

# ANNUAL REPORT

FY 2005

University of the Virgin Islands



Cooperative Extension Service

OVERVIEW STATEMENT  
FY 2005 ANNUAL REPORT  
UNIVERSITY OF THE VIRGIN ISLANDS  
COOPERATIVE EXTENSION SERVICE

The University of the Virgin Islands' Cooperative Extension Service (UVI-CES) is pleased to submit its FY-2005 Annual Report which is based on the FY2000-FY2004 Plan of Work and the FY2005-FY2006 Plan of Work Update 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. Also, three major publications were published and distributed to our clientele.

***GOAL 1: An Agricultural System that is Highly Competitive in the Global Economy***

In fulfillment of this goal are programs in Sustainable Agriculture, Beef, Dairy and Small Livestock and Eastern Caribbean Extension Outreach and Interchange.

In the Sustainable Agriculture Program, collaborative efforts with various governmental and non-governmental agencies, as detailed in the following pages, were established in providing workshops and shortcourses to targeted clientele. One such workshop was on the National Organic Program. Also, a shortcourse in one of the alternative agricultural enterprises – beekeeping or apiculture – was conducted for forty-four (44) participants. Workshops were also conducted in FY 2005 on computer literacy and recordkeeping skills.

The Beef, Dairy and Small Livestock Program continued to implement activities and workshops on animal care and productivity. Farms enrolled in the Beef Cattle Improvement Program and Dairy Herd Improvement Program continued to receive technical assistance from CES staff during this reporting period. Collaborative efforts with various governmental agencies and institutions allowed CES to disseminate information on such areas as animal identification, tropical bont tick, animal husbandry, and recordkeeping. CES staff also provided leadership to three Caribbean organizations with which we are affiliated.

***GOAL 2: A Safe and Secure Food and Fiber System***

This program includes food safety nutrition, and basic food safety education for EFNEP and EFNEP Youth. The staff attended this year's workshop on food safety cosponsored by the CES and the V.I. Department of Licensing and Consumer Affairs. The food safety program continues to be one of our priority programs in the Virgin Islands. CES staff held workshops and seminars for food vendors and others who sell food at the V.I. Agriculture and Food Fair and other public events where cooked foods are sold. The EFNEP program continues to target low-

income, at-risk clientele and food stamp recipients. Clients continue to receive information on nutritional value of various foods, budgeting, meal planning and food preparation. As part of our summer program, the EFNEP program continues to provide assistance to youth programs especially 4-H youth in teaching them how to select and prepare nutritional diets and also how to select different foods to avoid obesity.

**GOAL 3:     *A Healthy Well-Nourished Population***

Improving Nutrition, Diet and Health is the main focus in this program. During this year a new nutritionist and health professional was added to the staff of this program. Virgin Islanders were educated in the fields of basic nutrition, nutritional diseases, and how to avoid these diseases. Specific programs targeted diabetics and hypertension patients. Seminars, workshops, and demonstrations were conducted and focused on childhood obesity, diabetes, and hypertension. We continue to provide nutrition education programs in collaboration with the Departments of Health and Human Services assisting people on public assistance such as Women, Infant, and Children (WIC) program and the local food stamp program.

**GOAL 4:     *Greater Harmony between Agriculture and the Environment***

CES continues to educate the general public in planting, pruning, composting, and maintaining urban gardens and trees. CES staff in collaboration with the Department of Agriculture conducted workshops, short courses, and demonstration for residents, in the areas of Urban Gardening, Water Quality Protection, Urban Forestry and Backyard Composting. In collaboration with the Department of Planning and Natural Resources (DPNR), CES also conducted a series of workshops in Natural Resource and Environmental Management.

Composting workshops for teachers, government officials and DPNR personnel were conducted. Staff continues to assist different elementary schools and high schools to implement and take care of their school gardens. CES staff in collaboration with DPNR, conducted a non-point source pollution workshop and training for people in Region 2 of the United States. Staff continues to supply information on the Magens Bay Septic Rehabilitation project and continues to give feedback on the protection of the coral reefs. A major publication entitled *A Field Guide to the Plant and Marine Communities of the Virgin Islands* was developed by staff with the assistance of the UVI Conservation Data Center (CDC). This 213-page book provides information to developers, constructors, community leaders and activists on plants and marine life in the Virgin Islands.

