

# **ANNUAL REPORT**

**COOPERATIVE EXTENSION SERVICE**

**UNIVERSITY OF THE VIRGIN ISLANDS**

**Fiscal Year 2002**

OVERVIEW STATEMENT  
FY 2002 ANNUAL REPORT  
UVI/COOPERATIVE EXTENSION SERVICE

The University of the Virgin Islands' Cooperative Extension Service is pleased to submit its FY 2002 annual report which is based on the 2002-2004 Plan of Work (POW), outlined by the national goals established within the mission of the Cooperative State Research, Education and Extension Service of USDA.

Using the attached goals and objectives, CES developed 16 strategic innovative projects and activities that positively impacted and changed the lives of many Virgin Islanders.

**GOAL 1: AN AGRICULTURAL SYSTEM THAT IS HIGHLY COMPETITIVE IN THE GLOBAL ECONOMY**

Sustainable Agriculture, Beef, Dairy and Livestock and Eastern Caribbean Extension Outreach and Interchange are programs featured in this unit. The VI Sustainable Agriculture Network, through collaboration with local and federal agencies, provided training and professional development activities to staff and farmers for the promotion of sustainable agriculture practices. One of the most significant activities during this period was a training on storage pond design. The two-day training provided farmers and agricultural professionals with information on construction, and maintenance of storage ponds. The ultimate outcome of the training was to increase water retention in farm ponds. The Beef, Dairy and Livestock program focuses on animal care and productivity. CES staff provided technical assistance to farmers by monitoring the performance of the beef and dairy animals. Staff also assisted the Virgin Islands Department of Agriculture with the implementation of the Branding Program. The youth education programs continue to be active in the schools.

**GOAL 2: A SAFE AND SECURE FOOD AND FIBER SYSTEM**

This unit includes Food Safety Nutrition, Basic Food Safety Education for EFNEP and EFNEP Youth. During this period, staff attended a workshop on food safety cosponsored by CES, and the V.I. Department of Licensing and Consumer Affairs. The workshop was conducted by the Puerto Rico's federal Food and Drug Administration (FDA). Currently, CES staff is serving as co-chair for the local FDA and is working on implementing a local Health Fraud Task Force. Teaching Virgin Islands' adults and youth healthy, dietary practices, budgeting and food preparation continues to be the focus of the Basic Food Safety Education Program. The annual Agriculture and Food Fair, World Food Day, Mango Melee and Tropical Fruits Festival and the CYFAR program provide additional venues for information to be disseminated about the program.

### GOAL 3: A HEALTHY WELL-NOURISHED POPULATION

Improving Nutrition, Diet and Health is the focus of this program. Through educational activities such as World Food Day, Agriculture and Food Fairs, hands-on demonstrations were conducted to educate Virgin Islanders on basic nutrition, food preparation, and food safety. Since the territory has a high level of individuals who suffer with diabetes and hypertension, CES and the Virgin Islands Department of Health held sessions on obesity and hypertension.

### GOAL 4: GREATER HARMONY BETWEEN AGRICULTURE AND THE ENVIRONMENT

CES continues to educate Virgin Islanders about the benefits and importance of properly planting, maintaining urban trees, and composting. Through programs such as Urban Forestry, Backyard Composting, Urban Gardening, Water Quality Protection, Natural Resources and Environmental Management, staff provide workshops, demonstrations, short courses, and exhibits for residents. Collaborative efforts with the International Society of Arborist, USDA Forest Service's International Institute of Tropical Forestry and the Puerto Rico Conservation Foundation sponsored activities such as the Arborist short course and the 7<sup>th</sup> Annual Caribbean Urban Forestry Conference and the 11<sup>th</sup> Caribbean Foresters Meeting. In addition, CES staff conducted "train the trainer" gardening workshops for teachers. School gardens continue to be implemented at various schools throughout the territory. Other programs that enhance the quality of life are discussed in this unit.

### GOAL 5: ENHANCED ECONOMIC OPPORTUNITY AND QUALITY OF LIFE FOR AMERICANS

This unit covers Limited Resources: Individuals and Families, Marketable Skills, Volunteer and Youth Leadership, 4-H Club Systems and 4-H Summer Day Camp.

CES provides programs to Virgin Islanders, particularly the unemployed and underemployed with short courses, and workshops that will enhance or teach marketable skills. Courses in adult sitting, child care and day care are taught so that adults can enter the world of work and provide the quality care that is needed in the territory.

Working collaboratively with the Virgin Islands Department of Human Services, CES held Spanish Parenting classes for the Hispanic community on St. Croix. Topics covered were self-esteem, discipline and school success through teamwork.

Finally, CES's 4-H programs are involved in many community activities. The 4-H Summer Day Camp Program was a tremendous success and provided 414 of the territory's youth with educational and fun activities. Additionally, programs such as CYFAR, focus on community-based educational programs for children, youth, parents and families. In collaboration with the Mini-Society®'s effort, CES staff, teachers, and individuals from other community groups received training in the concept of Mini Society®— entrepreneurship, economics and citizenship concepts for students ages 8 to 12.

GOAL 1: AN AGRICULTURAL SYSTEM THAT IS HIGHLY COMPETITIVE IN THE GLOBAL ECONOMY

*Program 1 – Sustainable Agriculture*

**Introduction:**

The Sustainable Agriculture Network of the U.S. Virgin Islands experienced a very productive year which featured several educational initiatives. Through partnerships with local and federal agencies training initiatives and professional development activities were designed to address priority concerns, including increased collaboration among partner agencies, the promotion of sustainable agriculture practices, and providing technical support to farmers. These activities consisted of professional development programs, exhibits and demonstrations which were conducted for farmers and outreach personnel. One of the most impacting initiatives undertaken during this reporting period was a project to assist a group of farmers in their need to increase the water holding capacity of storage ponds.

**Accomplishments:**

The annual fairs and exhibits (i.e. St. Thomas-St. John Agriculture & Food Fair and St. Croix Agrifest) offer opportunities to disseminate information to farmers and other participants about sustainable agriculture through demonstrations and presentations on St. Thomas. The Sustainable Agriculture program exhibit focused on marketing issues, cultural practices and record keeping. The exhibit also featured an initiative to develop an inter-island directory of crop producers and processors to create an agribusiness network as a marketing strategy, and to facilitate improved communication between producers, food processors and consumers.

The annual Agrifest activity on St. Croix offered another opportunity to continue the dissemination of technical advice to farmers. The presentation included a display of several alternate food crops which have economic potential in the Virgin Islands. The staff also shared information about farm planning and factors which farmers should consider from the initial planting phase through marketing to enhance their practices.

The annual Mango Melee and Tropical Fruits Festival on St. Croix featured presentations that provided information to farmers regarding value added opportunities and marketing strategies to increase farm income and enhance their overall farm operations.

The staff of the Cooperative Extension Service in collaboration with the Virgin Islands Resource Conservation and Development Council, Inc. hosted the first Virgin Islands Agriculture and Natural Resources Workshop which featured a two day comprehensive presentation by federal and local agencies regarding their respective support programs for farmers. Other feature presentations focused on marketing issues, organic farming practices, and the development of farmers' cooperatives.

The CES staff continues to encourage water use efficiency and soil conservation among farmers through the use of drip irrigation technology. Our staff successfully imparted this information on all three islands through outdoor demonstrations to an enthusiastic audience which included farmers.

In order to assist farmers with addressing water resource issues a two-day training initiative was held on St. Thomas; this technical training was designed to disseminate information about the design, function, hydrology, and maintenance of water storage ponds. The second day of this activity consisted of an on-site visit in Estate Bordeaux on St. Thomas to visit with farmers to discuss the installation of synthetic liners in water storage ponds to address a problem of excessive seepage. This loss of valuable water resources has resulted in reduced crop yields. This workshop represented the first phase of this initiative. The next step is the practical demonstration of installing liners in the ponds. Upon completion of this project farmers anticipate increased yields and farm income as a result of an enhanced water supply.

