

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

**Program # 3**

**1. Name of the Planned Program**

Global Food Security and Hunger: Urban Gardening

Reporting on this Program

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

**1. Program Knowledge Areas and Percentage**

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

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

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

Year: 2014	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.2	0.0	0.0	0.0
<b>Actual Paid</b>	2.2	0.0	0.0	0.0
<b>Actual Volunteer</b>	0.0	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
50000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
30000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
5000	0	0	0

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

**1. Brief description of the Activity**

Conducted educational classes, workshops, seminars.

Developed publications, resource materials, curriculum guides.

Conducted field days, field demonstrations, exhibits and tours.

Conducted one-on-one counseling and site visits.

Used electronic and social media to promote the program.

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

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

**3. How was eXtension used?**

eXtension was not used in this program

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

**1. Standard output measures**

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	750	20000	110	500

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

**Patent Applications Submitted**

Year: 2014

Actual: 0

**Patents listed**

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

**Number of Peer Reviewed Publications**

2014	Extension	Research	Total
<b>Actual</b>	0	0	0

## V(F). State Defined Outputs

### Output Target

#### Output #1

##### Output Measure

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

Year	Actual
2014	3

#### Output #2

##### Output Measure

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

Year	Actual
2014	6

#### Output #3

##### Output Measure

- Number of educational classes in the benefits of proper gardening

Year	Actual
2014	6

#### Output #4

##### Output Measure

- Number of consultations with residents about gardening

Year	Actual
2014	125

#### Output #5

##### Output Measure

- Number of articles/publications on urban gardening management

Year	Actual
2014	2

**Output #6**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2014	3

**Output #7**

**Output Measure**

- Number of print, electronic, and social media appearances/programs promoting urban gardening

<b>Year</b>	<b>Actual</b>
2014	12

**Output #8**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2014	2

**Output #9**

**Output Measure**

- Number of public and private entities and individuals establishing gardens

<b>Year</b>	<b>Actual</b>
2014	5

**Output #10**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2014	4

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

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

O. No.	OUTCOME NAME
1	Increase the number of residents who will become more aware of the benefits of gardening by 10%
2	Increase the number of residents,who increase their knowledge of more efficient low cost technologies, practices, and principles by 10%
3	Increase the number of home gardeners who realize a reduction in their cost of living resulting from urban gardening by 10%
4	Increase the number of residents who will establish gardens by 10%
5	Increase the number of residents who start composting by 10%

## **Outcome #1**

### **1. Outcome Measures**

Increase the number of residents who will become more aware of the benefits of gardening by 10%

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

- 1862 Extension

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

Change in Condition Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2014	83

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

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

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 as is evident in the increased cases of heart disease, diabetes, high blood pressure, and obesity. Virgin Islanders continue to seek information and educate themselves on how they can make lifestyle 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 participated in a radio call-in talk show called The Food and Health Connection on radio station WGOD 97.9 FM.

CES participated in the annual Department of Human Services Father/Child Activity Day at the Head Start facility on St. Thomas. Extension staff appeared on nine (9) occasions on radio station WGOD 97.9 FM to talk about gardening and to field questions from the listening audience.

Extension agriculture staff presented information on how gardening can be incorporated into the school's curriculum at the annual Youth Gardening Workshop sponsored by CES 4-H program held on the UVI Albert Sheen Campus. The Junior Gardening and Ecology Summer Program invited extension staff to talk with the youth and staff about the importance of growing your own food.

#### **Results**

Thousands of listeners to The Food and Health Connection increased their knowledge of the many benefits of building and maintaining their own garden. Under the guidance of extension

staff, thirty (30) men participating in the Father/Child Activity Day increased their awareness of the social and emotional benefits of gardening. Approximately, forty-five (45) students and eight (8) staff from various schools on St. Croix participated in workshops designed to help them incorporate gardening into the course work.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

#### Outcome #2

##### 1. Outcome Measures

Increase the number of residents, who increase their knowledge of more efficient low cost technologies, practices, and principles by 10%

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2014	480

##### 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 recommended for over 20 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**

The annual Agriculture and Food Fair of the Virgin Islands provided CES with the opportunity to interact with a wide range of Virgin Islands residents who may have never utilized our services

before. Extension staff continued to provide residents with information on growing their own vegetables. Extension staff also appeared on 2 local radio stations throughout the year to discuss a wide range of agriculture topics including gardening. During National Agriculture Week, CES partnered with the VI Department of Agriculture (VIDOA) on various educational events around the district. On St. John Extension staff conducted a seminar entitled "How to Start A Vegetable Garden" at the St. John Academic Center in Cruz Bay. Extension staff joined the VIDOA staff and other farmers under the Sanderilla Thomas Bungalow in Market Square to celebrate the role agriculture plays in the life of the community.

Extension staff presented a lecture and answered questions from youth participating in the Junior Gardening and Ecology summer camp.

The annual Youth Gardening Workshop sponsored by the 4-H program was held on the Albert Sheen Campus of UVI.

### **Results**

Approximately, three hundred fifty (350) persons became more aware of various kinds of growing systems they can use to raise fresh vegetables. Over 100 copies of factsheets were provided as a resource for interested residents.

Thousands of radio listeners across the territory and beyond have increased their knowledge of building and maintaining growing systems around their homes and landscape.

Twelve (12) persons on St. John increased their knowledge of the fundamental of starting a vegetable gardening and were provided handouts on vegetable gardening in tires and raised beds.

Twenty-five (25) persons attending National Agriculture Week activities on St. Thomas increased their knowledge of various gardening subjects through one-on-one interaction with Extension staff and they received handouts on tire gardening.

Thirty-five (35) youth and five (5) adults from the summer camp increased their knowledge of growing and managing vegetables in the garden.

Approximately, forty-five (45) students and eight (8) staff participated in hands on workshops on planning a gardening, soil fertility and fertilizer, pest identification, and transplanting at the all-day event.

## **4. Associated Knowledge Areas**

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

### **Outcome #3**

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

Increase the number of home gardeners who realize a reduction in their cost of living resulting from urban gardening by 10%

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

- 1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2014	10

### 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, store owners 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

Extension staff conducted home visits and demonstration garden tours, responded to telephone and email inquiries.

#### Results

No surveys were conducted to determine actual cost savings that residents realized. Anecdotal information from some residents suggests that some savings were realized as a result of creating a garden or augmenting a cultural practice.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

### Outcome #4

#### 1. Outcome Measures

Increase the number of residents who will establish gardens by 10%

#### 2. Associated Institution Types

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2014	20

**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**

Six (6) elementary schools developed raised bed and tire gardens with the assistance of CES staff. Twenty (20) residents began cultivating a garden with the assistance from extension staff.

**4. Associated Knowledge Areas**

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

**Outcome #5**

**1. Outcome Measures**

Increase the number of residents who start composting by 10%

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Actual
2014	8

**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**

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

**Results**

Three (3) elementary schools built their own compost piles.

**4. Associated Knowledge Areas**

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

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

**External factors which affected outcomes**

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

**Brief Explanation**

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

### **Evaluation Results**

Staff shortages and budget cuts have severely hindered the ability to execute plans for the urban gardening projects. The ability to gather follow-up information regarding changes in behavior is lacking and needs to be implemented.

### **Key Items of Evaluation**