**GOAL 5:     *Enhance Economic Opportunity and Quality of Life for Americans***

This goal covers Limited Resources: Individuals and Families, Marketable Skills, Volunteer and Youth Leadership, 4-H Club System, and the 4-H Summer Day Camp. CES continues to provide information through workshops, short courses, and seminars to unemployed individuals and people trying to enter the job market. Courses including clothing construction and marketable skills were held for clients. The use of recyclable materials was also emphasized and clients were assisted in using these materials to create products targeting the tourist market.

Computer courses and computer literacy trainings were provided to this clientele to help them acquire basic computer competency skills. CES continues to work in collaboration with Human Services and other non-profit groups to conduct educational programs to assist this target audience.

The 4-H programs continue to be one of the most popular programs in the Extension Service. The annual Summer Academy continues to draw more students all over the three islands in basic skills, computer technology, entrepreneurship and agricultural programs. This year new activities were added to the program such as video production, small engine repair and energy programs to attract more young males to take part in the summer camp. Volunteer development continues to be a major part of our program as we continue to provide volunteer development short courses and volunteer management programs to recruit and maintain our volunteer pool.

## GOAL 1: AN AGRICULTURAL SYSTEM THAT IS HIGHLY COMPETITIVE

### *Program 1 – Sustainable Agriculture*

#### National Organic Program

As a result of a collaborative initiative between the University of Florida, the University of Puerto Rico, and the University of the Virgin Islands, sixty (60) farmers and professional staff attended two workshops. The two workshops were conducted which allowed participants to increase their knowledge of the National Organic Program's standards, rules and regulations. These intensive two-day trainings served as a pilot project for information dissemination utilizing a series of eight academic modules that covered crop and livestock production, post-harvest handling, and labeling. This joint program provided a major contribution toward the efforts to advance education in the territory regarding the National Organic Program.

#### Alternative Agricultural Enterprises

Several alternative agricultural enterprises have been suggested to improve the sustainability of local production operations. One major area of interest among crop farmers is Beekeeping or Apiculture. In order to respond to this need, a weeklong series of activities was conducted to train forty-four (44) farmers and agriculture outreach professionals in the basic art and science of Beekeeping, and related industry opportunities for farmers. Training topics included Introduction to Beekeeping, and Queen Rearing; field activities were also conducted to impart practical, hands on skills to participants. As a result of the comprehensive shortcourse our SARE team is well prepared to assist farmers in pursuing Beekeeping as an optional enterprise to enhance profit, diversity, and sustainability. This training was a joint initiative between the Cooperative Extension Service programs of the University of the Virgin Islands and the University of Kentucky.

#### Computer Literacy & Record Keeping

Three (3) members of the SARE team received comprehensive training, which was conducted by personnel from the Southern Region Risk Management Center. The program was designed to prepare the participants to provide subsequent instruction to farmers in improving the efficiency and sustainability of their farm operations through the development and application of computer literacy and record keeping skills. Subsequently, twenty (20) crop and livestock producers received training in computer literacy and record keeping skills.

Two (2) of the course instructors advanced their knowledge by participating in a subsequent SARE Professional Development Program activity at Kentucky State University. The three-day workshop was designed to train outreach staff to assist producers in reducing the risk of economic loss through improved record keeping and financial management practices.

### Caribbean Food Crops Society

Seven (7) members of the local SARE team participated in the 41<sup>st</sup> annual meeting of the Caribbean Food Crops Society, which was held on the islands of Guadeloupe in the French West Indies. This rare opportunity enabled these participants to gain insight into issues and research initiatives of neighboring scientists and farmers. Since many of these issues are of mutual concern, this meeting provided an opportunity for the meaningful exchange of scientific information and solutions. During this year's meeting new partnerships were formed with the Caribbean Institute for Research and Agricultural Development and the National Institute for Research and Agriculture. Networking with these French organizations will stimulate increased joint projects to address common issues in sustainable agricultural research and education in the Caribbean region.

### Producer Managed Marketing of Livestock Products Workshop

Two (2) staff members of the Cooperative Extension Service received valuable training in Producer Managed Livestock Marketing during a three-day regional Professional Development program conducted by North Carolina A&T State University. Topics covered included Business Planning and Management, Customer Centered Marketing, Food Safety and Handling, Licensing, Permits and Regulations. Participants also benefited from presentations on the Logic-Model and Program Evaluation / Reporting. As a result of this training our staff are prepared to address business planning and management issues for livestock producers who are interested in marketing their own products.

