
|---------|---|
| 123     | Management and Sustainability of Forest Resources |

# Outcome #3

# 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 1                   | 0      |

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

Issue (Who cares and Why)

What has been done

# Results

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### 4. Associated Knowledge Areas

**KA Code Knowledge Area**134 Outdoor Recreation

### Outcome #4

#### 1. Outcome Measures

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

#### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 200                 | 0      |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Many educators, students, environmental groups and the general public want to increase their understanding of V.I. ecosystems and the effects of human alterations to natural ecosystems.

#### What has been done

Through direct and indirect methods CES delivered information about how native plant habitats are impacted by humans and the consequences of these impacts. The Conservation Data Center (CDC) and CES produced and distributed a book, 'Island Peak to Coral Reef - The Plant and Marine Communities of the Virgin Islands', with the goal of raising awareness about the importance of VI ecosystems and the negative anthropogenic effects on these unique systems

### Results

The CDC/CES book 'Island Peak to Coral Reef...' was increasingly endorsed and used by university professors and environmental agencies as a text book to promote an increased understanding of the human effects on native ecosystems. Teachers, students and environmental groups propagated, planted or protected native trees to restore native ecosystems, and property owners became more interested in preserving natural ecosystems in their home landscapes.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                    |
|---------|---|
| 123     | Management and Sustainability of Forest Resources |

# Outcome #5

# 1. Outcome Measures

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

#### 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 500                 | 127    |

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

#### Issue (Who cares and Why)

Stakeholders (government personnel, developers, community groups, resource managers and students) requested information relating to the connections between terrestrial and marine communities and watershed protection. There were various reasons for these requests including: compliance with governmental regulations, classroom assignments, environmental stewardship initiatives, partnership with other agencies promoting watershed research and protection, etc.

### What has been done

Through site visits, seminars, field trips, media interviews, phone consultations and publication distribution CES provided information relating to watershed awareness and protection to a wide variety of stakeholders. CES has been forging new partnerships with specialists in watershed protection and management to identify BMP's that are most suitable for protecting watersheds on small, rapidly urbanizing, mountainous tropical islands.

#### Results

The CDC-CES book 'Island Peak to Coral Reef...' prompted more stakeholders to request information about BMP's that can be used to protect watersheds. More resource managers and developers are implementing specific CES recommended BMP's that protect or restore coastal terrestrial plant communities including wetlands.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                       |  |
|---------|--------------------------------------|--|
| 112     | Watershed Protection and Management  |  |
| 136     | Conservation of Biological Diversity |  |

### Outcome #6

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 0                   | 3      |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

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

### What has been done

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CES, the Center for Marine and Environmental Science (CMES) and the Conservation Data Center (CDC) investigated the interface between terrestrial and marine systems. This pilot study, funded by the NSF Experimental Program to Stimulate Competitive Research (EPSCoR), focused on quantitatively comparing three VI watersheds categorized as minimally impacted to heavily impacted. CDC and CES produced GIS maps and conducted field work to identify natural and altered drainage patterns, land-based activities that affect stormwater runoff, and the integrity of riparian vegetation.

#### Results

Coral reef researchers indicated that the quantification of the watershed data produced by CDC-CES is useful to them. Pilot study research resulted in projects to develop: (1) a land-sea transect study area in a pilot study watershed for the new UVI Master of Marine and Environmental Science program; (2) a guide for watershed managers funded by the Dept of Forestry and the V.I. Division of Environmental Protection; (3) a management plan for revitalizing targeted VI guts as urban recreational spaces funded by WRRI, involving community workshops and demonstration activities in two guts.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                      |
|---------|-------------------------------------|
| 112     | Watershed Protection and Management |

### Outcome #7

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 100                 | 2      |  |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

### What has been done

The effort to train youth for careers in ecotourism focuses on St. Croix. On St. Thomas, CES has supported ecotourism by working closely with the Nature Conservancy (TNC) and VI Ecotours. However, the high costs of maintaining trails and qualified tour guides made ecotourism ventures by TNC and VI Ecotours unsustainable on St. Thomas. Upon request, CES provided information about VI natural and cultural history to taxi drivers and individuals interested in leading nature tours in St. Thomas, St. John, and Water Island.

#### Results

Tour guides incorporated information provided by CES into their tours.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                    |
|---------|---|
| 134     | Outdoor Recreation                                |
| 123     | Management and Sustainability of Forest Resources |

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

### External factors which affected outcomes

• Government Regulations

# **Brief Explanation**

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

- 1. Evaluation Studies Planned
  - After Only (post program)
  - Before-After (before and after program)
  - During (during program)

# **Evaluation Results**

**Key Items of Evaluation** 

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### Program #4

# V(A). Planned Program (Summary)

# 1. Name of the Planned Program

**Urban Forestry** 

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

# 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area                                    |      | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|---|------|--------------------|-------------------|-------------------|
| 123        | Management and Sustainability of Forest Resources | 20%  |                    |                   |                   |
| 124        | Urban Forestry                                    | 70%  |                    |                   |                   |
| 125        | Agroforestry                                      | 10%  |                    |                   |                   |
|            | Total   | 100% |                    |                   |                   |

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Exter | nsion | Research |      |
|------------|-------|-------|----------|------|
|            | 1862  | 1890  | 1862     | 1890 |
| Plan       | 0.8   | 0.0   | 0.0      | 0.0  |
| Actual     | 0.8   | 0.0   | 0.0      | 0.0  |

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

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

# V(D). Planned Program (Activity)

# 1. Brief description of the Activity

Partnerships were established and strengthened with public, private agencies such as semi-autonomous government agencies, local and international municipal and excutive agencies along with primary and junior high school students. This was achieved through the use of publications, seminars, radio talk shows and exhibits as well as personal contacts.

# 2. Brief description of the target audience

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

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# V(E). Planned Program (Outputs)

# 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts<br>Adults<br>Target | Indirect Contacts<br>Adults<br>Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------------|---------------------------------------|------------------------------------|--------------------------------------|
| Plan | 850                                 | 5200                                  | 560                                | 1000                                 |
| 2007 | 141                                 | 5200                                  | 187                                | 600                                  |

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

# **Patent Applications Submitted**

Year Target

**Plan:** 0 2007: 0

#### **Patents listed**

# 3. Publications (Standard General Output Measure)

**Number of Peer Reviewed Publications** 

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

**Output Target** 

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# Output #1

### **Output Measure**

Number of educational classes in tree identification

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 3      | 1      |

# Output #2

### **Output Measure**

Number of workshops/demonstrations in tree pruning

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 3      | 1      |

### Output #3

#### **Output Measure**

Number of educational classes in tree care

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 3      | 1      |

### Output #4

### **Output Measure**

Number of one-on-one consultation with residents

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 100    | 70     |

### Output #5

### **Output Measure**

Number of public service announcements

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 0      |

#### Output #6

### **Output Measure**

Number of artlicles/publications on tree care and urban forest management

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 3      | 0      |

## Output #7

### **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 2      |

# Output #8

### **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 1      | 1     |

### Output #9

# **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 5      | 0      |

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# V(G). State Defined Outcomes

# V. State Defined Outcomes Table of Content

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

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# Outcome #1

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 300                 | 0      |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

# 4. Associated Knowledge Areas

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

### Outcome #2

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 600                 | 328    |

### 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Because trees appear to exist without much care, home owners, maintenance crews and others residents assume that they don't need attention. It isn't until a limb suddenly crashes to the ground or the tree suddenly falls over exposing decaying roots that most resident realize that trees need attention. Urban trees in particular need even more attention as they are in close proximity to pedestrians.

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#### What has been done

Lectures, workshops, and demonstrations have been the major avenues for the dissemination of tree care information. Junior and senior high students and home owners that visit the office and demonstration garden were given poster presentations and interactive question and answer sessions. Landscape crews from hotels, city municipalities, and private businesses along with homeowners participated in workshops designed to provide them with the rudiments of tree care and community tree management.

#### Results

A large majority of the students, and home owners had never had any formal or experiential educational training in tree care and management. Ninety-five (95) percent of the participants indicated that they had learned more about trees at the lectures and garden tours than at any other educational opportunity. There was a definite heightening of awareness and increase in knowledge amongst that group. Of the participating landscape crews, sixty-five (65) percent had some experiential education in tree care but the majority, eighty-five (85) percent, had never had any formal training in tree care and management. Crew members reported a definite increase in knowledge and a confirmation of some things learned by experience and to the contrary the repudiation of some word-of-mouth information they had received over the years. A small group of the homeowners have used their newly obtained knowledge to serve as watchdogs when there is tree pruning taking place in their community. We have had periodic calls from homeowners, and private landscape firms for consultations after being approached by a resident that has taken the training classes.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                    |
|---------|---|
| 123     | Management and Sustainability of Forest Resources |

### Outcome #3

#### 1. Outcome Measures

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

#### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 13     |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                                    |
|---------|---|
| 123     | Management and Sustainability of Forest Resources |

### Outcome #4

### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 0      |

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

Issue (Who cares and Why)

What has been done

Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area        |  |  |
|---------|-----------------------|--|--|
| 124     | <b>Urban Forestry</b> |  |  |

### Outcome #5

#### 1. Outcome Measures

Number of 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

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 10                  | 7      |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

As urban communities continue to grow and expand as the population increases, tree populations usually suffer as a result. Either through outright removal, severe pruning or damage due to construction, trees and tree parts are delivered to the landfill for disposal. The landfills are already overburdened and these organic materials can be recycled and/or reused in many ways and can generate economic opportunities for residents.