**Impact/Outcome:**

1. More than 5000 fair goers increased their awareness of sustainable agriculture and related concerns. Sixty (60) farmers benefited from a targeted presentation on packaging ideas and value added opportunities in the marketing of commodities. The farmers expressed much enthusiasm regarding this project, and look forward to the benefits once completed. Consequently, all sixty farmers provided all pertinent information required to include them in the directory.
2. More than 100 producers visited the display and increased their knowledge about crop production practices such as drip irrigation, mulching, proper crop selection and record keeping. Twenty-five (25) of the farmers requested additional information regarding purchasing drip irrigation system supplies for their own operations.
3. More than seventy-five (75) farmers benefited from the exhibit on farm planning and alternative food crops. More than 50% of these farmers expressed an interest in expanding their operations by including one or more of the alternate crops suggested by the Cooperative Extension Service (CES) staff.
4. More than 1000 people attended the Tropical Fruits Festival. All the farmers (approximately 80) who attended expressed an interest in modifying their current approaches to marketing, and in using the value added concept in their operations. These producers were encouraged to seek the assistance of the CES in their pursuit to improve their farm endeavors.
5. A total of 161 farmers attended the Agriculture and Natural Resources Workshop, and increased their knowledge and awareness of services and programs offered by various local and federal agencies, eligibility requirements, and application procedures. This conclusion was verified by the results of a post workshop survey. More than 75% of the farmers have

also requested follow-up workshops, especially to address the practices and certification aspect of organic farming, and the development of a farmers' cooperative.

6. Another significant outcome resulting from the Agriculture and Natural Resources Workshop was the expansion of the local Agriculture Support Network group to formally include the Virgin Islands Resource Conservation and Development Council, Inc. This effort to expand the network of collaborators remains an on-going objective of the V.I. Sustainable Agriculture initiative.
7. As a result of the technical training on drip irrigation 33% of the workshop clients visited our office for catalog information to purchase their own irrigation systems.
8. Seventeen (17) farmers and outreach professional staff increased their knowledge and awareness of storage pond design and maintenance, particularly the application of synthetic liners to reduce seepage. On the second day 30 farmers and professional staff received on-site (field) training by USDA personnel as a follow-up to classroom presentations. A second workshop was held on St. Croix which provided similar training for 38 farmers and outreach staff.

**Source of Funding:** CES/University of Georgia Sustainable Agriculture Grant,  
CES/North Carolina State University Sustainable Agriculture Grant

**Scope of Impact:** Territory-wide

#### *Program 2 – Beef, Dairy and Livestock*

The livestock component of CES has continued to be active throughout the year, initiating and continuing program work as outlined in the plan of work.

Beef farmers continue to be assisted in monitoring the performance of the animals in their herd as per the guidelines set forth by the Beef Cattle Improvement Program. Cattle are periodically weighed and scored. The farmers also continue to face the challenge of marketing their product locally. Programs continue to be designed to stress the benefits of locally produced products with the goal to enhance the local market and, therefore, the sales of locally produced meat.

Dairy producers continue to be involved in and serviced by the dairy production testing program. Through the efforts of the program, farmers are continually improving the producing capability of their herds. Areas covered by the program include production monitoring on a monthly basis, assistance with fertility assessment in both cows and bulls, identification of their stock and selection of replacement animals. With the continued advancements made through the program, the farmers have been able to supply all of the milk needed by the processing plant for the year, allowing them to forgo any supplemental milk shipments from outside the territory for the second year in a row.

All livestock farmers are receiving technical assistance in implementing and maintaining livestock identification in order to comply with the newly enacted Virgin Islands government law mandating identification of all livestock. Farmers are being informed as to their options for identification, including: branding, tattooing, tagging or electronic identification. Any animal found straying is currently being impounded and, if lacking in identification, is identified through hot branding. The program is being implemented in conjunction with the Virgin Islands Department of Agriculture Livestock Division. This program is assisting in verifying ownership of animals that are loose and cause damage or accidents. In addition, it is allowing more accurate tracking of the animals affected by the ongoing tick survey/eradication program.

The tick program continues in operation through the cooperative efforts of USDA APHIS, the VI Department of Agriculture and the Extension Service. It continues to monitor the eradication efforts against the *Amblyoma varegatum* tick on the island of St. Croix, in addition to the known population of *Boophilus microplus*. The tick teams have identified areas of the island that are “pockets” of infestation *Amblyoma* tick and are focusing their efforts to ensure that the ticks do not spread from there. Animals in these and surrounding areas are checked and sprayed with acaricide at regular intervals to control the ticks. Through the efforts of this program, the Virgin Islands cattle producers were able to restore limited export of cattle to the United States mainland this year.

Forage test sites continue to be maintained and monitored in several areas of the island. The project is being implemented cooperatively with the Agriculture Experiment Station. Studies are being conducted in the areas of grazing, animal load capacity and sustainability of pasture resources.

Farmers continue to be encouraged to produce and consume their own locally produced animal products through the availability of day old chicks for sale to the farmers. Both layer and broiler chicks have been made available to interested farmers and hobbyists that would like to produce their own meat and eggs. Instruction and guidance is provided to ensure that they are successful in their endeavor. This program, while still successful, faces the increasing challenge of extremely limited consumption of locally produced meat products and the nationwide decrease in meat consumption overall. As with the beef farmers, the small livestock farmers that raise not only poultry, but also sheep, goat and rabbit, are benefiting from programs designed to address the positive aspects of locally produced products.

Youth education programs continue to be active in the schools. The programs focus on the proper care and raising of animals. In addition to schools, the program has done outreach workshops for other youth groups in the community.

**Source of Funding:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

### *Program 3 – Eastern Caribbean Extension Outreach and Interchange*

The Cooperative Extension Service continued to provide leadership and coordination for the four agriculture organizations that have linkages within the Caribbean region: Caribbean Food Crop Society (CFCS), Caribbean Association of Researchers and Herbal Practitioners (CARAPA), Caribbean Council of Higher Education in Agriculture (CACHE), and the University of Puerto Rico (UPR). During the year CES sponsored the Annual Caribbean Forestry Conference that brought together Caribbean Foresters and the Urban Foresters together for the first time in the Caribbean. A total of 200 participants attended this conference. Two newsletters were published for CFCS to help in information exchange and activities scheduled in the Caribbean region. CES specialists continue to provide consultation on sustainable agriculture, horticulture, livestock production and management to the other Caribbean Islands. Assistance was given to the CFCS in the organization of the 38th annual meeting in Martinique. A total of 150 participants attended this conference. About 19 nations were represented. A regional integration meeting is being planned with the University of Puerto Rico to assist in bringing scientists in both Universities together for scientific exchange and more regional cooperation.

**Scope of Impacts:** Caribbean region

**Source of Funding:** USDA Smith-Lever

### GOAL 2: A SAFE AND SECURE FOOD AND FIBER SYSTEM

#### *Program 4 – Food Safety Nutrition*

During the first quarter, twenty (20) workshop participants had an opportunity to learn about the basic food groups, nutrition and food safety. They also received information on budgeting and food preparation.

In September 2002, 6 (six) Extension staff attended a Food Safety Workshop, co-sponsored by UVI-CES and Department of Licensing and Consumer Affairs; and conducted by the Puerto Rico office of the federal Food and Drug Administration (FDA). Thirty-six (36) nutrition workers in the education system, the university and members of the environmental health staff of the local health department participated. CES staff - including serving as co-chair for St. Croix - played a critical role in working with the FDA in meetings throughout the year to implement a local Health Fraud Task Force. This ongoing effort is targeting reporting of fraudulent products, gadgets and medications in the marketplace, especially those which target the most vulnerable populations, senior citizens and youth. Products promising to have the key to the fountain of youth, cure for AIDS, or quick weight loss are examples.



During December, a holiday baking workshop was held with thirty (30) participants; twenty in the first class, and ten in the second on St. Thomas. A similar workshop was held on St. Croix attended by twenty (20) individuals.

**Impacts/Outcomes:**

1. A heightened awareness of food safety and its implications in the restaurant and education arena was gained by six (6) CES staff, and thirty (30) other attendees who participated in the food safety training. Participants learned the importance of keeping cooking preparation surfaces clean, refrigerating cooked food, and cooking foods at the proper temperatures.
2. Over fifty (70) participants engaged in demonstrations, received information on nutritional values of foods and budgeting to assist in reducing the cost of food to families. Getting the best value for the food dollar was stressed. One participant reported an approximate savings of 20% on her monthly food bill as a result of planning meals in advance and comparison shopping for food items. Giving baked goods as Christmas gifts was planned by 10% of the participants.
3. Over 25% of the participants expressed an increase in use of a written list for grocery shopping for a savings of \$10 - \$70 per month.

**Source of Funding:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

*Program 5 – Basic Food Safety Education for EFNEP and EFNEP Youth*

During this quarter, ten (10) clients were recruited for the EFNEP Program in the Head Start Centers and the Bovoni Housing Community in St. Thomas.

In November, 2001 the Annual Agriculture and Food Fair was held in St. Thomas and in February, 2002 in St. Croix where displays focused on food safety practices in the home and restaurants. Over 30, 000 persons were in attendance in a combined count of both fairs. Young children, young adults and adults, senior citizens took advantage of the many exhibits and displays. Brochures were disseminated and demonstrations conducted regarding food safety.