### National Small Farms Conference

The National Small Farms Conference provided an opportunity for four (4) members of our team to network with other outreach professionals and farmers from across the nation to share successes and challenges to common concerns. The Virgin Islands delegation also delivered a poster presentation on recent research initiatives in sustainable agriculture in the territory. An important outcome of this professional development activity was a proposed joint project between the Cooperative Extension Service programs of the University of the Virgin Islands and North Carolina A&T State University to develop a web-based networking initiative between farmers in North Carolina and the Virgin Islands. The target audience for this project would be clientele of the respective agencies who previously received computer literacy training.

### Agriculture & Food Fair Exhibits

The Agrifest activity, which was held on St. Croix, featured numerous educational presentations from various state and federal agencies to increase knowledge among SARE partners and trainers regarding recommended practices in sustainable agriculture, and the local network of support services that is available to producers. The display of the Cooperative Extension Service featured drip irrigation technology, the USDA National Organic Program, and initiatives to increase knowledge of sustainable agriculture among secondary school students.

The display attracted approximately 300 participants including farmers, home gardeners, and other residents.

The St. Thomas/St. John Agriculture and Food Fair held on St. Thomas showcased general information about all aspects of the SARE program, youth initiatives in sustainable agriculture, and the application of computer technology to enhance the efficiency of crop and livestock production systems. As a result of this exhibit more than 50 trainers increased their knowledge based regarding local and national initiatives of the SARE program.

### Model State Program

Major efforts were expended in developing a Model State Program for the US Virgin Islands. A prospective Program Assistant has been identified to provide support to the Coordinator. During the reporting period the candidate was hired on a temporary basis in order to evaluate performance and suitability for this position. Secondly, progress was made in securing a web server for the launching of a local SARE website. Objectives for the following year will include the hiring of a Program Assistant and the development of a functional website to be administered by the University of the Virgin Islands Cooperative Extension Service.

#### Output/Outcome Indicators:

1. Approximately 90% of producers that participated in outreach activities expressed a sincere commitment to adapt/implement at least two sustainable agricultural practices. Furthermore, at least 50% of those crop and livestock farmers have already adapted recommended sustainable agricultural practices, including drip irrigation, crop rotation, and the use of computer technology for record keeping purposes.
2. As a result of our training initiatives more than 80% of producers, and outreach staff increased their knowledge and awareness of current issues in sustainable agriculture, and recommended production and marketing practices.
3. Six (6) new partnerships were formed and previous networks were strengthened with academic institutions and service providing agencies throughout the USVI territory, the Caribbean, and southern region of the United States.

Source of Funding: SARE, Smith-Lever, Organic Rules Project grant, Risk Management grant

Scope of Impact: Territory-wide

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

Program staff assisted local producers in the selection and implementation of the export of registered Senepol cattle to the US Mainland as well as South America. Because of the tick

situation in the Virgin Islands, strict procedures and quarantine are required in addition to the standard blood tests. Staff assisted the farmers in performing these tests and procedures. Overall, over one hundred (100) cattle were exported.

Consultation was provided to farmers, both on-farm and under more casual circumstances, throughout the year. Advice and recommendations were given in the areas of housing, husbandry, selection of stock, feeding and nutrition and record keeping. In addition information was offered as to location and availability of animals desired for purchase. Total number of farms visited was more than 300 in the course of the year and number of farmers advised through those visits and other instances was in excess of 400.

Staff performed routine weighing and evaluation of beef cattle enrolled in the Beef Cattle Improvement Program, as per the guidelines set forth by the Senepol Cattle Breeders Association. Weights were recorded at 205 days of age, weaning separation and yearling age and recommended at birth and periodically throughout their growth and life to monitor their performance. Other data was also collected to include sex, color, navel fold condition, head condition, height, and scrotal circumference, type of birth. All data was evaluated to assist the producer in the task of selection of the top animals for retention in the breeding herd or animals for sale to other breeders or market. Staff also assisted the farmers in identification of the animals, fertility testing and parasite control. Overall, in excess of 500 animals were weighed and evaluated through this program

Farmers were assisted in the identification of their livestock to maintain compliance with the current Virgin Islands Code requirements for animals. Methods of identification that were used were eartags, tattooing, and branding. Consultation was also given in the area of electronic microchip identification that is offered through veterinarians and the Virgin Islands Department of Agriculture livestock programs. Total numbers of animals identified were in excess of 600.