#### What has been done

Poster presentations were developed highlighting the potential uses and reuses of tree. Twenty-three (23) woodworkers and residents attended a marketing class for wood products. In an effort to utilize the skills and knowledge acquired, a public Expo was created whereby local woodworkers could both display wood art and provide demonstrations of how tree parts can be turned into art and furniture.

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### Results

Thirteen (13) individuals reported that they were able to use some of the skills learned in the marketing class to improve the quality of their displays and make some money. Approximately 2800-3000 residents witnessed the poster presentations and the hands-on demonstrations of recycling and reusing of felled trees through wood turning, wood carving and furniture making. The woodworkers have also organized themselves and are planning to become lobbyists for tree conservation, preservation and responsible recycling of felled trees.

### 4. Associated Knowledge Areas

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

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

### External factors which affected outcomes

• Government Regulations

**Brief Explanation** 

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

- 1. Evaluation Studies Planned
  - Retrospective (post program)
  - Before-After (before and after program)

**Evaluation Results** 

**Key Items of Evaluation** 

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### Program #5

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

### 1. Name of the Planned Program

**Urban Gardening** 

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

### 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area  | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|---|--------------------|--------------------|-------------------|-------------------|
| 205<br>403 | Plant Management Systems Waste Disposal, Recycling, and Reuse | 75%<br>25%         |                    |                   |                   |
|            | Total   | 100%               |                    |                   |                   |

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Exter | nsion | R    | esearch |
|------------|-------|-------|------|---------|
|            | 1862  | 1890  | 1862 | 1890    |
| Plan       | 1.1   | 0.0   | 0.0  | 0.0     |
| Actual     | 1.1   | 0.0   | 0.0  | 0.0     |

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

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

# V(D). Planned Program (Activity)

# 1. Brief description of the Activity

Provided resource materials, coducted field days, field demonstrations, fielded questions on radio talk shows, conducted demonstration-garden tours, and one-on-one counseling along with on-site visits to homes, businesses, and public institutions

#### 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

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# V(E). Planned Program (Outputs)

### 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts Adults Target | Indirect Contacts Adults Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Plan | 850                           | 5000                            | 560                                | 1000                                 |
| 2007 | 71                            | 5000                            | 312                                | 500                                  |

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

# **Patent Applications Submitted**

Year Target

**Plan:** 0 2007: 0

#### **Patents listed**

# 3. Publications (Standard General Output Measure)

**Number of Peer Reviewed Publications** 

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

**Output Target** 

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### Output #1

### **Output Measure**

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

Year Target Actual 2007 3 2

### Output #2

#### **Output Measure**

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

Year Target Actual 2007 3 2

#### Output #3

# **Output Measure**

Number of educational classes in the benefits of proper garden management

Year Target Actual 2007 3 3

### Output #4

### **Output Measure**

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

 Year
 Target
 Actual

 2007
 100
 150

#### Output #5

#### **Output Measure**

Number of public service announcements

Year Target Actual 2007 0 0

#### Output #6

### **Output Measure**

Number of articles/publications on urban gardening management

 Year
 Target
 Actual

 2007
 3
 1

### Output #7

### **Output Measure**

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

Year Target Actual 2007 2 2

#### Output #8

#### **Output Measure**

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

 Year
 Target
 Actual

 2007
 1
 0

#### Output #9

### **Output Measure**

Number of seminars on radio appearances/programs on urban gardening

Year Target Actual 2007 4 5

### Output #10

### **Output Measure**

Number of demonstration sites developed using urban gardening principles and practices

Year Target Actual 2007 1 1

### Output #11

#### **Output Measure**

Number of workshops and public and private entities establishing gardens

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| Year | Target | Actual |
|------|--------|--------|
| 2007 | 25     | 3      |

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# V(G). State Defined Outcomes

# V. State Defined Outcomes Table of Content

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

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### Outcome #1

#### 1. Outcome Measures

Number of 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

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 300                 | 318    |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Many adult residents have had some experience with gardening and landscaping at sometime in their life. Because of economic and some social changes the supermarket has become the primary source of fresh fruits and vegetables. Lifestyle management to include diet and stress reduction is the buzz phrase from doctors and health care professions. The video game generation of young people is facing obesity as a healthcare challenge. Many have never had any experience building a garden. Exposure to the benefits of gardening is just the first phase in a healthy lifestyle plan and gardening can be a component of that plan.

#### What has been done

Through a combination of lectures and practical onsite demonstrations residents including young people, were introduced to the benefits of gardening. Other means of information dissemination to residents were through direct telephone contact, office visits, and indirectly though radio appearances.

#### Results

Eighty-five (85) percent of the participants reported that they gained a greater awareness of the benefits that gardening provides to the individual. The other fifteen percent (15%) of the participants had already received some benefits from gardening and are planning to take advantage of the other benefits. Seventy (70) percent of the young persons polled indicated that they were better informed about gardening's benefits. However, fifty percent (50%) indicated that they weren't sure if they would actually do any gardening as an activity.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area           |
|---------|--------------------------|
| 205     | Plant Management Systems |

### Outcome #2

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 400                 | 318    |

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

#### Issue (Who cares and Why)

Traditional gardening and landscaping practices involved hours of manual labor. Watering and weeding consumed the majority of the time that home gardeners spent in cultivating. For the youth, this is the one of areas of gardening that can be a challenge. The introduction of new technologies and sustainable management practices has helped to reduce time spent in manually cultivating gardens and landscapes.

#### What has been done

Poster presentations, demonstration garden tours, and lectures were used to increase awareness of the technologies that exist to reduce labor and increase water use efficiency. Field demonstrations and on-site visits were also used to increase resident's knowledge of tried and proven cultural practices that can be applied in residential and commercial landscapes and gardens. A large portion of the population received their knowledge indirectly through radio interviews.

#### Results

Approximately eighty-five (85%) of resident reported having an increase in knowledge regarding the time and labor saving devices available to them. Ten percent of respondents had been exposed to some form of labor saving devices within the last 3-5 years. Most residents were not inclined to purchase some of the new technologies within 3-6 months after attending a workshop or demonstration. Initial start-up cost of supplies was a deterring factor. Ninety-five (95) percent of adults were more prepared to adopt practices that reduced weeding and increased water holding capacity within three (3) months after an educational opportunity. Among the youth that visited the demonstrations garden, ninety-nine (99) percent indicated that they had learned about labor saving technologies that they had never seen before. Approximately thirty-five (35) percent of the young people said that they would seek more information about the technologies that they had been made aware of. Some wanted to seek more information in order to advise relatives that are gardeners and landscapers.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area           |
|---------|--------------------------|
| 205     | Plant Management Systems |

### Outcome #3

### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 75                  | 0      |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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#### What has been done

#### Results

### 4. Associated Knowledge Areas

KA Code Knowledge Area

205 Plant Management Systems

#### Outcome #4

#### 1. Outcome Measures

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

#### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 85     |

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

### Issue (Who cares and Why)

Engaging young people in meaningful, non electronic activities is a challenge. If it doesn't use batteries or isn't computer animated, then it must be boring. However, young people that have an opportunity to develop a garden, usually describe it as a fun experience. Obesity statistics among young people paint a gloomy picture of a lack meaningful exercise and poor dietary habits. Gardening will help to provide some type of physical activities as well as exposure to the cultivation of fresh fruits and vegetables.

# What has been done

Two youth groups were given the opportunity to create container gardens. Each group was given a series of lectures in areas such as soil, transplanting, fertilizers, and selecting containers. Consumer Sciences staff provided them with information on the benefits of fresh fruits and vegetables in the diet along with exercise. They were also given some practical demonstrations on transplanting and fertilizing plants.

# Results

Approximately eighty-five young persons successfully grew at least one vegetable in a container. For approximately forty percent of the young people participating, this was their first experience in growing any thing. Fifty (50) percent of the youths were exposed to some type of gardening or landscaping from parents or grandparents. For many of the youths this was the first time that they had seen a vegetable growing naturally and not associated with a supermarket. Unfortunately, there are very few school garden clubs or neighborhood community gardens. Efforts will need to be made to encourage the creation of gardening activities in schools and in neighborhoods.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area           |
|---------|--------------------------|
| 205     | Plant Management Systems |

### Outcome #5

#### 1. Outcome Measures

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

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### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 0      |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

# 4. Associated Knowledge Areas

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

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

### External factors which affected outcomes

Government Regulations

**Brief Explanation** 

# $\mathbf{V}(\mathbf{I})$ . Planned Program (Evaluation Studies and Data Collection)

# 1. Evaluation Studies Planned

• Before-After (before and after program)

### **Evaluation Results**

{No Data Entered}

### **Key Items of Evaluation**

{No Data Entered}

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### Program #6

# V(A). Planned Program (Summary)

# 1. Name of the Planned Program

Water Quality

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

# 1. Program Knowledge Areas and Percentage

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

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 1.8       | 0.0  | 0.0      | 0.0  |
| Actual     | 1.8       | 0.0  | 0.0      | 0.0  |

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

| Extension           |                | Research       |                |
|---------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch          | Evans-Allen    |
| 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 |
| 71000               | 0              | 0              | 0              |