A “Bread in the Bag” activity was held in St. Thomas with eight (8) individuals in conjunction with sessions which included discussion of the four basic food groups, equivalent measurements and portion sizes of daily requirements.

Thirty-two (32) teenagers participated in the Annual EFNEP (Expanded Foods and Nutrition Education Program) Summer Teen Program. The program provided information on

planning meals, buying, preparing, handling and storage of foods. Dietary handouts, recipe adaptations, video presentations, staff/volunteer presentations and field trips were used to educate the teenagers on the concepts of health and nutrition. One hundred and thirty-two (132) children participated in the EFNEP sessions in St. Thomas during Summer Camp. Sixty-two (62) individuals participated in the St. John Camp.

EFNEP individuals received information on basic food safety practices, i.e., personal hygiene, food preparation, food storage and basic kitchen safety.

Twenty-two (22) EFNEP program clients received a presentation from Ms. Veronica Phillips, public health educator from the Health Department, which focused on the importance of taking care of oneself when diabetic and/or hypertensive.

### **Impacts/Outcomes:**

1. Over 30,000 individuals viewed the EFNEP displays associated with the Agricultural Food Fairs in St. Croix & St. Thomas which focused on food safety.
2. Thirty-two (32) teenagers in St. Croix acquired new information and skills through the Summer Teen Program, many of whom indicated that they would use and prepare food in different ways. They also found cooking to be easy, even when nutritious and delicious meals are prepared. One hundred and ninety-four (194) youth were exposed to elements of the EFNEP information during the summer camp experience. They also learned about the importance of physical exercise. Ninety percent (90%) of the Summer Camp participants expressed a desire to enroll in the class next year.
3. Over the course of the year, over fifty (50) individuals took advantage of baking workshops on St. Croix and St. Thomas. As a part of the nutrition information received participants learned about making nutritious breakfast, lunch and dinner meals from what's available, stretching their food dollars, keeping foods safe, and the importance of planning.

**Source of Funding:** USDA Smith-Lever

**Scope of Impacts:** Territory-wide

GOAL 3: A HEALTHY WELL-NOURISHED POPULATION

### *Program 6 – Improving Nutrition, Diet and Health*

In 2001, World Food Day, a one day fair was held on the University's grounds. The foods in focus were lamb and citrus. A demonstration on how to prepare various dishes with these foods was presented and the nutritional analyses of the items made available. In conjunction with World Food Day and the holiday season, three workshops were held. Pumpkin

was the focus for the Thanksgiving holiday, and making sweet bread and fruitcake for the Christmas season was emphasized. Thirty-nine (39) persons participated in these workshops.

In November 2001, Dr. Ramsey Johnson, Dr. Doris Sewer and Dr. Gloria Callwood conducted a presentation over three sessions on obesity and high blood pressure. Seventy-five (75) persons attended. Due to the high level of diabetes in the territory, these presentations were timely and well received.

January 28, 2002, a Vegetarian Workshop was held in St. Thomas with twenty-three (23) individuals. This workshop was held in conjunction with the VI Housing Authority – Community Outreach Program. Focus was placed on preparation of vegetarian meals and the importance of ensuring that diet is supplemented with correct ingredients for a well-balanced “meatless” meal. “Being a vegetarian can be fun” was the focus of this workshop.

From April 8-12, 2002, The Week of the Young Child Observance was held on St. Croix and participants included individuals from five (5) Head Start Programs. During one of the jointly sponsored workshops, a discussion was held on “Preparing the Youngster for Entering Elementary School and Monitoring His/Her Behavior.” Nutrition workshops for parents, included how to prepare nutritious meals/snacks for children. This emphasis was seen throughout this observance. In St. Thomas, forty-five (45) persons participated in the observance. Also, fifty-two (52) pre-school children from Head Start Centers participated in presentations with parents and children which focused on the nutritive content of coloring vegetables and fruits.

April 16-17 and April 23-24, 2002, Healthy Eating Workshops were held for the general public and entailed forty-seven (47) participants. Attendees learned about the importance of using healthy ingredients, eliminating saturated fats and fast food; and drinking of 8 glasses of water per day.

During May, an After School program, Family Life Center (45) participants and 4 teachers met three times a week at the Romana Blades Community Center (St. Thomas). Table etiquette, correct posture, table setting were practiced and the youth demonstrated what had been learned to their families on Mother’s Day.

In June, fourteen (14) participants were a part of a basic foods and nutrition, food safety and budgeting; and food preparation workshop, a closing ceremony was held and everyone was able to showcase their newly acquired skills garnered over the previous six week period.

Thirty-two (32) persons attended health awareness workshops from September 10-12, 2002. Topics included how to reduce stress, importance of counting calories, cholesterol level monitoring, diabetes and weight control.

## **Impacts/Outcomes:**

1. Over three hundred and twenty (320) individuals participated in nutrition, health and diet workshops between October - September; approximately 33% of all participants were youth. Most participants indicated that they learned the importance of healthy eating, exercise, food safety, and alternative ways to prepare appetizing and healthy foods. Ten percent (10%) indicated a willingness to try vegetarian menus. Healthy beverage choices were demonstrated utilizing fresh, local fruit products.
2. Over 50% of participants expressed a change in behavior due to the information received in the various baking and nutrition workshops; especially in regards to three easy steps in meal preparation, planning and creativity in making nutritious meals for the family.

**Source of Funding:** USDA Smith-Lever

**Scope of Impacts:** Territory-wide

**GOAL 4: GREATER HARMONY BETWEEN AGRICULTURE AND THE ENVIRONMENT**

### *Program 7 – Urban Forestry*

In fulfillment of the Urban Forestry Program's objective to increase the knowledge and awareness of residents about the benefits and importance of properly planting and maintaining urban trees, staff made two presentations as part of the landscaping series sponsored by the St. George's Village Botanical Gardens and the St. Croix Environmental Association. One presentation was on Tree Biology and Tree Pruning, and forty (40) individuals were in attendance. The other presentation was on the services offered by the CES-ANR Program in the areas of tree care and urban forestry, and forty-five (45) persons were present for this second presentation.

Additionally, staff coordinated the efforts of the Cooperative Extension Service's co-sponsorship of the following urban forestry related educational activities:

1. International Society of Arborist Short Course which was also co-sponsored by SEA and attended by 30 individuals.
2. Utility Line Clearance Workshop which was also co-sponsored by SEA and had 24 participants.

Extension staff trained nine (9) new and returning supervisors of the Anti-litter and Beautification Commission's (ALBC) Summer Island Cleanup program. These supervisors were instructed in tool safety, tool selection, tool maintenance, basic tree biology, importance of pruning and pruning techniques. The practical portion of the training was partially conducted by two of the returning supervisors.

The Cooperative Extension Service in conjunction with the USDA Forest Service's International Institute of Tropical Forestry and the Puerto Rico Conservation Foundation sponsored the 7<sup>th</sup> Annual Caribbean Urban Forestry Conference and the 11<sup>th</sup> Caribbean Foresters Meeting on St. Thomas. This was the first time that these conferences were held jointly and it provided an opportunity for foresters to meet and exchange information. Approximately 150 foresters from the Caribbean and the U.S. attended the conference including scientists and representatives from government agencies and non-governmental organizations.

**Impacts/Outcomes:**

1. One hundred percent (100%) of the participants in the St. George Village Botanical Garden's landscaping series increased their knowledge of tree biology, tree care and other aspects of urban tree management.
2. Thirty-three percent (33%) of the new and returning ALBC supervisors increased their knowledge of urban tree care. Sixty-six (66%) percent of the supervisors increased their knowledge in two areas; tool safety and maintenance as these were new and expanded subjects. These supervisors then trained and supervised approximately 150 young people of the summer island cleanup program.
3. Ninety-five percent (95%) of the foresters attending the conference increased their knowledge of critical issues regarding urban forestry. Twenty (20%) percent of the foresters expressed interest in obtaining information and education about establishing urban gardening programs in their respective countries. For the majority of the foresters from the independent Caribbean countries, more emphasis will be placed on urban forestry.
4. Ninety-five percent (95%) of the urban foresters increased their knowledge of the forest/urban forest interface.

**Source of Funding:** USDA Forest Service grant - \$20,000

**Scope of Impact:** Territory-wide, the Caribbean region

*Program 8 – Backyard Composting*

Presentations on backyard composting were conducted at schools on St. Croix. There was a composting exhibit performed by students at the 2002 V.I. Agriculture and Food Fair. This exhibit provided an opportunity for thousands of persons attending the fair to increase their knowledge of composting.