Personnel from CES worked closely with the VI Department of Agriculture and the USDA APHIS program to educate farmers as to the dangers of the Tropical Bont Tick, it's unwelcome presence on St. Croix, and the detrimental effects it can have on the livestock industry. Farmers were assisted in the identification of their animals so that they can be monitored more easily. They were also assisted in the treatment of the animals to eliminate the ticks from their herds/flocks and prevent it from returning. The total number of farms visited was 520. The number of animals examined was 4,100 with 1,500 animals receiving treatment.

The three (3) dairy farms on St. Croix continued to be enrolled in the Dairy Herd Improvement Program. Routine monthly testing was performed on all farms. The monthly test is comprised of two individual tests performed back-to-back, in the evening and then the following morning. The weight of the milk produced by each individual cow is recorded for each milking as well as any personal information such as calving that has occurred during the preceding month. Data was compiled and processed through the main program system at North Carolina State University. Resulting data was interpreted by Extension personnel and used by the farmers to evaluate the animals in their herd. Decisions regarding drying, breeding and culling are based significantly on this information. In addition to milk weights, other data collected were calving

data, reproductive data, health data, and selection data. Assistance was also provided to the farmers in the areas of identification, reproductive status determination, fertility evaluation and animal wellness management. Total number of milk tests performed was seventy-two (72) and the total number of animals tested was approximately 3400.

Extension staff assisted livestock farmers on St. Croix as they established the Virgin Islands Farmers' Cooperative. The objective of this Cooperative is to assist small livestock farmers in their ability to perform better husbandry of their livestock through collective purchasing power in obtaining farm materials and feedstuffs. In addition, they will be better able to exchange premium breeding stock and assist other Cooperative members with their needs through the collaborative effort of the present members.

Extension staff was host to twenty-seven (27) livestock farmers and professionals from Puerto Rico as they visited the island of St. Croix to observe the livestock farms and practices here. There was talk of exchange of livestock between the islands, thereby opening another market to the local farmers.

A six-week shortcourse was conducted to address the need to increase the level of knowledge of small livestock producers, especially with respect to management and marketing. Topics covered during the course included record-keeping, poultry, swine and goat/sheep production and management, health and sanitation, abattoir procedures and practices, pasture establishment and management, financial management and marketing. Twenty-six (26) participants were enrolled in this training, which was jointly sponsored by the Virgin Islands Department of Agriculture, University of the Virgin Islands Agriculture Experiment Station and Cooperative Extension Service, and Farmers in Action, Inc. As a result of this educational activity, the participants became more aware of the latest research-based information pertaining to small livestock management and marketing practices. The incorporation of these strategies into their operational routines will enhance the efficiency, sustainability and profitability of their small livestock enterprises. The sixteen (16) participants completed the course and received certificates of completion.

University of the Virgin Islands Cooperative Extension Service, in collaboration with the University of Puerto Rico – Mayaguez, Food Safety Institute and the Virgin Islands Department of Agriculture sponsored a two-day workshop entitled “Educational Program for the Establishment of Hazard Analysis and Critical Control Points (HACCP) and Compatible Animal Production Practices in Poultry Farms.” The workshop was offered to all poultry and livestock farmer as well as livestock professionals. It was designed to provide these parties with information on improving poultry operations, ensuring product safety and sustaining profitability in today's market. Twenty-three (23) persons completed the workshop and were awarded certificates of completion issued by the University of Puerto Rico.

Swine and other livestock farmers were presented with an educational workshop on the profitable production of swine from farrow to finish. Topics covered during the workshop included proper housing, nutrition, sanitation, and health, breeding management, general management, the different types of swine production systems and record keeping. A total of

sixteen (16) farmers were in attendance at this workshop, which was sponsored by University of the Virgin Islands Cooperative Extension Service in partnership with the Virgin Islands Department of Agriculture.

Output/Outcome:

1. Eight dairy farm employees improved their milking techniques.
2. Twenty-six farmers increased their knowledge of the latest research and advances in small livestock husbandry procedures and practices.
3. Twenty-three poultry producers and livestock personnel advanced their knowledge of sanitation and product safety practices for their operations.
4. Sixteen farmers increased their knowledge of swine husbandry practices.
5. Thirty farmers increased their knowledge of the Tropical Bont Tick and its associated problems

Source of Funding: USDA: Smith-Lever

Scope of Impact: Territory-wide

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

The CES continues to provide leadership and coordination for the four agricultural organizations that have linkages in the Caribbean region: the Caribbean Food Crops Society (CFCS), the Caribbean Association of Researchers and Herbal Practitioners (CARAPA), the Caribbean Council of Higher Education in Agriculture (CACHE), and the University of Puerto Rico.