# V(D). Planned Program (Activity)

1. Brief description of the Activity

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Interest in the popular V.I. Home & Farm Water Quality Assessment (VI\*A\*Syst) program spread mostly by word-of-mouth. Throughout the year, VI\*A\*Syst presentations and workshops were regularly requested by schools, community groups, youth groups, churches, scouts, businesses, maintenance professionals, government agencies, and residents of the British Virgin Islands. These presentations, focused on transmitting information about water quality protection and least-toxic household products to the respective audiences so convincingly that many attendees indicated that they would stop using hazardous products. Locally oriented outreach materials were also requested and disseminated related to water conservation, drinking water protection, waste water disposal and best management practices for pollution prevention through the VI\*A\*Syst program. Linkages between lifestyle practices, watershed health and water quality were key outreach focuses of the VI\*A\*Syst program. Watershed awareness also was promoted through a grant entitled A Pilot Study to Integrate the Effects of Watershed Activity Patterns and Coastal Processes on Near-Shore Coral Reefs funded by VI EPSCoR. This study of the patterns of sediment delivery and septic system nutrient loading and the impacts on coastal water quality, conducted in partnership with the UVI Conservation Data Center and UVI Marine Science Faculty, has served as a prototype for subsequent land-sea studies by UVI students and other researchers. Study results have been presented to other researchers, policy-makers, students and the general public. This study also produced GIS maps that have been reproduced and distributed for use by faculty and students in UVI's natural resource management programs. Media outreach methods utilized by the WQ Program were PSAs, television video spots, and local talk shows (radio & TV). In addition, local newspaper reporters published information referring to water quality issues obtained through interviews with WQ program staff. 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 WQ team strengthened. The team collaborated in the design of a demonstration animal waste treatment facility to be constructed on a St. Croix farm. Progress was made in obtaining construction materials for the demonstration animal waste digester and facility. Additional collaboration with the EPA Region 2 liaison resulted in the development of a pollution.

### 2. Brief description of the target audience

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

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

#### 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts Adults Target | Indirect Contacts  Adults  Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------|-----------------------------------|------------------------------------|--------------------------------------|
| Plan | 200                           | 1000                              | 200                                | 300                                  |
| 2007 | 172                           | 800                               | 212                                | 280                                  |

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

#### **Patent Applications Submitted**

Year Target

**Plan:** 0 2007: 0

#### Patents listed

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

### **Number of Peer Reviewed Publications**

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

### **Output Target**

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### Output #1

### **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 2      | 0     |

### Output #2

### **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 4      | 3     |

#### Output #3

### **Output Measure**

One on one consultations with residents, government employees, students

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 150    | 38     |

### Output #4

### **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 2      |

### Output #5

### **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 6      | 8      |

### Output #6

### **Output Measure**

PSAs

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 0      | 0      |

### Output #7

# **Output Measure**

Fairs

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 2      |

#### Output #8

### **Output Measure**

TV/Media

| Year | Target | Actual |  |
|------|--------|--------|--|
| 2007 | 2      | 2      |  |

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# 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  |
| 2     | improved packaged sewage treatment systems or alternative wastewater treatment systems.   |
| 2     | Fifty (50) homeowners will request technical assistance with the evaluation of old septic systems; 20 homeowners will proactively pump their septic systems, and three (3) businesses will construct alternative wastewater treatment |
|       | systems based on successful prototypes recommended by CES.  |
| 3     | Educational materials, workshops, tours and other direct and indirect outreach methods will increase public   |
|       | knowledge of the characteristics and functions of aquatic ecosystems (guts, salt ponds, mangrove lagoons, bays  |
|       | and oceans) including their role within a watershed. Five (5) homeowners and/or natural resource managers will  |
|       | protect riparian and wetlands vegetation. Fifty (50) clients will become aware of the VI laws protecting riparian and wetlands vegetation.  |
| 4     | Requests for site visits and VI*A*Syst assessments and presentations will increase. 75 clients or more will each  |
|       | adopt at least one VI*A*Syst recommended practice such as the use of non-toxic household products, etc. Fifty   |
|       | (50) homeowners will improve cistern water quality by following CES recommendations.  |
| 5     | At least twenty (20) clients will implement effective stormwater, erosion and sediment control practices and  |
|       | xeriscaping. The VI Dept. of Public Works roadside maintenance crews (10) will improve their roadside clearing  |
|       | methods to prevent soil erosion and sediment runoff.  |
| 6     | Over 1000 VI youth will become aware of the vital connections between human activities and water quality, how   |
|       | land-based activities affect coastal water quality, why watershed protection is important to them and their   |
|       | well-being. Youth and volunteer involvement in water quality protection and resource conservation will increase.  |
| 7     | Information from watershed studies utilizing oceanographic and GIS technology will lead to specific   |
|       | recommendations for watershed residents and government agencies about how to reduce sediments and   |
|       | nutrients in stormwater runoff.   |

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# Outcome #1

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 15                  | 0      |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                      |
|---------|-------------------------------------|
| 133     | Pollution Prevention and Mitigation |

### Outcome #2

### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 12                  | 1      |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

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

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#### What has been done

DPNR referred Concordia Ecoresort, St. John, to CES for technical assistance regarding the retrofitting of a standard septic system with an alternative OSDS at the employees' residence. CES provided Concordia's manager with information about non-invasive native plants that could be planted in the OSDS trenches, as well as how to construct the facility so that the plants would survive during low usage times when few employees were in residence.

#### Results

Concordia Ecoresort installed the alternative OSDS. Reportedly, it is functioning adequately.

#### 4. Associated Knowledge Areas

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

### Outcome #3

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actua |
|------|---------------------|-------|
| 2007 | 10                  | 72    |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

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

### What has been done

CES distributed posters featuring NPS threats and VI laws that protect riparian areas and produced an interactive exhibit about native trees and their value in protecting water quality. A CES-CDC book featuring information about aquatic ecosystems and watersheds was widely distributed to educators, students, and the general public. Presentations were made to the community and students about the book, and it was also used by graduate students as a key reference. During seminars, field trips and a conference, presentations about aquatic systems were made.

#### Results

At least 50 individuals who viewed the CES interactive exhibit verbally indicated that it raised their awareness. Five coral reef researchers indicated that they benefited from the quantitative data from CDC-CES watershed research. Fifteen resource management and environmental law graduate students verbally indicated that CES presentations and the CDC-CES book made them more aware of the V.I. aquatic ecosystems and how human impacts are altering these systems. MBA converted CES posters about NPS threats and BMP's into durable signs for a permanent outdoor exhibit.

# 4. Associated Knowledge Areas

KA Code Knowledge Area

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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 | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 25                  | 10     |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Homeowners with cisterns. The main water supply for homeowners is from cisterns and they need to check cisterns periodically to maintain a clean, healthy and safe water system.

#### What has been done

Homeowners were informed through presentations and 'word of mouth' about alternative use of household products.

### Results

Seventeen individuals informed CES that they used alternative household products.

### 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. The VI Dept. of Public Works roadside maintenance crews (10) will improve their roadside clearing methods to prevent soil erosion and sediment runoff.

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 6                   | 7      |

### 3c. Qualitative Outcome or Impact Statement

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### 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

Architects and engineers working on construction projects were given assistance with preserving and restoring native habitats and native plant selection for low-maintenance landscaping and erosion control. CES provided the St. Croix Foundation with training in roadside stabilization road maintenance practices and recommendations for low-maintenance, non-invasive plants to install on roadside slopes. CES introduced Magens Bay management to landscape maintenance BMP's (tree preservation, tree planting, and mulching) near coastal areas.

#### Results

Magens Bay management has implemented BMP's on about 13 acres of land near coastal areas. CES has provided one of the construction projects with site-appropriate native trees from the VI Dept. of Agriculture that are being installed on the construction site in erosion prone areas.

### 4. Associated Knowledge Areas

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

#### Outcome #6

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 200                 | 73     |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

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

### What has been done

CES presented information about the connections between human activities and water quality to over 60 students employed by the VI Waste Management Authority to do roadside maintenance during the summer.

#### Results

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According to the director of the VI Waste Management Authority summer program, information that CES presented to student workers about the affects of human land-use activities on water quality would be incorporated into the overall work plan for the summer program.

#### 4. Associated Knowledge Areas

| KA Code    | Knowledge Area                          |
|------------|---|
| 111        | Conservation and Efficient Use of Water |
| 112        | Watershed Protection and Management     |
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### Outcome #7

#### 1. Outcome Measures

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

#### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 1                   | 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

The CDC-CES research findings utilizing GIS technology to detect potential land-based sources of sediments and nutrients was shared with the Director of the Yale School of Forestry and Environmental Studies and Yale Environmental Management graduate students during seminars and field trips.

#### Results

During phone consultations and a joint seminar presented by Yale and UVI to VI Department of Planning and Natural Resources employees, 17 government officials were made aware of the sources of NPS pollution within VI watersheds. During the seminar some personnel agreed to mitigate NPS threats. Immediately after the seminar, a DPNR Permits Officer immediately visited a construction site that was shown in the seminar to be violating government erosion control regulations.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                      |
|---------|-------------------------------------|
| 112     | Watershed Protection and Management |

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

### External factors which affected outcomes

Government Regulations

### **Brief Explanation**

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

### 1. Evaluation Studies Planned

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

### **Evaluation Results**

{No Data Entered}

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# **Key Items of Evaluation**

{No Data Entered}

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### Program #7

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

### 1. Name of the Planned Program

Computer Training and Technology Program

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

### 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area                                     | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|--|--------------------|--------------------|-------------------|-------------------|
| 903        | Communication, Education, and Information Delivery | 100%               |                    |                   |                   |
|            | Total  | 100%               |                    |                   |                   |

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

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

| Year: 2007 | Exter | nsion | Research |      |
|------------|-------|-------|----------|------|
|            | 1862  | 1890  | 1862     | 1890 |
| Plan       | 1.2   | 0.0   | 0.0      | 0.0  |
| Actual     | 1.2   | 0.0   | 0.0      | 0.0  |

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

| Extension                          |                | Research       |                |
|------------------------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c 1890 Extension |                | Hatch          | Evans-Allen    |
| 60000                              | 0              | 0              | 0              |
| 1862 Matching                      | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 60000                              | 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 an eight-week Basic Computer Training Courses on using Microsoft Windows, Microsoft Word, E-mail, and how to 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.