Forty elementary school students were involved in conducting comparison trials of static compost piles versus actively managed compost piles as part of a class project. Students found that for composting to be successful, the pile has to be properly managed. Prizes were awarded to the students who wrote the best reports related to the experiment.

An elementary school teacher, along with her students, developed a composting demonstration video. This video, along with oral presentations by the students, was used to increase the knowledge of hundreds of elementary school students at the 2002 Earth Day activities.

Twenty responses were made to requests for assistance and about 10 site visits were made to residents' homes to provide technical advice to persons who were interested in or already involved in composting. These visits resulted in increased knowledge of residents regarding the setting up and troubleshooting of compost piles.

A series of composting training activities were conducted for 10 persons with the Anti-Litter and Beautification Commission of St. Croix. In addition to increasing the participants' knowledge of composting they were also encouraged to better manage their composting site.

**Impacts/Outcomes:**

1. A total of 1,860 students and other residents increased their knowledge of composting.
2. Approximately 75% of the residents involved in composting were successful in developing a finished product.

**Source of Funding:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

*Program 9 – Urban Gardening*

During this calendar year, Extension staff conducted a School Gardening Workshop for selected teachers in the St. Thomas /St. John district. As part of our efforts to encourage young people to get involved in gardening, CES invited teachers to participate in a “train the trainer” type workshop that was intended to provide them with fundamental concepts of gardening. Seventeen (17) teachers and school representatives from ten (10) schools spent the morning learning from and interacting with CES staff about the following subjects: Planning Your Garden, All About Your Soil, Pest Control, and Growing Your Vegetables. In the afternoon session, CES staff guided the school representatives through the Demonstration Garden. There, they observed the various options for container gardening, mulch types and drip irrigation.

Extension staff in the St. Croix district assisted four (4) new schools with initiating box garden (raised bed) projects involving approximately one hundred forty four (144) students. On a weekly or biweekly basis, the students learned how to select the material to build the box, customize and prepare the soil, grow and nurture seedlings, transplanting and caring for the crops until harvest. Extension staff built the first box then the students built the other boxes.

One hundred fifty (150) 4-H campers were taught the fundamentals of plant care and culture over a six-week period. Each student was presented with a vegetable or herb seedling.

Students were given instructions for three (3) weeks on soil fertility, fertilizers, watering, and other after transplanting care. They were then required to take care of the plants on their own and display “the finished product” at the closing ceremony.

Approximately one hundred fifty (150) youth and eight (8) supervisors from the Anti-Litter and Beautification Commission’s summer island clean up program were given a two and a half (2½) hour tour and lecture on landscaping with nature for the home landscape. The tour was conducted at the home of an Extension client who has utilized advice provided by Extension Services in developing her yard into a virtual botanical garden. The youth learned how ornamental plants are selected for the various micro environs that make up the garden.

Urban Gardening activities on St. Croix included hands-on practical experiences and practices involved in container gardening and producing vegetables in areas where space is limited were coordinated for ten (10) senior citizens at an independent living complex. They produced herbs and vegetables in abundance and sold the excess to other residents in the complex.

Extension staff presented a series of lectures/demonstrations on rabbit care and box gardening to five (5) elementary schools on St. John. Two hundred twenty-five elementary school children were given a series of one-hour hands-on demonstrations on raising rabbits in a small environment. One of the schools was shown the fundamentals of box (raised bed) gardening including the dimensions, type of soil preparation, and vegetables to be grown in the garden.

### **Impact/ Outcomes**

1. Ninety-five percent (95%) percent of the teachers in the St. Thomas/St. John district’s School Garden Workshop increased their knowledge of gardening fundamentals. One new garden was developed from among the participating schools. The teacher took the knowledge gained about drip irrigation and not only was he able to put together a simple system for his school garden but he demonstrated the concept of drip irrigation with parents at a PTA meeting.
2. Ninety percent (90 %) of the campers reported learning something new about caring for plants. Twenty-five (25%) of the 4-H campers grew their plants satisfactorily and displayed them at the closing ceremony. A parent of a handicapped child commented that she had never seen her son devote so much attention to anything except taking care of his basil plants.
3. One hundred percent (100%) of the youth in the summer island clean up program reported increasing their knowledge of plants in their proper environment. Thirteen percent (13%) of the students were able to use the knowledge gained to assist their supervisors in selecting appropriate plants for specific planting sites.

**Source of funding:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

*Program 10 – Water Quality Protection*

Key Theme – Water Quality

**Brief Description:**

Educational programs targeting the general public, youth, businesses, professionals, government agency personnel, homeowner associations and community organizations were conducted to teach individuals about drinking water quality (specifically related to cisterns), septic system operation & maintenance, nonpoint source pollution, wastewater management, least-toxic household products, watershed management & land use, crop land and pasture land management re: NPS pollution, and coastal water quality. Home water quality test kits were distributed to individuals in both districts, and results and information on practice implementation collected. Training and demonstration projects in erosion, sediment & stormwater control, alternative onsite sewage disposal system design & installation, home water quality assessment, and farm water quality assessment provided excellent “hands-on” experiences for local government personnel and professionals.

**Impact/Accomplishments:**

1. Over 130 people increased their knowledge and awareness of best management practices to improve drinking water quality through workshops and media outreach (radio talk shows, fairs, PSAs), with 123 adopting one or more practices to improve drinking water quality (regular water testing, chlorination/disinfection, cistern cleaning, filtering, screening cistern pipes, checking MSDS for roof/cistern coatings). Ninety-eight people tested their cistern water and/or implemented recommended treatment practices (monthly chlorination, filtering, cistern pipe screening, replace piping, clean gutters).
2. Over 2150 people increased their knowledge and awareness of NPS pollution issues and best management practices to protect and improve surface and ground water through workshops, presentations, fairs, media outreach (TV & radio talk shows, radio PSAs), and individual contacts. Over 1200 clients reported passing along information & materials to friends, family, clients, and adopting best management practices, such as using native or water-conserving plant materials, soil conservation methods, proper septic system siting, design, operation & maintenance, use of least-toxic household products, reducing NPS pollution. Kmart staff have reported that Borax and other less-toxic cleaning supplies in much higher demand since initiation of Safe & Healthy Home workshops.
3. Over 220 business people, local government personnel, decision-makers and development professionals increased knowledge and awareness of nonpoint source pollution issues through training, conferences and technical assistance consultations, and 135 adopted BMPs to protect drinking water, or to protect and improve surface and ground water by



implementing erosion & sediment control practices, retrofitting failing septic systems, stream restoration, using least-toxic household products & properly disposing of household hazardous waste.

**Sources of Funding:**

CSREES Regional Water Quality Coordination Grant – \$137,671.10 (FY 2001-2003)  
Magens Bay alternative OSDS – \$64,000 §319 grant (FY 2000 multi-year grant)  
VI\*A\*Syst Train-the-Trainer – \$25,000 §319 grant (FY 1998 multi-year grant)  
LaGrange gut rehabilitation – \$21,000 §319 grant (FY 2002)  
EPA Environmental Education grant (VI\*A\*Syst outreach) – \$14,130 (FY 2001/2002)  
CSREES/HUD Healthy Homes grant – \$4,300 (FY 2001+2002)

**Scope of Impact:**

Territory-wide; also with Region 2 water quality coordination project (UPR, Rutgers, Cornell, Region 2 EPA/CSREES Liaison); assistance/ information provided to New York, Florida, Virginia, Wisconsin, Puerto Rico, British Virgin Islands, USDA-NRCS, U.S. EPA.

Key Theme - Soil Erosion

**Brief Description:**

Soil erosion continues to be a considerable water quality and environmental threat in the Virgin Islands. Poor land clearing and landscaping practices are negatively impact flora, wildlife, soil, and water resources. Sediment resulting from soil erosion on construction sites, dirt roads and other disturbed areas is the largest pollutant of Virgin Island waters, by volume. Recent studies conducted by V.I. National Park researches have documented significant coral reef ecosystem degradation resulting from the effects of sedimentation. UVI-CES was awarded a two-year §319 grant to provide education and training in the design and implementation of low-impact developments and successful erosion and sediment control practices (BMPS) to the construction industry (architects, contractors, draftsmen, developers, and engineers).

