

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

**Program # 5**

**1. Name of the Planned Program**

Urban Gardening

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

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems	95%			
403	Waste Disposal, Recycling, and Reuse	5%			
	<b>Total</b>	100%			

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

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	2.2	0.0	0.0	0.0
Actual	2.2	0.0	0.0	0.0

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

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

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

1. Brief description of the Activity

Conducted educational classes, workshops, seminars

Developed resource materials and curriculum guides

Conducted field days, field demonstrations, exhibits and tours

One-on-one counseling

On-site visits

Use of electronic media

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

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

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

**1. Standard output measures**

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

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

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

**Number of Peer Reviewed Publications**

2010	Extension	Research	Total
<b>Plan</b>	0	0	
<b>Actual</b>	0	0	0

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

**Output Target**

**Output #1**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	4	1

**Output #2**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	3	5

**Output #3**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	4	5

**Output #4**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	130	70

**Output #5**

**Output Measure**

- Number of public service announcements

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	1	60

**Output #6**

**Output Measure**

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

**Output #7**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	2	3

**Output #8**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	1	2

**Output #9**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	4	5

**Output #10**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	1	1

**Output #11**

**Output Measure**

- Number of workshops and public and private entities establishing gardens

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	50	52

**Output #12**

**Output Measure**

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

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	7	4

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

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

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

**Outcome #1**

**1. Outcome Measures**

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

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	400	613

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

**Issue (Who cares and Why)**

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

**What has been done**

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

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

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

about the benefits of gardening which resulted in the creation of a garden.

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

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

### **Results**

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

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

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

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

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

## **4. Associated Knowledge Areas**

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

## **Outcome #2**

### **1. Outcome Measures**

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

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2010	550	540

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

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

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

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

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

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

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

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

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

### **Results**

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

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

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

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

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

## **4. Associated Knowledge Areas**

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

**Outcome #3**

**1. Outcome Measures**

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

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	200	52

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

**Issue (Who cares and Why)**

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

**What has been done**

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

**Results**

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

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
205	Plant Management Systems

**Outcome #4**

**1. Outcome Measures**

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

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	250	52

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

**Issue (Who cares and Why)**

Virgin Islands residents have been exposed to gardening either from practical experience or from visiting another garden. Some may have had gardens but gave them up for one reason or another. Some who have never gardened, probably wanted to but do not know how and where to begin. Youth need to experience the benefits of gardening as well. Obesity in the youth and adults is one of the concerns of healthcare professionals.

**What has been done**

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

**Results**

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

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

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

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

Six (6) elementary schools and one (1) junior high school developed raised bed and tire gardens with the assistance of CES staff. Forty-two residents began cultivating a garden with the assistance from Extension staff.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

#### Outcome #5

##### 1. Outcome Measures

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

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	250	4

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

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

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

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

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

provided written information about composting.

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

### **Results**

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

Three of the six elementary schools built their own compost piles.

## **4. Associated Knowledge Areas**

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

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

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

- Competing Programmatic Challenges

#### **Brief Explanation**

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

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

#### **1. Evaluation Studies Planned**

- Before-After (before and after program)

### **Evaluation Results**

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

### **Key Items of Evaluation**