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# V(E). Planned Program (Outputs)

### 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts Adults Target | Indirect Contacts Adults Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Plan | 80                            | 3000                            | 60                                 | 2500                                 |
| 2007 | 78                            | 310                             | 93                                 | 280                                  |

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

### **Patent Applications Submitted**

Year Target Plan: 0

2007: 0

#### **Patents listed**

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

### **Number of Peer Reviewed Publications**

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

## V(F). State Defined Outputs

# **Output Target**

### Output #1

### **Output Measure**

Conduct two days workshops of Microsoft E-mail

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 6      | 4      |

# Output #2

### **Output Measure**

Conduct two days workshops of Microsoft Word

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 6      | 8      |

# Output #3

#### **Output Measure**

Conduct two days workshops of Microsoft Windows

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 6      | 4     |

### Output #4

### **Output Measure**

Conduct two days workshops of Microsoft Internet

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 6      | 5      |

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# 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%.     |

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### Outcome #1

### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 80                  | 61     |  |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area   | 3 |
|---------|------------------|---|
|         | Tallo Mioago Alo | • |

903 Communication, Education, and Information Delivery

#### Outcome #2

### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 120                 | 88     |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

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### 4. Associated Knowledge Areas

KA Code Knowledge Area

903 Communication, Education, and Information Delivery

### Outcome #3

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 65     |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

#### 4. Associated Knowledge Areas

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

### Outcome #4

### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year Quantitative Target |     | Actual |
|--------------------------|-----|--------|
| 2007                     | 120 | 82     |

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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### What has been done

Results

### 4. Associated Knowledge Areas

KA Code Knowledge Area

903 Communication, Education, and Information Delivery

# $V(\mbox{H})$ . Planned Program (External Factors)

### External factors which affected outcomes

Government Regulations

**Brief Explanation** 

# $\mathbf{V}(\mathbf{I})$ . Planned Program (Evaluation Studies and Data Collection)

### 1. Evaluation Studies Planned

Before-After (before and after program)

### **Evaluation Results**

{No Data Entered}

# **Key Items of Evaluation**

{No Data Entered}

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### Program #8

# V(A). Planned Program (Summary)

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

# V(C). Planned Program (Inputs)

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

| Year: 2007 | Extension |      | Extension Research |      |
|------------|-----------|------|--------------------|------|
|            | 1862      | 1890 | 1862               | 1890 |
| Plan       | 2.0       | 0.0  | 0.0                | 0.0  |
| Actual     | 2.0       | 0.0  | 0.0                | 0.0  |

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

| Exter               | nsion          | Research       |                |
|---------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch          | Evans-Allen    |
| 80342               | 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

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- Facilitated formation of three (3) 4-H clubs resulting in two clubs receiving their charter.
- Provided leadership and support for one (1) special interest group focusing on our cultural heritage.
- Provided orientation, training and professional development for teen and adult volunteers, partners, 4-H/Family and Consumer Sciences/CYFAR staff, and CES personnel.
- Twenty adult and teen leaders (100%) demonstrated successful leadership strategies as they successfully organized and led three (3) 4-H clubs, one (1) special interest group and seven (7) 4-H projects enrolling 216 4-H members in non-formal educational programs and activities focusing on biotechnology, community service, cultural arts, foods and nutrition, gardening, health, and small livestock.

# 2. Brief description of the target audience

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

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

#### 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

|      | Direct Contacts<br>Adults | Indirect Contacts<br>Adults | Direct Contacts<br>Youth | Indirect Contacts<br>Youth |
|------|---------------------------|-----------------------------|--------------------------|----------------------------|
| Year | Target                    | Target                      | Target                   | Target                     |
| Plan | 250                       | 2500                        | 150                      | 1500                       |
| 2007 | 275                       | 1565                        | 150                      | 500                        |

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

### **Patent Applications Submitted**

**Year Target Plan:** 0
2007: 0

### Patents listed

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

#### **Number of Peer Reviewed Publications**

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

### **Output Target**

# Output #1

## **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 5      | 1     |

### Output #2

### **Output Measure**

Number of workshops, presentations and demonstrations conducted

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 25     | 31    |

### Output #3

### **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 35     | 26    |

### Output #4

### **Output Measure**

Number of partnerships, collaborations or cooperative agreements formed

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 5      | 1     |

# Output #5

### **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 15     | 2     |

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# 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:  |

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# Outcome #1

### 1. Outcome Measures

Number of organized 4-H clubs formed

#### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 3      |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

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

#### What has been done

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

#### Results

There is one school-based 4-H club and two community based 4-H clubs on St. Croix.

#### 4. Associated Knowledge Areas

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

### Outcome #2

### 1. Outcome Measures

Number of special interest or short-term groups formed

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 1      |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

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

#### What has been done

Based on interest and a desire to become affiliated with 4-H, special interest groups have been the strategy of choice for some of our partners.

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## Results

On St. Thomas, 39 young people formed the 4-H Carnival Troupe and won 2nd place. On St. Croix, one of our school partners enrolled 28 5th - 8th graders in the 4-H Robotics Special Interest Group.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area |
|---------|----------------|
|---------|----------------|

802 Human Development and Family Well-Being

#### Outcome #3

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 1                   | 0      |

### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

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

#### What has been done

Efforts are ongoing to collect policy and procedural manuals from other 4-H programs.

#### Results

No results to report.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area  |
|---------|---|
| 802     | Human Development and Family Well-Being   |
| 803     | Sociological and Technological Change Affecting Individuals, Families and Communities |

## Outcome #4

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

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## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 50                  | 50     |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

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

### What has been done

Volunteer leaders receive training on leadership styles, strategies and skills. In turn, they are expected to model and foster leadership in their clubs and programs.

#### Results

A total of 20 youth and adult volunteers provided leadership for three 4-H clubs and one special interest group on St. Croix and one special interest group on St. Thomas; with their leadership, there are a total of eight 4-H projects offered.

## 4. Associated Knowledge Areas

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

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

### External factors which affected outcomes

• Government Regulations

## **Brief Explanation**

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

## 1. Evaluation Studies Planned

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

#### **Evaluation Results**

## **Key Items of Evaluation**

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## Program #9

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

#### 1. Name of the Planned Program

A Healthy, Well-Nourished Population

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

## 1. Program Knowledge Areas and Percentage

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

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

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

| Year: 2007 | Exter | nsion | R    | esearch |
|------------|-------|-------|------|---------|
|            | 1862  | 1890  | 1862 | 1890    |
| Plan       | 1.0   | 0.0   | 0.0  | 0.0     |
| Actual     | 1.0   | 0.0   | 0.0  | 0.0     |

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

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

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

## 1. Brief description of the Activity

Developed culturally sensitive nutrition and health education products and resources that were made available to professionals, students, and the public. A fruit and vegetable nutrient composition poster was developed and made available for distribution – it included the vitamin, mineral, and fiber content of local fruits and vegetables. 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.

## 2. Brief description of the target audience

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

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

## 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts Adults Target | Indirect Contacts Adults Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Plan | 250                           | 5000                            | 300                                | 5000                                 |
| 2007 | 1495                          | 22500                           | 580                                | 250                                  |

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

## **Patent Applications Submitted**

Year Target Plan: 0
2007: 0

#### **Patents listed**

## 3. Publications (Standard General Output Measure)

| Number of Pe | er Reviewed Publicatio | ns       |       |
|--------------|------------------------|----------|-------|
|              | Extension              | Research | Total |
| Plan         |                        |          |       |
| 2007         | 0                      | 0        | 0     |

## V(F). State Defined Outputs

## **Output Target**

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## Output #1

## **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 15     | 21    |

## Output #2

#### **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 4      |

## Output #3

### **Output Measure**

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

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 4      | 8     |

## Output #4

## **Output Measure**

• d. Number of web sites developed and maintained.

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 1      | 0     |

## Output #5

## **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 1      | 1      |

## Output #6

## **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 5      | 1      |

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## 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).               |

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## Outcome #1

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 50                  | 0      |

### 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 are high in the territory. It is important to increase the community's access to culturally sensitive nutrition education materials to help reduce the mortality and morbidity rates in the U.S. Virgin Islands.

#### What has been done

A tropical fruit poster was produced entitled 'Virgin Islands Tropical Fruits and Their Nutritional Values'. The fruit poster features fourteen local fruits and their nutritional values. It utilizes a five-star rating scale, which lists the quantity of potassium, vitamin C, and fiber content of each tropical fruit.

#### Results

The fruit poster was released to the public on September 27, 2007. Over 300 posters were distributed by the end of the fiscal year (September 30, 2007). More information regarding the number of individuals who have indicated benefits as a result of the poster will be available at the end of the 2008 fiscal year.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                   |
|---------|----------------------------------|
| 703     | Nutrition Education and Behavior |

### Outcome #2

### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 55                  | 50     |

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

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

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#### What has been done

Six to twelve weeks nutrition education classes have been conducted in order to meet this goal. Primarily women with young children attended the classes.