**Impact/Accomplishments:**

1. Ground cover and vetiver demonstration plots and the porous pavement parking lot at the CES St. Thomas Home Demonstration Garden were maintained. Tours of the erosion & sediment control demonstration site were conducted for 35 regulators, government agency representatives, construction industry personnel, and homeowners interested in implementing BMPs on their home construction sites.
2. Revision of the *1995 V.I. Environmental Protection Handbook* was completed and 500 copies of the Handbook were printed. The Handbook is a guidance manual produced for the V.I. Department of Planning & Natural Resources which describes planning, erosion, sediment and stormwater control practices for use on construction sites. DPNR personnel refer Earth Change and CZM permit applicants to this manual for use in developing stormwater pollution prevention plans. The revised Handbook was introduced at the 7<sup>th</sup> Annual V.I. NPS Pollution Conference, and advertised in local media. To date, over 100

Handbooks have been distributed. The Handbook was also digitized and made available online (<http://rps.uvi.edu/CES/VIEnvironmental.Protection.Handbook.pdf>)

3. The St. Thomas hydroseeder was loaned out on six (5) different occasions to stabilize disturbed areas at local school and government construction sites. Increased use of this practice by the construction industry in St. Thomas is a success story of this project. Assistance was also provided to over 50 clients, by request, on erosion and sediment control practices, plant materials, and stormwater control. Twenty-seven local business people and government personnel were certified to use the hydroseeder during training workshops.

**Source of Funding:** \$20,000 – two-year §319 grant from V.I. DPNR  
**Scope of Impact:** Territory-wide; technical assistance also provided to FHA for a local project; government agency personnel and professionals in Puerto Rico and the British Virgin Islands.

### *Program 11 – Natural Resources & Environmental Management*

Key Theme – Natural Resources Management

#### **Brief Description:**

Educational programs targeting the general public, youth, businesses, professionals, government agency personnel, homeowner associations and community organizations were conducted to teach individuals about urban forestry, habitat preservation, native & endangered plant species, native plant propagation, invasive plants, environmental landscaping, and ethnobotany. Training, demonstration and research projects in tree conservation and restoration (urban forestry), environmental landscaping, Virgin Islands natural history (for ecotourism), building nature trails, medicinal properties of native plants, natural products, and rapid ecological assessment provided excellent “hands-on” experiences for local government personnel, educators and professionals.

#### **Impact/Accomplishments:**

1. Over 4900 youths (including UVI students) and adults increased their knowledge and awareness of V.I. natural resource management issues and best management practices to preserve & protect native plants & habitats, implement environmental landscaping, conserve resources and promote ecotourism through workshops; classroom, youth & community group presentations, hikes, fairs, media outreach (TV & radio talk shows, radio PSAs), and individual contacts. Over 150 clients reported adopting BMPs to protect native trees and habitats, and conserve resources.
2. Over 120 business people, local government personnel, decision-makers and development professionals increased knowledge and awareness of habitat protection, environmental management and resource conservation issues through demonstrations, conferences,

training and technical assistance consultations, and at least 80 adopted BMPs to protect native trees and habitats, and conserve resources.

3. CES continued its partnership with the UVI Science and Math Division to incorporate lessons on native plants, Virgin Islands vegetation communities, resource conservation, and chemistry of commonly used medicinal plants into class curriculums, helped develop in-service learning projects for UVI students that involved restoration of Brewers' beach vegetation and maintenance of grant-funded campus beautification projects, and collaborated with UVI researchers & students on projects to propagate native trees to restore vegetation patches on the UVI St. Thomas campus, investigate native plant biochemistry for a natural products research project, and inventory big trees of cultural interest in the Virgin Islands. CES also continued to work closely with the UVI St. Thomas Physical plant, providing assistance with campus beautification projects, developing tree maintenance & landscape plans for both campuses, training staff in proper erosion & sediment control practice installation, and developing Brewers Bay beach beautification, maintenance and management plan.

**Source of Funding:** USDA Smith-Lever

**Scope of Impact:** Territory-specific; also consultation with Sweet Briar College researchers, assistance/ information provided to New York, Florida, Georgia, Puerto Rico, British Virgin Islands, USDA-APHIS, USDA-NRCS.

Key Theme – Environmental Public Policy

**Brief Description:**

Local policy-makers and regulators lack access to complete and unbiased information on which to base their decisions and, often, have an incomplete understanding of complex environmental issues. Local agencies charged with environmental regulation and stewardship lack the resources, personnel and expertise to deal with the myriad of problems they are faced with on a daily basis. Extension has the unique opportunity to play a critical and lead role in collecting, developing and disseminating information relating to water resources, water quality and watershed management and promoting public awareness of environmental issues, with special emphasis on water resource protection and watershed planning. In addition, Extension is in a position to facilitate the interaction of community groups and local leaders to address these problems.

**Impact/Accomplishments:**

1. Extension is the primary technical assistance resource for the Magens Bay Authority, a semi-autonomous government agency that manages the 60-acre Magens Bay beach and park property, assisting in securing grant funding for projects, providing recommendations for landscaping, resource management and conservation, trail development, arboretum restoration, and wastewater management.

2. Extension is a significant technical assistance resource for the Virgin Islands Department of Planning and Natural Resources (DPNR), the local environmental regulatory agency. CES routinely provides input and assistance to DPNR's Divisions of Environmental Protection & Coastal Zone Management in regards to policy issues related to land development and habitat protection, technical review of environmental assessment reports and watershed management plans, provision of information on plant materials for erosion control and alternative wastewater treatment systems, and training in stormwater runoff estimation and BMP design and construction. Extension is also a significant leader in DPNR advisory committees, especially the V.I. Nonpoint Source Pollution Committee, for which CES manages the Committees operating budget, funded by a §319 grant, produces the Committee's quarterly newsletter, funded by a separate §319 grant, and coordinates the Committee's annual Nonpoint Source Pollution conference.
3. Extension provides technical assistance to and is a primary participant in numerous government/NGO advisory committees, including the Urban Forestry Council, VI RC&D, Great Pond Advisory Committee, Marine Park Advisory Committee, Anti-Litter & Beautification Commission, and The Nature Conservancy.
4. Finally, Extension has expanded its outreach to Virgin Islands Senators, providing technical assistance to 3 different senators legislation regarding drinking water quality, stormwater runoff and pollution prevention, land use and habitat protection.

**Source of Funding:**

- V.I. Newsletter – \$19,570 §319 grant (remainder FY 2000 grant + FY 2002 2-year grant, continuing project renewed bi-annually)
- V.I. Nonpoint Source Committee – \$6,600 §319 grant (continuing project renewed yearly)  
Smith-Lever

**Scope of Impact:** Territory-specific

**GOAL 5: ENHANCED ECONOMIC OPPORTUNITY AND QUALITY OF LIFE FOR AMERICANS**

*Program 12 – Limited Resources Individuals and Families*

From October 24-December 12, 2001, a **Money Management Short Course** gave twenty-eight (28) participants information about the importance of values and goals-especially spending goals, budgeting, estimating income, non-money income, fixed and flexible expenses and evaluation in managing money.

November 8-29, 2001 a **Successful Parenting Short Course** was offered and twenty-four (24) persons participated. Topics included improved self-esteem, good communication,

appropriate discipline, school success, school/parent teamwork, effective use of homework and the single parent family challenge for children and parent.

Another **Successful Parenting Short Course** was held targeting ten (10) Spanish speaking participants from November 8- December 13, 2001.

During January – February, 2002 preparations were made for the annual **Agricultural Food Fair** at the university; and the **Adult Sitter Class** to be held in April. As part of the Food Fair, a display and manned booth featuring short courses and workshops offered by the Limited Resources Individuals and Families component were prepared. Several individuals expressed an interest in taking some of the workshops and short courses at the next opportunity, especially tax preparation, money management and adult sitter.

In collaboration with the **Mini-Society®** effort, staff attended training in preparation for delivery of this information targeting low-income family youth learning about entrepreneurship. This training was held in collaboration with (approximately 30) school teachers and other youth serving individuals from March 11-13, 2002 in St. Croix, and the following week in St. Thomas/St. John, twenty-five (25) persons participated. This training was designed to enhance the experiences of youth in the school system, 4-H and CYFAR participants as they learn about entrepreneurship, civic obligations and responsibilities in a democratic society. In the future, it is anticipated that the curriculum will be incorporated into the elementary and junior high schools program in the territory.

On March 26, 2002, twenty-six (26) participants attended a **Tax Workshop** sponsored by the CES and delivered by a local IRS agent. They received information on several topics including: who must file, exemptions, income, standard deductions, itemized deductions, tax computation, tax credits, payments, pensions and completing the tax return.

An **Adult Sitter Clinic** was held from April 22-26, 2002 where eighteen (18) participants learned the characteristics of an adult sitter and the do's and don'ts of a caregiver. Participants were residents of the Village, Ginger Thomas Home, the Housing Authority and the general public. Discussions also included: food and nutrition for the elderly and food safety, coping with the disoriented, infection control, patient hygiene, and other topics including, helping the disabled, also skills in assisting and providing companionship. Many of the participants were interested in meeting the increasing need for adult sitters in the community and anticipate becoming gainfully employed providing this service.

A **Babysitting Workshop** was held at the John H. Woodson Jr. High School on May 1, 2002; eighteen (18) males and females learned about the correct way to care for infants and toddlers. Another **babysitting workshop** was held on May 2, 2002 at the same junior high school. The participants were thirty-one (31) students both males and females.

On May 15-16, 2002 eighteen (18) on the first day; and thirty-one (31) on day two, John Woodson Junior High School students participated in an **Etiquette Workshop**. Students learned

how to set the table properly, use good table manners, set a formal and informal table, and use utensils properly (American and European style).

Staff participated in preparations for Annual Summer Camp Program scheduled for June.

June 5-26, 2002 participants from the Village, Flamboyant Gardens and from the public participated in a **Money Management Workshop**. Thirty-one (31) persons learned about the importance of values and goals, especially spending goals; budgeting, estimating income, non-money income, fixed and flexible expenses and evaluation in managing money.

On June 26, 2002 a **Spanish Parenting Class** was held at the Human Services Conference Room. Seven (7) persons attended. Topics included self-esteem is the key, communication is crucial, discipline makes the difference, school success takes teamwork, the single parent family –a challenge for children and parents.

A **CPR** course was offered in conjunction with the Charles Harwood Complex staff on July 1, 2002 participants were individuals who took the Adult Sitters course.

September 3-24, 2002, a **Spanish Parenting Class** was held, topics included self-esteem is the key, communication is crucial, discipline makes the difference, school success takes teamwork, the single-parent family – a challenge for children and parents.

From September 21- February 2, 2003 a **Child Care Provider Short Course** was held in association with the Department of Human Services and ChildWorth. This five-month training program is designed to equip child care providers with tools to help them succeed in providing quality child care for the V.I. community. Twenty-one (21) day care providers received information on the importance of having a quality facility, maintaining health and safety standards, and being concerned about nutrition and oral health. Information on brain development and attachment, principles of growth and development; and infection control and illness prevention completed the topics covered during this four-month short course.

### **Impacts/Outcomes:**

1. During this period, over three hundred and thirty-three (333) individuals took advantage of the workshops and short courses offered to impact limited resources individuals and families. The range of participants continues to encompass the elderly, young, multi-lingual, disabled and other members of the Virgin Islands community. Emphasis on collaboration with other agencies is also apparent under this goal and increases the synergistic effect of the program efforts. See specific outcomes above in individual workshop and short course descriptions.
2. All participants received information about the importance of values and goals-especially spending goals, budgeting, estimating income, non-money income, fixed and flexible expenses and evaluation in managing money. Twenty-five (25%) percent committed to adopting more stringent methods in managing money.

3. All of the persons in the Parenting Classes received training in the following topics: improving self-esteem, good communication, appropriate discipline, school success, school/parent teamwork, effective use of homework and the single parent family challenge for children and parents. The Parenting Workshop included both Hispanic and black parents – in two separate classes- one conducted in English and the other in Spanish. Ten (10%) expressed an interest in receiving additional information.
4. The Mini-Society training was designed to enhance the experiences of youth in the school system, H and CYFAR participants as they learn about entrepreneurship, civic obligations and responsibilities in a democratic society. Ninety-eight (98%) of the adult participants receiving the initial training expressed an interest in implementing this curriculum in the school system or other youth serving agencies or organizations.
5. This five-month training program was designed to equip childcare providers with tools to help them succeed in providing quality child care for the V.I. community. Twenty-one (21) day care providers received information on the importance of having a quality facility, maintaining health and safety standards, and being concerned about the three steps to good nutrition and oral health. Information on brain development and attachment, principles of growth and development; and infection control and illness prevention completed the topics presented during this five-month short course.

**Source of Funding:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

### *Program 13 – Marketable Skills*

An eight-week **Intermediate/Advanced Clothing Construction Course** was held during the October-December, 2001 period. These classes were held two days per week from 9:30 – 11:30 a.m. for eleven (11) participants. They were given an opportunity to learn new sewing skills and techniques; and to improve on what they learned previously. A variety of garments were completed including: 14 jackets, 5 blouses, 11 dresses, 14 skirts and 2 half slips. *These classes were held as a follow-up to the Beginners' Clothing Class conducted during the previous quarter.*

Also, during this quarter eleven (11) participants took part in the **Home Decorating and Gift Items Workshop**. This provided participants with the opportunity to make items for their homes or to give as presents to family and friends. Many items were made to assist in generating income by selling items at various venues around the islands. Emphasis was placed on utilizing creative ways to develop marketable items from recycled materials. All items were placed on display for the general public. Over one hundred and ninety- six items were completed. These included: decorative towel sets, potpourri wash cloths, flat sheets, napkins, place mats, decorative soap, tree ornaments, fitted sheets, candle holders, pillow shams, decorative table cloth, flower baskets, washcloths, cosmetic bags, and other assorted items.

Preparations were made for the Agricultural and Food Fair held in February, 2002. Many of the items listed above were on display for the thousands of fairgoers to view. The most popular items each year tend to be the t-shirts, sewing with knits, lingerie and the home decorating and gift items. Additionally, participants sold items made to the general public. Many had not considered entrepreneurial endeavors prior to this experience.

Staff attended an Economic Development Conference, entitled: “Emerging Businesses and Their Role in the New Economy” sponsored by the Women’s Business Center, The St. Croix Foundation and the U.S. Department of Labor – Women’s Bureau from April 18-20, 2002.

During this quarter a **Beginners Clothing Class** was held on May 6 – June 12, 2002 with 12 participants. Most of the participants had little or no experience in sewing. A class for **T-Shirt Making** started on May 14, 2002 - June 13, 2002 with six (6) participants. Participants were taught how to operate a sewing machine, identify the parts and explain their function. Participants were also given limited exposure to the overlock machine. The participants were engaged in learning about and completing several samples of seam finishes, darts, hems and centered zipper application. They learned about body measurements, fabric yardage, fiber content, sewing notions, sewing terms, pattern parts including guide sheets, layout, cutout and tracing and assembling of garments. For beginning participants, the required garments were a straight or A-line skirt or simple pants with zipper, darts and a waistband. A simple pullover blouse with a round, square or V-neck opening was also required. Only plain fabric was used in cotton blend, linen, khaki or broadcloth.

The annual **Young Scholars or Summer Teens’ Program** was held from June-August 2002, with the assistance of two assistants, for teens 10-15 years old. A total of 32 female students were enrolled. The program was designed to help the students learn the parts and operation of the sewing machine. They were given the opportunity to take body measurements and find their pattern size. Also, they were taught how to select pattern pieces to be used, how to lay out, cut out and sew selected garments. The students learned various techniques such as making darts for busts, waistline and hems. They also learned to use sewing tools. Items made included: blouses, skirts and capris. Some blouses were sleeveless, while others had capped sleeves; some had round, square or a v-neck line. Skirts were made with elastic waist and some with a back hemline vent. Other skirts were made with a back zippered waistband and a back, front or side vent. Students had the opportunity to model the garments made at a closing ceremony.

### **Impacts/Outcomes:**

1. Over seventy (70) individuals gained knowledge and skills in home decoration, gift item and clothing construction; forty-eight percent (48%) were teens. Workshops assisted in the development of marketable skills for low-income families. Several teens made outfits to wear to school, which had a very positive effect on their families’ savings on clothes.
2. New sewing skills and techniques were shared with all participants, 50% had not sewn a garment previously.



3. Fifteen percent (15%) of the home decorating and gift items made by the participants were later purchased by individuals interested in the unique, creative, tissue box covers, clothes pin hangers, detergent bottle covers, decorative towel sets, pillow cases, hats, lingerie, pot holders and aprons.
4. Six (6) staff attended an Economic Development Conference, entitled: “Emerging Businesses and their Role in the New Economy” sponsored by the Women’s Business Center. They received knowledge about the “abc’s” of starting your own business, including the pitfalls of not writing a business plan, challenge of undercapitalization; and other challenges. Additionally, presentations by prominent, successful business women who shared their success stories made the importance of preparation before entering a business endeavor very clear.

**Source of Funds:** Smith-Lever  
**Scope of Impact:** Territory-wide

#### *Program 14 – Volunteer and Youth Leadership*

The Southern Region 4-H Volunteer Leaders Forum was held October 3-7, 2001; staff facilitated participation of two volunteer leaders from each district.