#### Results

Fifty percent of the participants had a positive change at exit from the program in adopting at least one healthy lifestyle practice. These practices included increasing consumption in the Fruit group, Vegetable group, Milk groups and Grain group.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |  |
|---------|-------------------|--|
| 724     | Healthy Lifestyle |  |

### Outcome #3

#### 1. Outcome Measures

Number of school age children learning basic nutrition information.

### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 300                 | 221    |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

To have a healthy community you need healthy children. As a result, special emphasis has been placed on increasing nutrition education among school-aged children.

#### What has been done

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

## Results

Summer camp participants were administered a pre and post test to determine change in knowledge regarding basic nutrition information. Fifty-seven percent of the participants were able to answer the basic nutrition questions prior the first lesson, however by the end of the 6-8 week series seventy percent of the participants answered the questions correctly.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                   |
|---------|----------------------------------|
| 703     | Nutrition Education and Behavior |

## Outcome #4

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

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## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 45                  | 0      |

## 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 724     | Healthy Lifestyle |

## Outcome #5

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 0      |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Will reduce morbidity and mortality rate in general public.

#### What has been done

Collaborated with local Human Services Department to conduct three workshops on disease prevention. Video made.

#### Results

Participants expressed increased awareness of importance of proper food intake, physical fitness and disease prev.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                   |
|---------|----------------------------------|
| 703     | Nutrition Education and Behavior |

## Outcome #6

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## 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 25                  | 0      |

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

Issue (Who cares and Why)

#### What has been done

No programs were conducted in this fiscal year to meet this objective.

Results

## 4. Associated Knowledge Areas

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

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

#### External factors which affected outcomes

Government Regulations

**Brief Explanation** 

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

## 1. Evaluation Studies Planned

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

## **Evaluation Results**

{No Data Entered}

## **Key Items of Evaluation**

{No Data Entered}

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## Program #10

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

## 1. Name of the Planned Program

**Basic Food Safety Education** 

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

## 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area   | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|--|--------------------|--------------------|-------------------|-------------------|
| 703<br>712 | Nutrition Education and Behavior Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins | 65%<br>25%         |                    |                   |                   |
| 724        | Healthy Lifestyle  | 10%                |                    |                   |                   |
|            | Total  | 100%               |                    |                   |                   |

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

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

| Year: 2007 | Exter | nsion | R    | esearch |
|------------|-------|-------|------|---------|
|            | 1862  | 1890  | 1862 | 1890    |
| Plan       | 0.5   | 0.0   | 0.0  | 0.0     |
| Actual     | 0.5   | 0.0   | 0.0  | 0.0     |

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

| Extension           |                | Research       |                |
|---------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch          | Evans-Allen    |
| 25000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 25000               | 0              | 0              | 0              |
| 1862 All Other      | 1890 All Other | 1862 All Other | 1890 All Other |
| 100000              | 0              | 0              | 0              |

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

1. Brief description of the Activity

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- · 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.

### 2. Brief description of the target audience

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

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

## 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

|      | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts<br>Youth | Indirect Contacts<br>Youth |
|------|------------------------|--------------------------|--------------------------|----------------------------|
| Year | Target                 | Target                   | Target                   | Target                     |
| Plan | 50                     | 5000                     | 150                      | 5000                       |
| 2007 | 97                     | 2000                     | 464                      | 2000                       |

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

## **Patent Applications Submitted**

Year Target Plan: 0

2007: 0

#### Patents listed

## 3. Publications (Standard General Output Measure)

| Number of Peer Reviewed Publications |
|--------------------------------------|
|--------------------------------------|

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

## V(F). State Defined Outputs

## **Output Target**

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## Output #1

## **Output Measure**

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

 Year
 Target
 Actual

 2007
 10
 6

## Output #2

### **Output Measure**

Number of volunteers recruited and trained to deliver food safety program

Year Target Actual 2007 2 0

## Output #3

### **Output Measure**

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

Year Target Actual 2007 4 3

## Output #4

## **Output Measure**

Number of web sites developed and maintained

 Year
 Target
 Actual

 2007
 1
 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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 2      |

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## 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) |

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## Outcome #1

#### 1. Outcome Measures

Number of adults learning basic food safety information

#### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 50                  | 32     |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Although the incidence of food borne illness is not well documented in the Virgin Islands, the territory has many risk factors for food borne illness outbreaks. These risks include the tropical climate; unpredictable power outages; and inappropriate home storage, purchasing, and preparation practices. Therefore, food safety education programs are needed to decrease the likelihood of food borne illness outbreaks becoming a major health problem in the territory.

#### What has been done

Basic food safety information has been disseminated through lectures, classes, and demonstrations. Low income individuals enrolled in EFNEP were educated about the importance of proper personal hygiene, food storage, food preparation, and food handling to prevent food borne illnesses. In addition, during the holiday season educators conducted lectures and demonstrations to increase the publics awareness of the proper methods of thawing frozen turkey and the importance of using a meat thermometer to check for doneness.

#### Results

A large majority of the participants were able to correctly state the proper methods of thawing a frozen turkey post delivery of the information.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                   |
|---------|----------------------------------|
| 703     | Nutrition Education and Behavior |

## Outcome #2

### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 55                  | 0      |

## 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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In order to help prevent food borne illness outbreaks, individuals 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 adults through a series of lessons over 12 weeks. In addition, basic food safety information was shared at fair-type settings.

#### Results

No data is available at this time.

### 4. Associated Knowledge Areas

KA Code Knowledge Area

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 information

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 150                 | 342    |  |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

School age children are highly susceptible to food borne illness. To help keep children safe it is important that they learn basic food safety information such as the importance of washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly, and cooking food to proper temperatures.

#### 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. In addition, basic food safety information was shared at fair-type settings. Children were given an opportunity to learn basic food safety information by playing computer games that promoted proper personal hygiene, food storage, food preparation, and food handling to prevent food borne illnesses.

#### Results

Summer camp participants were administered a pre and post test to determine change in knowledge regarding basic food safety information. Sixty-four percent of the participants were able to answer the food safety questions prior the first lesson however by the end of the 6-8 week series eighty-six percent of the participants answered the questions correctly. Eighty percent of the participants who played the food safety computer game received two or more queries wrong the first time they played the game. However, after a brief explanation about when hands should be washed the participants got one or less queries wrong when they played the game for a second time.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                   |
|---------|----------------------------------|
| 703     | Nutrition Education and Behavior |

## Outcome #4

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#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 55                  | 0      |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

In order to help prevent food borne illness outbreaks, youth enrolled in EFNEP and those attending food safety lectures and/or demonstrations need to adopt and maintain at least one food safety practice such as washing hands and surfaces often, avoiding cross-contamination, refrigerating food promptly, and cooking food at proper temperatures.

#### What has been done

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

#### Results

No data is available at this time.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |  |  |
|---------|-------------------|--|--|
| 724     | Healthy Lifestyle |  |  |

## Outcome #5

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 36     |

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

In order to help prevent food borne illness outbreaks, 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.

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#### What has been done

Basic food safety information was disseminated through a series of 6-12 week lessons.

#### Results

Awareness among EFNEP participants about food safety issues related to personal hygiene, food storage, food preparation, and food handling was increased among adults and youth who attended the 6-12 week series of lessons.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area |
|---------|----------------|
|---------|----------------|

712 Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

### Outcome #6

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 100                 | 0      |  |

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

The territory of the Virgin Islands 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. Therefore, food safety education programs are needed to increase participants' awareness of the food safety issues that may increase their risk of getting a food borne illness.

#### What has been done

No data is available at this time.

#### Results

No data is available at this time.

## 4. Associated Knowledge Areas

KA Code Knowledge Area

703 Nutrition Education and Behavior

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

#### External factors which affected outcomes

Government Regulations

### **Brief Explanation**

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

### 1. Evaluation Studies Planned

•

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## **Evaluation Results**

**Key Items of Evaluation** 

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## Program #11

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

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

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

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

| <b>Year</b> : 2007 | Exter | nsion | R    | esearch |
|--------------------|-------|-------|------|---------|
|                    | 1862  | 1890  | 1862 | 1890    |
| Plan               | 2.0   | 0.0   | 0.0  | 0.0     |
| Actual             | 2.0   | 0.0   | 0.0  | 0.0     |

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

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

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- Conducted short courses and set up volunteer recruitment booth at World Food Day, St. Thomas/St. John and St.
   Croix Agriculture and Food Fairs.
- Provided orientation, training and professional development for partners, 4-H/Family and Consumer Sciences/CYFAR staff.
  - Utilized multi-media outlets to promote FCS programs designed to attract potential clientele.
- Conducted workshops and short courses that helped low-income, at-risk audiences build knowledge, skills and attitudes that 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.

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

### 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

|      | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target                 | Target                   | Target                | Target                  |
| Plan | 100                    | 2500                     | 25                    | 750                     |
| 2007 | 70                     | 2600                     | 20                    | 500                     |

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

## **Patent Applications Submitted**

Year Target Plan: 0

2007: 0

### **Patents listed**

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## 3. Publications (Standard General Output Measure)

## **Number of Peer Reviewed Publications**

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

## V(F). State Defined Outputs

## **Output Target**

## Output #1

## **Output Measure**

Number of short courses conducted

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 5      | 3      |

## Output #2

## **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 25     | 20     |

## Output #3

## **Output Measure**

Number of special interest workshops conducted

| Year | Target | Actua |
|------|--------|-------|
| 2007 | 2      | 2     |

## Output #4

## **Output Measure**

• Number of youth, volunteers, staff and partners trained

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 120    | 100    |

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## 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 appliqués, 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   |
| 8     | development, personal finances, women's health and wellness issues, leadership and volunteerism  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, 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,   |
| 44    | develop a living will and explore the benefits of investing  Through "Wemon at the Crearcade", participants will learn about health issues impacting wemon, complete  |
| 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   |

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## 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 Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 60                  | 50     |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

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

#### What has been done

Provided workshops and short courses, summer session.

#### Results

Participants have expressed an interest in having more classes; some have increased income from skills.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                            |
|---------|---|
| 801     | Individual and Family Resource Management |

## Outcome #2

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 0                   | 0      |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Many individuals had not used a sewing machine before the classes.

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#### What has been done

Adults and youth learned how to make wearable apparel and home craft items.

#### Results

Participants have requested additional classes focusing on more difficult items.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

#### Outcome #3

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 200                 | 75     |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Community participants who enrolled in the beginner's class moved to the advance level.

## What has been done

Classes have been offered as planned.

## Results

All of the enrolled participants achieved their individual goals to complete an item.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                            |
|---------|---|
| 801     | Individual and Family Resource Management |

## 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 appliqués, use of adhesives, creativity and layout, project finishing, and glossary of terms

## 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 30                  | 20     |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Participants made items to enhance their home decorating skills, gift giving items and income making potential.

### What has been done

Participants completed required items.

#### Results

Participants completed items and requested further information and classes.

## 4. Associated Knowledge Areas

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

#### Outcome #5

#### 1. Outcome Measures

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

#### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 50     |

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Entire community benefits from recyclable items being used in a myriad of ways to diminish waste.

### What has been done

Participants have learned how to recycle materials to make several items which can be used in the home.

## Results

Participants are eager to learn more about recyclable materials.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |  |
|---------|-------------------|--|
| 806     | Youth Development |  |

## Outcome #6

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#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 250                 | 200    |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Entire community benefits from low income residents increasing their income.

#### What has been done

At-risk participants have been given training and information to acquire skills to increase their income.

#### Results

At-risk participants have acquired varied skills to increase their income.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                            |
|---------|---|
| 801     | Individual and Family Resource Management |

#### Outcome #7

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 45                  | 30     |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Entire community benefits from a better prepared workforce.

### What has been done

At-risk adults have been given courses on personal development and workforce preparedness.

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#### Results

Participants have increased their ability to write resumes, increase interview skills and develop confidence.

#### 4. Associated Knowledge Areas

KA Code Knowledge Area

802 Human Development and Family Well-Being

#### Outcome #8

## 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 45                  | 30     |

### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

At-risk community members increase their ability to secure employment.

#### What has been done

Workshops and presentations have been offered.

#### Results

Participants have more confidence in their ability to secure employment based on exit measures.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                          |
|---------|---|
| 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

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#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |  |
|------|---------------------|--------|--|--|
| 2007 | 45                  | 30     |  |  |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

At-risk residents increase their potential for employment.

#### What has been done

Workshops and presentations offered to better prepare residents for employment.

#### Results

All participants completed requirements to prepare for increased chance at self and other employment.

## 4. Associated Knowledge Areas

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

### Outcome #10

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 30                  | 25     |  |

### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

At-risk participants desire to better understand personal finances.

### What has been done

Presentations focused on budgeting, checking and investing.

## Results

Several residents started a checking account and expressed an interest in advanced information.

### 4. Associated Knowledge Areas

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

## Outcome #11

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## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 45                  | 30     |

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Nutrition related diseases are prominent in the general community.

#### What has been done

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

#### Results

Participants expressed an interest in increasing their knowledge of nutrition in general.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                            |
|---------|---|
| 801     | Individual and Family Resource Management |

## Outcome #12

## 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |  |
|------|---------------------|--------|--|--|
| 2007 | 20                  | 8      |  |  |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Entire community benefits from leadership development skills.

## What has been done

Young women have been exposed to the elements of good leadership skills and volunteerism.

### Results

Several continue to volunteer in various CES programs.

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## 4. Associated Knowledge Areas

KA Code Knowledge Area

802 Human Development and Family Well-Being

## Outcome #13

#### 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 45                  | 35     |  |

### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Increased employment opportunities benefit the entire community.

#### What has been done

Residents have begun to experience more confidence in job search especially utilizing computer skills.

## Results

Participants have increased their efforts to search for employment.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                            |
|---------|---|
| 801     | Individual and Family Resource Management |

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

## External factors which affected outcomes

Government Regulations

## **Brief Explanation**

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

### 1. Evaluation Studies Planned

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

## **Evaluation Results**

Pre-post data instruments are being revised. Anecdotal results are highly favorable.

## **Key Items of Evaluation**

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Focus will be placed on pre/post measures, follow-up interviews and informal methods of data collection.

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## Program #12

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

1. Name of the Planned Program

4-H Summer Program

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

## 1. Program Knowledge Areas and Percentage

| KA<br>Code | Knowledge Area  | %1862<br>Extension | %1890<br>Extension | %1862<br>Research | %1890<br>Research |
|------------|---|--------------------|--------------------|-------------------|-------------------|
| 608        | Community Resource Planning and Development   | 5%                 |                    |                   |                   |
| 724        | Healthy Lifestyle   | 5%                 |                    |                   |                   |
| 803        | Sociological and Technological Change Affecting Individuals, Families and Communities | 5%                 |                    |                   |                   |
| 806        | Youth Development   | 85%                |                    |                   |                   |
|            | Total   | 100%               |                    |                   |                   |

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

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

| Year: 2007 | Exter | nsion | ion Research |      |
|------------|-------|-------|--------------|------|
|            | 1862  | 1890  | 1862         | 1890 |
| Plan       | 2.0   | 0.0   | 0.0          | 0.0  |
| Actual     | 2.0   | 0.0   | 0.0          | 0.0  |

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

| Exter                              | nsion          | Research       |                |
|------------------------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c 1890 Extension |                | Hatch          | Evans-Allen    |
| 80000                              | 0              | 0              | 0              |
| 1862 Matching                      | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 150000                             | 0              | 0              | 0              |
| 1862 All Other                     | 1890 All Other | 1862 All Other | 1890 All Other |
| 20000                              | 0              | 0              | 0              |

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

1. Brief description of the Activity

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- Conducted six-week day camp enrolling 217 youth, and employing 38 high school and college students.
- In addition to Cloverbuds, Cultural Heritage, Agriculture, Science and Entrepreneurship, provided basic computer literacy labs for 165 youth on St. Croix
  - Offered Mini-Society® to all campers; 100% created at least one product or service for Market Day.
- Provided every participant with Healthy Lifestyles special resulting in a 21% increase in those who reported eating breakfast daily; 80% reported they watched less television and increased playtime; and 100% indicating that they would enroll again
  - Fifty youth learned how to plant seeds and transplant seedlings effectively.
- All summer staff received training on teamwork, leadership, working with multi-age groups and experiential learning strategies.
- 100% participated in Closing Program and exhibition by demonstrating what they learned, displaying their project work or developing an educational skit or play.
  - Program featured in CSREES/USDA Partners Video Magazine #18.

## 2. Brief description of the target audience

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

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

## 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts  Adults  Target | Indirect Contacts  Adults  Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|
| Plan | 200                             | 2500                              | 350                                | 5000                                 |
| 2007 | 285                             | 3558                              | 768                                | 6170                                 |

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

## **Patent Applications Submitted**

Year Target Plan: 0
2007: 0

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## **Patents listed**

# 3. Publications (Standard General Output Measure)

## **Number of Peer Reviewed Publications**

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

## V(F). State Defined Outputs

## **Output Target**

## Output #1

## **Output Measure**

Number of digital newsletters promulgated

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 5      | 10     |

## Output #2

## **Output Measure**

Number of workshops, presentations and demonstrations facilitated or conducted

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 25     | 75     |

## Output #3

## **Output Measure**

Number of parents attending workshop(s)

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 30     | 121    |

## Output #4

## **Output Measure**

Number of teachers and students employed

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 30     | 64     |

## Output #5

## **Output Measure**

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

| Year | Target | Actual |
|------|--------|--------|
| 2007 | 2      | 5      |

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## 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 youth reporting an increased decision making skills reflected core character values                    |
| 8     | Percentage of employees reporting successful use of counselor training and experience in future employment endeavors |
| 9     | Number of youth demonstrating knowledge gained, skills learned, positive attitudes                                   |

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# Outcome #1

# 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 300                 | 217    |

## 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

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

#### What has been done

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

#### Results

Our summer program enrolled 165 youth, ages 5-14 on St. Croix, and 62 youth, ages 5-12 on St. Thomas/St. John.

# 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |  |
|---------|-------------------|--|
| 806     | Youth Development |  |

# Outcome #2

#### 1. Outcome Measures

Number of youth learning basic computer competencies

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 150                 | 165    |

# 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Basic computer skills are a necessity in the 21st century. Building computer competencies helps our young people become more competent and well-prepared contributors to the world in which they find themselves.

#### What has been done

Computer technology is provided as a special to all participants enrolled in our summer programs.

### Results

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Our computer labs assisted in promulgation of ten weekly newsletters; all youth learn basic Internet and email skills, net netiquette, and word processing. Older youth were introduced to Excel, developed Power Point presentations and launched personal web pages.

#### 4. Associated Knowledge Areas

KA Code Knowledge Area

803 Sociological and Technological Change Affecting Individuals, Families and Communities

#### Outcome #3

#### 1. Outcome Measures

Number of youth building entrepreneurship skills

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 300                 | 217    |

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

#### Issue (Who cares and Why)

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

### What has been done

Mini-Society(r), an experiential entrepreneurship program of the Kaufman Foundation, is offered to all participants.