4-H Club Officer/Junior Leadership Training was held on October 29 and November 19 for Seventh Day Adventist School 4-H Club; 12 4-H members and one (1) teacher/volunteer participated. Emphasis was placed on the importance of taking responsibility for behavior, “playing fair” with others, establishing teamwork, having a mentor for guidance, and willingness to persevere in the face of challenges; and display honesty.

A 4-H/Youth Garden Workshop was organized and held December 11, 2001. Thirteen (13) 4-H members, and three (3) teacher/volunteers representing five (3) schools attended. Transplanting techniques, garden layout, pest identification and management, record-keeping and soil bed preparation were discussed. Considerable enthusiasm was exhibited by the young people as they got an opportunity to participate in the demonstrations.

Staff assisted in selection, orientation and preparation of one staff person, one youth leader; and three youth delegates for the 72<sup>nd</sup> National 4-H Conference which was held on April 7-13, 2002 in Washington, D.C. The five person Virgin Islands delegation included CES staff, a volunteer and 4-H Club and a CYFAR participant.

Also, during this period, staff conducted five 4-H Community Service/Leadership Project Meetings resulting in a youth-led initiative to organize and implement the Ag Olympics at the annual VI Agriculture and Food Fair. A group of eight (8) youth also prepared for children’s games as part of the Kite-a-Thon, April 1, 2002. The Kite-a-thon was designed to teach youth the art and science of kite-making. The friendly competition resulted in the following categories winning an award - highest kite flown, the longest kite constructed, and the steadiest kite operated.

A 4-H Junior Leadership/Community Service Project was held with 14 high school students where they were recognized and credited with over 25 hours of community service. Their biggest contributions included planning and implementing the Children's Games at the 2002 Agriculture and Food Fair, and coordinating the Easter Egg Hunt during the Kite-a-thon.

Junior leadership yielded five (5) graduating seniors going to college; and eight (8) remaining sophomores and juniors who rejoined the Rising Phoenix 4-H Club.

**Impacts/Outcomes:**

1. Forty-three (43) 4-H members, six staff, and seven volunteers worked under the volunteer and youth leadership component of the 4-H Program where they acquired leadership skills, training in public speaking and information on exercising good civic responsibilities.
2. As a result of their participation in the National 4-H Conference, three (3) teens are providing youth leadership at extension activities on an ongoing basis.

**Source of Funds:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

*Program 15 – 4-H Club Systems*

Through recruiting efforts, one school-based club was organized representing 25 4-H members and one volunteer. A community-based club was established called the “Golden Eagles” 4-H Club at the Louis E. Brown CYFAR Center.

Staff conducted workshops, trained twenty (20) junior and teen leaders, and provided support services for 4-H project development in arts and crafts, career development and college preparation, community service, computers, embryology, gardening, horses, small livestock, leadership, marine science and veterinary science.

Staff served on fair boards, CYFAR Planning Committee and the Research and Public Service Fairs and Exhibitions Steering Committee.

A 4-H Leadership Project was initiated to assist fifteen (15) high school students complete their community service requirements.

In cooperation with Antilles School on St. Thomas, staff coordinated an “Embryology in the Classroom” project with 23 first grade students resulting in a 55% hatching rate.

The Incubator in the Classroom Project was held on January 16, 2002; sixteen (16) first-graders, ages 6 & 7, two (2) teachers and one (1) parent, hatched 22 of 36 bantam eggs (a hatch rate of 61%). Technical assistance was provided to the Science Fair Embryology Project for one student at Good Hope School which led to an honorable mention in the senior high division for that student.

St. Mary's Catholic School Career Day was held on February 26, staff served as a guest speaker on AgriScience and agriculture related career opportunities; spoke to 18 5<sup>th</sup> – 8<sup>th</sup> graders resulting in an invitation to return and do a follow-up on AgriScience activities in May.

The annual Agriculture and Food Fair was held February 16-18, 2002, the 4-H Program participated in the following activities:

- 1) Agriculture Fair Clean-up Day on February 9 –**community service activity** involving forty-three (43) 4-H members and 8 volunteer leaders representing 3 clubs. Youth were committed to giving back to the community through this project. They also learned about the considerable amount of responsibility of planning and closing of a large endeavor such as a food fair.
- 2) 4-H/Youth Small Livestock Fitting and Showmanship competition, February 18; fourteen (14) 4-H members and two (2) volunteer leaders representing two clubs participated in the poultry and rabbit demonstrating animal handling skills, general knowledge, animal husbandry skills, etc.
- 3) 4-H Youth Groom Squad Competition, February 17th in collaboration with the Pony Club involved 15 youth and 4 adult volunteers. Competition between 4-H and the Pony Club included general knowledge, safety techniques in working with a horse, importance of team work, cooperation and good sportsmanship.
- 4) 4-H Drink Booth manned by 4-H staff and volunteer leaders with funds raised to benefit 4-H volunteer development.
- 5) UVI-CES 4-H/ Youth Development Program booth recorded over 434 individuals paid a visit during the fair.

Demonstration/Illustrated Talk Workshop was held on March 26 and April 9, 2002 attended by ten (10) 4-H members, three (3) adult volunteers and one (1) parent.

The Randolph Lockhart Panthers 4-H Club was formed with two (2) adult volunteers and 22 4-H members who are looking forward to leadership development, cooperation, teamwork, pursuing knowledge and skills in arts and crafts, gardening, computers, bicycles, horses, food and nutrition, and community service.

The Leatherback Clovers 4-H Club provided technical support to the club's community service initiative to re-stage the Easter Monday Kite-a-Thon, April 1; 75 persons, including 63 4-H members, the general public, parents, adult volunteers and other kite enthusiasts braved torrential rain on both days to participate. The friendly competition - eluded to earlier in this report regarding the Kite-a-thon - provided much interest and enthusiasm.

Staff served on the Virgin Islands Board for Vocational Education – 1<sup>st</sup> Annual State Conference, on April 19, 2002, "Solving the Problems Today for the Challenges of Tomorrow."

This conference afforded the program staff networking opportunity with the vocational/technical education community with further collaboration planned.

During the months leading up to April, preparations were made for the St. Thomas 4-H clubs to participate in the 50<sup>th</sup> Annual Children's Carnival Parade. Forty (40) 4-H members – 25 boys and 15 girls; five (5) parents, and 1 volunteer leader practiced diligently for one month. Costumes were made and their entry received an award.

Staff also prepared for the 8<sup>th</sup> Annual 4-H Project Exposition although the event was postponed to May 11<sup>th</sup>. On May 11, 2002 approximately 90 4-H members representing the Leatherback Clovers CYFAR Golden Eagles, Randolph Lockhart Panthers and the St. Croix Christian Academy 4-H Clubs participated. Eleven (11) 4-Hers presented demonstrations on rocketry, how to make a Gyro sandwich; and a variety of arts and crafts. Over thirty (30) volunteer leaders, parents and friends were on hand to celebrate the accomplishments of the youth and to celebrate 4-H's 100<sup>th</sup> anniversary.

On July 24-28, 2002 the National 4-H Technology Conference was held at the University of Minnesota; seven (7) delegates attended from the Virgin Islands. As a result of the youths' participation, a proposal was prepared and submitted to host a 4-H Cyber Boot Camp at the university.

Efforts are underway to re-establish six (6) school-based clubs: Eulalie R. Rivera, Evelyn M. Williams, St. Mary's Catholic School, Free Will Baptist Christian School, St. Croix Christian Academy and the Seventh Day Adventist School. The CYFAR Golden Eagles 4-H Club is being reorganized. Also, the 4-H Leadership/Community Service Club is continuing to meet the many requests for community service hours. Preliminary contacts have been made with Beacon School Programs which are considering offering Mini-Society® at the Claude O. Markoe School and the GLOBE Program at the Elena Christian, Jr. High School.

The 4-H Project Development component is offering the following projects through the volunteer leader corps: arts and crafts, bicycles, biotechnology/gardening, computers/aerospace, foods, hands-on science, horses, marine science, leadership and rabbits; and small livestock/veterinary science.

Staff participated as judges in several science fairs and career days held locally.

### **Impacts/Outcomes:**

1. Over two hundred, and seventy-three (273) 4-H club members participated in the 4-H Club System activities; fifty-six (56) volunteers, ninety-seven (97) students and twelve (12) parents, ranging from the Kite-a-thon to leadership training. See specific outcome above under individual description of output.
2. The Golden Eagles 4-H Club in collaboration with the CYFAR Program is being reorganized, however during the year – twenty (20) youth, ages 5-19- had an opportunity

to develop their leadership and creative skills, to build self-worth and to foster teamwork in a safe, educational environment.