#### Results

100% of youth enrolled created at least one product or service to be sold during program's Market Day. In addition, they experienced supply and demand, created their own community, flag and money, served in a variety of leadership positions in their community and developed other entrepreneurship skills, knowledge and attitudes.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                              |
|---------|---|
| 608     | Community Resource Planning and Development |

#### Outcome #4

### 1. Outcome Measures

Percentage of youth adopting healthy lifestyles strategies

# 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 80                  | 217    |

# 3c. Qualitative Outcome or Impact Statement

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## Issue (Who cares and Why)

4-H recognizes the strong correlation between healthy, happy kids and their sense of self-worth and success.

#### What has been done

Through a Healthy Lifestyles grant, all participants took part in healthy lifestyle session twice per week for six weeks. Basic foods and nutrition and food safety knowledge was imparted via the EFNEP program.

#### Results

The number of children eating breakfast increased by 21%; over 80% reported that they watched less television and spent more time playing outside; and 100% indicated that they would enroll in the Healthy Lifestyles program again.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 724     | Healthy Lifestyle |

#### Outcome #5

#### 1. Outcome Measures

Percentage of participants constructing container or small gardens

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 25                  | 50     |

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

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

#### What has been done

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

#### Results

100% of youth demonstrated successfully planted over 400 vegetable seeds resulting in each person taking home four seedlings to begin their own home garden. At least five individuals indicated that they had transplanted their seedlings.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

## Outcome #6

## 1. Outcome Measures

Percentage of youth demonstrating leadership and life skills

#### 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 75                  | 100    |

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

#### Issue (Who cares and Why)

Developing life skills is the central focus of all our 4-H programs as we endeavor to help young people become caring, contributing and conscientious members of their communities.

#### What has been done

All summer program staff and volunteers were trained to incorporate life skill development through experiential learning in their summer programs.

#### Results

All youth enrolled had the opportunity to display, demonstrate or otherwise showcase what they learned during Parents' Day, Open House and Closing Program activities.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

#### Outcome #7

#### 1. Outcome Measures

Percentage of youth reporting an increased decision making skills reflected core character values

#### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 75                  | 50     |

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

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

#### What has been done

Throughout the summer program, guest speakers talked to participants about refusal skills, conflict resolution strategies, and shared valuable information so that our young people are equipped with the knowledge, skills and attitudes needed to make sound decisions.

# Results

At least three youth used conflict resolution strategies learned in camp to defuse a potentially volatile situation on campus. Positive feedback was received by all guest speakers who took part.

### 4. Associated Knowledge Areas

KA Code Knowledge Area

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806

Youth Development

# Outcome #8

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 50                  | 50     |

### 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Employment in our summer program should provide new skills and opportunities that allow employees to learn and grow personally and professionally.

#### What has been done

All counselors take part in an orientation and training program designed to prepare them for their experience as a counselor.

#### Results

At least two counselors reported that their 4-H experience helped prepare them for the classroom; one counselor is repeatedly called upon to conduct workshops based on her 4-H experience.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

# Outcome #9

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 300                 | 217    |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Involvement in our summer program continues to provide young people with an opportunity to learn and grow in a safe nurturing environment for six weeks during the summer.

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## What has been done

There are several times during the summer program that young people can share the knowledge they have learned, skills gained and healthy attitudes developed.

#### Results

Program participants take part in planning and implementing programs at Parents' Day, Open House and our Closing Program. At least two individuals serve as Masters of Ceremony and play other critical roles in these programs.

# 4. Associated Knowledge Areas

**KA Code Knowledge Area** 806 Youth Development

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

## External factors which affected outcomes

Government Regulations

#### **Brief Explanation**

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

# 1. Evaluation Studies Planned

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

## **Evaluation Results**

# **Key Items of Evaluation**

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# Program #13

# V(A). Planned Program (Summary)

- 1. Name of the Planned Program
- 4-H/Youth Development

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

# 1. Program Knowledge Areas and Percentage

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

# V(C). Planned Program (Inputs)

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

| Year: 2007 Extension |      | nsion | Research |      |
|----------------------|------|-------|----------|------|
|                      | 1862 | 1890  | 1862     | 1890 |
| Plan                 | 2.0  | 0.0   | 0.0      | 0.0  |
| Actual               | 2.0  | 0.0   | 0.0      | 0.0  |

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

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

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- Supported three (3) 4-H clubs led by 20 adults and three teen leaders enrolling 216 members.
- Enrolled 39 youth in short-term, special-interest group focusing on our cultural heritage resulting in \$1,500 in sponsorships and being recognized for Junior King and Queen of Bands
  - Assisted two (2) 4-H clubs (66%) to fulfill 4-H Club Charter requirements.
- Facilitated adoption of 4-H Robotics project and other activities that attracted young, black males resulting in an increase in our male enrollment of 15% exceeding our expected increase by 5%.
- Organized annual 4-H Project Expo with over 200 entries showcasing knowledge gained, skills learned and attitudes changed
- Organized food drive, House of Cans Competition and facilitated 4-H booth at World Food Day; developed 4-H Jeopardy Game for St. Thomas/St. John Agriculture and Food Fair; collaborated with CYFAR program to conduct hands on activities in the UVI Exhibition Tent, awarded 13 high school student with 156 hours of community service organizing and implementing children's games and activities, coordinated entry of 36 schools in educational exhibits, and facilitated fitting and showmanship demonstrations for 12 youth at the V.I. Agriculture and Food Fair (St. Croix) Developed one (1) brochure and authored one (1) article.
- Provided orientation, training for 22 teen and adult volunteers, and 4-H members to effectively work with club officers and program committees.
  - Conducted 31 workshops, demonstrations and presentations promoting 4-H, leadership development and nutrition.
- Collaborated with government departments, non-profit agencies, community-based programs and foundations, and special interest groups to form one (1) 4-H program/project development committee.

## 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.

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# V(E). Planned Program (Outputs)

# 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts Adults Target | Indirect Contacts Adults Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Plan | 400                           | 2500                            | 1500                               | 5000                                 |
| 2007 | 480                           | 2880                            | 2150                               | 6175                                 |

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

# **Patent Applications Submitted**

Year Target

**Plan:** 0 2007: 0

#### **Patents listed**

# 3. Publications (Standard General Output Measure)

**Number of Peer Reviewed Publications** 

|      | Extension | Research | Total |
|------|-----------|----------|-------|
| Plan |           |          |       |
| 2007 | 0         | 0        | 0     |

# V(F). State Defined Outputs

**Output Target** 

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# Output #1

# **Output Measure**

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

Year Target Actual 2007 5 2

# Output #2

### **Output Measure**

• Number of workshops, presentations and demonstrations conducted

 Year
 Target
 Actual

 2007
 25
 31

## Output #3

#### **Output Measure**

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

 Year
 Target
 Actual

 2007
 80
 22

# Output #4

# **Output Measure**

Number of partnerships, collaborations or cooperative agreements formed

 Year
 Target
 Actual

 2007
 5
 1

# Output #5

# **Output Measure**

Number of youth participating in off-island leadership development opportunities

YearTargetActual200750

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# 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     | Percentage of youth reporting an increased decision making skills reflected core character values  |
| 9     | Number of 4-H members volunteering to serve as club officers, committee members, junior leaders or teen  |
| 10    | leaders, or advisory council representatives  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 |
| 11    | Number of youth learning and applying principles outlined in 4-H Philanthropic Giving curricula  |

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# Outcome #1

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 200                 | 216    |

## 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

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

#### What has been done

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

#### Results

There are three organized 4-H clubs on St. Croix and one special interest group on St. Thomas enrolling 216 youth; volunteer leadership is provided by 17 adults and three teens.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

## Outcome #2

## 1. Outcome Measures

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

### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 80                  | 66     |

# 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

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

# What has been done

Charter guidelines are available on line and are outlined in volunteer leader orientation and training programs.

#### Results

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

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## 4. Associated Knowledge Areas

**KA Code Knowledge Area** 806 Youth Development

## Outcome #3

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 80                  | 39     |

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

#### Issue (Who cares and Why)

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

#### What has been done

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

#### Results

Thirty-nine youth and six adults discovered the art, history and importance of carnival. Their marketing, costume design and choreography skills resulted in \$1,500 sponsorship, 2nd place and Junior King and Queen of the Band titles.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

# Outcome #4

## 1. Outcome Measures

Percentage of clubs adopting, implementing or utilizing effective leadership strategies

# 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 80                  | 66     |

# 3c. Qualitative Outcome or Impact Statement

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## Issue (Who cares and Why)

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

#### What has been done

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

#### Results

With adult leadership, three 4-H clubs are led by a team of elected club officers who practice their leadership skills.

#### 4. Associated Knowledge Areas

| KA Code | Knowledge Area    |
|---------|-------------------|
| 806     | Youth Development |

## Outcome #5

#### 1. Outcome Measures

Percentage increase in male enrollment

#### 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 10                  | 15     |

# 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

In the V.I., young black males face many challenges to success. Involvement in positive programs such as 4-H has been proven to be a successful coping strategy that helps them meet these challenges.

#### What has been done

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

## Results

The 4-H Robotics Special Interest Group was introduced at one school. Twenty-eight youth enrolled; 21 were male. Male enrollment in our 4-H programs increased 15% from 97 to 108.