3. Fifteen (15) members of the 4-H Leadership Project were able to exercise their voices through research, selection, planning, implementation and evaluation of their community service projects.
4. The Incubator in the Classroom Project allowed sixteen (16) students to gain firsthand knowledge and experience and the joy of an inordinately high hatching rate sparking their interest in science.
5. Five (5) youth returned from the National Technology Conference and assisted in the organizing of a local technology boot camp to enhance the technology skills of VI youth.

**Source of Funds:** USDA Smith-Lever

**Scope of Impact:** Territory-wide

#### *Program 16 – 4-H Summer Day Camp*

In general, the 4-H program provided technical assistance in the planning and initial implementation stages for the 2001 UVI-CES Summer Program; coordinated 36 field trips and transportation, t-shirt design and procurement, insurance; assisted in hiring process counselor positions; coordinated counselor orientation and training. Counselor Orientation and Training was held June 18-21. There were 2 site coordinators, 12 senior counselors, 30 junior counselors, 4 volunteers, 5 foster grandparents and 2 student assistants. The camp started on June 24 – August 2, 2002. The Virgin Islands 4-H Summer Day Camp Program assisted the Summer Camp Coordinator in implementing an educational, safe and fun filled six-week summer camp experience. The combined total of four hundred and fourteen (414) youth (including St. John, St. Thomas and St. Croix) participated in the Summer Camp Program. Emphasis was placed more on academics this year, however many of the traditional subjects remained, i.e. science projects, entrepreneurship, the world of work, dance, clothing construction, nutrition, art, English and Mathematics. The world of law was added this year.

#### **Impacts/Outcomes:**

1. Four hundred and fourteen (414) youth from St. Croix, St. Thomas and St. John participated in the Summer Camp Programs. 10% of the junior counselors decided that they are interested in working with young children during the course of their careers, as a result of the summer experience.
2. The Summer Camp Open House showcased many of the activities in which the youth had been involved and encouraged some interest in furthering their education after high school. Parents seemed very impressed with the productivity of the young people.

3. One hundred and twenty (120) young entrepreneurs developed business plans, set-up their own currency and turned their camp into a business venture.
4. Senior counselors were requested to complete an evaluation form and report at the end of the summer camp. Selected anecdotal/testimonial responses regarding the positive reciprocal impact the youth had on them follow: (*Senior Counselor Responses*)

“ Guest speakers greatly enhanced the experience for the youth.”

“ Many of the young people had not considered career options but were exposed to several role models.”

“ I was surprised at the receptivity of the youth even though many aspects of the Summer Camp experience seemed like “school.”

“ The young children’s eyes lit up when they started to understand the computers.”

“ The opportunity to actually work with soil and see how plants grow fascinated the kids.”

“ The excellent ratio of counselor to child was important for close interaction with children.”

“ Mock court really sparked an interest in how laws work.”

“ Dance class was the favorite for some of the young girls.”

“ Mini-Society had the youth so excited it was hard to get them to re-focus on other topics.”

“ The variety of offerings kept the youth interested, i.e. photography, journalism.”

“ Many youth enjoyed the opportunity to engage in physical activity – exercising, etc.”

***Other IMPACTS noted:***

- Males served as role models for the boys in camp – great to have males involved.
- Character education stressed for all youth seemed to have an impact on behavior.
- Behavior change occurred by utilizing conflict resolution with youth and parents.
- Recognition of staff and counselors publicly had a positive impact on youth.
- Comfortable and positive relationship with counselors increased trust and output of youth.
- Youth better understand the responsibilities and obligations of citizenship through Mini-Society.
- Camp experience enhanced youth’s ability to be creative.
- Closing program showcased talents and creativity of youth through song, dance, poetry, rap, drama, etc.
- The opportunity to bake and learn to prepare healthy meals assisted young girls in understanding the importance of planning ahead.
- Youth made new friends of staff and students.
- Youth in attendance indicated that they would highly recommend the camp experience to other youth – it was six weeks of fun and learning.

**Source of Funds:** USDA Smith-Lever; Kauffman Foundation Grant

**Scope of Impact:** Territory-wide

## **Stakeholders' Input:**

The Cooperative Extension Service (CES) seeks to involve all the stakeholders or their representatives in the process of developing educational activities. The CES Advisory Council is comprised of nine community leaders who are representatives of the respective programs in Extension. Their main purpose is to provide guidance and direction to the agency in its community outreach activities. They advise, counsel, and confer on the development of annual and long-range plans; represent the attitudes, opinions and feelings of stakeholders with regards to CES' outreach activities and to assist in the development of new activities; assist in communication between CES and its stakeholders. These nine members are also members of different community groups and some are also members of the 4-H Advisory Council and the Homemakers Club. This group meets every quarter. Special meetings are held as needed by the Council or are called at the discretion of the CES State Director. This group evaluates Extension programs and makes recommendations that are used to modify or refocus the different programs. Community groups are sometimes invited to enable them to give ideas and information to be used in their development of CES programs. The Chairman of the CES Advisory Group is also a member of the Research and Public Service (RPS) Advisory Council. CES is a unit within the Research and Public Service Component.

An evaluation form is given to participants at all seminars, meetings, and workshops. Participants normally fill out these forms and a computation is made at the end of the session to determine clientele response and needs. Farm and clientele visits are made occasionally to determine the impact of the program and suggestions made by clientele are recorded and are used to make improvements in educational activities.

CES, in conjunction with the Farm Services Agency, conducted two public listening sessions in both districts where residents were able to voice their opinions and ask questions about our programs. The recorded information was shared with all CES program leaders. These listening sessions were advertised through the two local newspapers, the University and RPS newsletters and the local television and radio stations.

Stakeholders' involvement in Extension programs has helped CES in providing a good public image in the community and has also helped CES in setting priorities and addressing emerging issues in the community.

CES has also established collaboration with the Department of Health, the Department of Labor, the Virgin Islands Housing Authority, and the office of the Governor to help address at risk issues in the community.

### **Program Review Process:**

No significant changes have been made in the program review process for the five-year Plan of Work.

### **Evaluation of the Success of Multi and Joint Activities:**

Two main joint research and extension programs were undertaken to address the critical need of the farming community in the Virgin Islands: the Sustainable Agriculture Program and the Beef Dairy and Livestock Program. Under the Sustainable Agriculture program, several activities were undertaken to emphasize alternative agricultural management practices. Workshops, seminars, and demonstrations conducted addressed sustainable agriculture practices in the production of various fruits and vegetables in the Virgin Islands. CES, AES and their collaborators worked jointly in hosting a farmer's day that was attended by the targeted clientele on sustainable agricultural practices. This clientele consisted of all the small farmers, medium and large producers and urban and home gardeners interested in sustainable agriculture practices.

The objectives of these programs were to combine resources and also provide a holistic approach in addressing producers concerns. The response has been overwhelming; there has been an increase in program participation and producer confidence in having their concerns addressed in a timely manner. There has also been an increase in the number of producers selling their produce in the farmers' market. Resources are also being utilized more efficiently.

Joint CES and AES staff provided training, information and technical assistance to strengthen participants in the beef, dairy and small livestock program. AES conducted semen evaluations on breeding bulls for local farmers, especially those who could not own their own bulls to use in breeding and improving their animals. Scientific and relevant information to ensure proper management practices were disseminated to program participants, and both CES and AES staff conducted workshops and demonstrations for these producers. CES, AES, and the Department of Agriculture staff joined together in helping livestock producers in identifying their animals.

These joint programs assisted Virgin Islands' farmers in being able to produce vegetables and culinary herbs out of season by utilizing irrigation and organic mulching techniques. The program also encouraged more producers and home gardeners to start producing more organic vegetables for sale at the farmers' market. Livestock producers have also started identifying their animals and using quality bulls for their breeding program. This has also helped to increase the rolling herd average of the dairy farms in the Virgin Islands. These programs have been very effective by allowing more people to participate in educational activities and utilize services of the research and extension specialists. These joint programs have also brought research and extension scientists together to address critical agricultural concerns of the farming community.

### **Multistate Extension:**

N/A. Although there are no formal multistate extension activities at this time, there is significant inter-agency coordination and collaboration of extension programs.



In an effort to reach the greatest number of stakeholders and also maximize resources of CES, we have been involved with other government and private agencies in collaboration and coordination of programs and activities. Programs have been held with the USDA Farm Service Agency, Department of Health, Department of Housing, Department of Labor, Department of Education, Department of Justice, Department of Human Services, and the Department of Agriculture.

These inter-agency coordination and collaborations have made CES more efficient in reaching target audience, leveraging resources to cover more program activities and have also enhanced program delivery. These joint efforts have also helped in providing a holistic approach to the needs of the clientele.