# 4. Associated Knowledge Areas

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

### Outcome #6

## 1. Outcome Measures

Percentage of youth adopting leadership and life skills

## 2. Associated Institution Types

•1862 Extension

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#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 75                  | 100    |

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Developing life skills is the central focus of all our 4-H programs as we endeavor to help young people become caring, contributing and conscientious members of their communities.

#### What has been done

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

#### Results

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

### 4. Associated Knowledge Areas

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

#### Outcome #7

### 1. Outcome Measures

Percentage of clubs or units engaging in community service activities

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 100                 | 100    |

## 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

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

## What has been done

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

#### Results

4-H clubs helped collect over 2,500 pounds of food during World Food Day, provided Thanksgiving baskets to seven needy families, presented Christmas gifts to orphans and picked up 32 bags of trash at two local beaches. These efforts resulted in seven new 4-H members, at least one new supporter and valuable exposure in local media.

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area                              |
|---------|---|
| 608     | Community Resource Planning and Development |

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Youth Development

# Outcome #8

#### 1. Outcome Measures

Percentage of youth reporting an increased decision making skills reflected core character values

# 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 75                  | 45     |

### 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Decision making skills are crucial to positive youth development and helping young people become competent citizens.

#### What has been done

Volunteer leaders have been encouraged to incorporate decision-making opportunities in their 4-H programs.

#### Results

In an informal survey with one club enrolling 27 members, 100% reported that they felt confident in their decision-making abilities based on educational programs included in their yearly club plan.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                            |
|---------|---|
| 806     | Youth Development                         |
| 801     | Individual and Family Resource Management |

## Outcome #9

#### 1. Outcome Measures

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

# 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 5                   | 22     |  |

# 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Willingness to assume leadership roles is one indicator of program success.

### What has been done

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Teens are given opportunities to take on various leadership responsibilities with their clubs, on committees or with different extracurricular organizations or groups.

#### Results

One teen serves on our CES Advisory Council, we have three teen leaders, 9 club officers and over 9 teens involved in various committees within and beyond the 4-H program.

### 4. Associated Knowledge Areas

| KA Code | Knowledge Area                              |
|---------|---|
| 608     | Community Resource Planning and Development |
| 806     | Youth Development                           |
| 802     | Human Development and Family Well-Being     |

#### Outcome #10

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |  |
|------|---------------------|--------|--|
| 2007 | 100                 | 100    |  |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

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

### What has been done

The 4-H office facilitateD member participation in the annual V.I. Agriculture and Food Fair in February and our World Food Day program in the fall.

### Results

One club successfully completed an Educational Exhibit Booth resulting in 2nd place; 12 members exhibited 21 small livestock projects; 39 youth participated in 4-H Carnival Troupe and received 2nd place.

# 4. Associated Knowledge Areas

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

## Outcome #11

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

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# 3a. Outcome Type:

Change in Condition Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 20                  | 0      |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Philanthropy is an exciting new project area for 4-H programming. Presently no youth programs address this topic.

## What has been done

Local 4-H office participated in peer review of national 4-H Philanthropic Giving curricula.

#### Results

No data to report at this time.

# 4. Associated Knowledge Areas

| KA Code | Knowledge Area                              |
|---------|---|
| 608     | Community Resource Planning and Development |
| 806     | Youth Development                           |

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

## External factors which affected outcomes

• Government Regulations

## **Brief Explanation**

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

## 1. Evaluation Studies Planned

Before-After (before and after program)

# **Evaluation Results**

{Evaluation being revisited for entire program.}

## **Key Items of Evaluation**

Planned evaluation includes pre/post and informal methods.

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## Program #14

# V(A). Planned Program (Summary)

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

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

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

| Year: 2007 | Exter | nsion | R    | esearch |
|------------|-------|-------|------|---------|
|            | 1862  | 1890  | 1862 | 1890    |
| Plan       | 1.0   | 0.0   | 0.0  | 0.0     |
| Actual     | 1.0   | 0.0   | 0.0  | 0.0     |

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

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

# V(D). Planned Program (Activity)

## 1. Brief description of the Activity

Professional linkages were maintained with fiveagricultural organizations in the Eastern Caribbean. Three training courses were conducted for the Department of Public Works in the British Virgin Islands on Proper Tree Management and Maintenance. Two workshops on Soil Management and Water Quality were conducted by CES Agents for the Department of Agriculture in the British Virgin Islands targeting crop farmers. Five extension specialists provided consultations on food and nutrition programs, sustainable agriculture, horticulture, and livestock production and management to agents in six Caribbean Islands. Breeding animals were exported to the British Virgin Islands, St. Eustacious, Antigua, St. Martin and Anguilathrough the Breeders Exchange Program to improve the local livestock population. A directory of individuals and institutions in agricultural research and development in the Eastern Caribbean was expanded and updated. UVI/CES telecommunication systems for collaborative training with other regional institutions were utilized to train extension specialists and agents.CES assisted in the planning and execution of international and regional meetings for CFCS, CACHE, and CARAPA.

## 2. Brief description of the target audience

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

# V(E). Planned Program (Outputs)

## 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

| Year | Direct Contacts<br>Adults<br>Target | Indirect Contacts<br>Adults<br>Target | Direct Contacts<br>Youth<br>Target | Indirect Contacts<br>Youth<br>Target |
|------|-------------------------------------|---------------------------------------|------------------------------------|--------------------------------------|
| Plan | 500                                 | 2000                                  | 200                                | 500                                  |
| 2007 | 478                                 | 1400                                  | 56                                 | 230                                  |

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

# **Patent Applications Submitted**

Year Target Plan: 0
2007: 0

#### Patents listed

# 3. Publications (Standard General Output Measure)

| Number of Po | eer Reviewed Publicatio | ns       |       |
|--------------|-------------------------|----------|-------|
|              | Extension               | Research | Total |
| Plan         |                         |          |       |
| 2007         | 0                       | 0        | 0     |

# V(F). State Defined Outputs

## **Output Target**

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## Output #1

## **Output Measure**

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

Year Target Actual 2007 5 5

# Output #2

### **Output Measure**

International and regional workshops will be coordinated.

Year Target Actual 2007 5 3

## Output #3

#### **Output Measure**

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

Year Target Actual 2007 3 0

## Output #4

#### **Output Measure**

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

 Year
 Target
 Actual

 2007
 1
 1

## Output #5

## **Output Measure**

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

| Year | Target | Actua |  |
|------|--------|-------|--|
| 2007 | 20     | 53    |  |

#### Output #6

## **Output Measure**

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

Year Target Actual 2007 5 5

# Output #7

# **Output Measure**

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

 Year
 Target
 Actual

 2007
 150
 130

## Output #8

# **Output Measure**

Adult and Youth will receive training on Management practices

Year Target Actual 2007 {No Data Entered} 128

## Output #9

# **Output Measure**

Producers will receive training on Production and Management Practices

YearTargetActual2007{No Data Entered}120

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# 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       |

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# Outcome #1

#### 1. Outcome Measures

Agricultural linkages established with regional organizations

#### 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 5      |

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

#### Issue (Who cares and Why)

Linkages were maintained with Regional and Professional organizations to strengthen programs in the Caribbean.

#### What has been done

Meetings were held to discuss issues relevent to Caribbean agriculture.

#### Results

There is greater collabrations with Regional institutions.

## 4. Associated Knowledge Areas

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

#### Outcome #2

#### 1. Outcome Measures

Interantional and regional workshops coordinated

### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 5                   | 3      |

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

One international meeting was held for CFCS in Costa Rica, One international meeting was held for CARAPA in Trinidad and a regional meeting was held for CACHE in the Dominican Republic

### What has been done

Regional and international discussions were held to discuss Caribbean issues.

#### Results

Greater understanding among Caribbean scientists

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## 4. Associated Knowledge Areas

KA Code Knowledge Area

903 Communication, Education, and Information Delivery

# Outcome #3

#### 1. Outcome Measures

Amount of animal breeding stock exported to Eastern Caribbean countries

## 2. Associated Institution Types

•1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 20                  | 53     |

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

To assist five Caribbean islands in improving their breeding stock.

#### What has been done

Senepol bulls, White hair rams and boer goat rams were exported to the five Islands to improve their breeding stock.

## Results

Producers in the five islands are excited for they have begun to see results in their herds.

## 4. Associated Knowledge Areas

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

# Outcome #4

## 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 1                   | 1      |

## 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

Scientists in the Caribbean have easy access to other scientists.

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#### What has been done

The Directory of individuals and institutions in agriculture research in the Eastern Caribbean was updated and expanded.

#### Results

Easy access to information on individuals and institutions

## 4. Associated Knowledge Areas

| KA Code | Knowledge Area |
|---------|----------------|
|---------|----------------|

903 Communication, Education, and Information Delivery

#### Outcome #5

#### 1. Outcome Measures

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

## 2. Associated Institution Types

•1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

## 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2007 | 3                   | 0      |

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

#### 4. Associated Knowledge Areas

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

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

### External factors which affected outcomes

**Government Regulations** 

# **Brief Explanation**

There were no external factors that affected the outcomes. No proceedings or publications were printed this year for any of the organizations since all publications were up to date.

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

#### 1. Evaluation Studies Planned

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

# **Evaluation Results**

Report Date 11/09/2009 Page 133 of 134 Participants in the programs gained knowlege that was useful to them. Collabrations have been establisheed based on the success of this program. One of the success of this program is the numerous invitations that our agents and specialists receive on a daily basis to assist different departments in the Caribbean.

# **Key Items of Evaluation**

This program has put the Virgin Islands Extension Service in a leadership position when people in the Caribbean need information and educational assistance in program development, agriculture and natural resouces and youth development.

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