CES staff provided leadership in assisting the local organizing committee in the preparation of the 41<sup>st</sup> annual Caribbean Food Crops Society Meeting that was held in Guadeloupe. This meeting brought scientists from the Caribbean, the southern United States, and other foreign countries. A total of 81 papers and 21 posters were presented with a unique farmers' forum attended by farmers from the various French islands. A total of 315 participants attended this conference. CES staff also provided leadership in the organizing of the 7<sup>th</sup> Caribbean Herbal Conference in St. Lucia. CES staff member was elected as president of CARAPA for the next two years. During this year, staff assisted CARAPA in getting their membership card printed and continued to assist in the publication of the conference proceedings. CES staff attended CACHE meetings and provided leadership in the organization.

The evaluation of the Internationalizing extension grant was completed and the final report forwarded to Michigan State University. The evaluation showed that participants enjoyed

the activities and also increased their organizational capacities in working effectively on local, regional, and international levels with diverse stakeholder groups. Extension educators were able to seek out and integrate information from international sources and experiences into local programs. The extension educators were able to help their clientele understand international perspectives and global interconnection. Also, participants said that they were able to enhance their institution and professional network within extension delivery agencies in the Virgin Islands, Florida, and the Caribbean.

Output/Outcome:

1. Three hundred fifteen (315) scientists and producers gained knowledge in Caribbean agriculture.
2. Sixty-five persons increased their organizational capacity in working effectively on local, regional and international levels with their diverse stakeholder groups.
3. Sixty-five extension educators increased their knowledge that would enable them to help their clientele understand international perspective and global interconnection.
4. Sixty-five participants were able to enhance their institutional and professional network within the extension system delivery agencies of the Virgin Islands, Florida, and the Caribbean.
5. Thirty-five extension personnel gained knowledge in hurricane preparedness.

Source of funding: CES/USDA: Smith Lever  
Internationalizing Extension: Capacity Building Grant (\$9,000)

Scope of Impact: Caribbean region

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

### ***Program 4 – Food Safety Education***

During the year, twenty (40) participants took part in a Nutrition Short Course on St. Croix and St. Thomas. They received information on the basic food groups, food safety, and nutrition, including the nutritional value of various foods, budgeting, reading labels, meal planning, and food preparation.

In October, the annual World Food Day observance was held and attended by approximately 2,500 individuals. The nutrition component focused on preparation of chicken, orange and hot pepper for the eighty (80) participants who took part in the food demonstrations.

In November, in St. Croix, a pumpkin workshop was held with sixteen (16) adult participants and twenty-two (22) teens who learned how to prepare a variety of dishes made with pumpkin. They also learned about the nutrients in pumpkins. Some of the dishes were pumpkin bread, pumpkin cake, pumpkin tart, pie and ice cream. In St. Thomas, 12 persons attended the pumpkin workshop.

The annual holiday baking workshop was held which included preparation of sweetbread, tarts, pies, fruitcakes and holiday drinks, i.e., Christmas punch and coquito. Approximately 32 persons attended the two-day workshop. In St. Thomas, thirty (30) individuals took part in the Sweet Bread Workshop. Holiday recipe booklets were disseminated to over 200 residents and participants of the Food and Nutrition program.

Staff conducted a food safety workshop for thirty (30) Head Start cooks on St. Thomas. Participants received information on the new food pyramid guide.

#### Impacts/Outcomes:

1. The forty (40) participants in the nutrition short course experienced an increase in awareness of the importance of six principles of basic food safety, and eight (8) sound nutrition principles in preparing meals for families and friends. They made an agreement to use 60% of those principles within the next two months during meal preparation.
2. The sixty (60) persons participating in the holiday baking classes received information on how to prepare sweet bread, tarts, fruitcakes and holiday drinks. This information will be utilized as preparations are made for the holidays. Considerable emphasis was placed on healthy substitutes for some of the more popular ingredients with little to no nutritional value.
3. Over 2,500 participants received information targeting healthy preparation of meals for families. They now know the 4 basic principles of nutrition ABC's received as a part of the World Food Day activities where emphasis was placed on chicken, orange and hot pepper preparation. The 80 participants attended the workshops and food demonstrations.
4. Two hundred forty-two (242) adults and youth took part in workshops and related program activities during this year. Of the persons receiving the food safety information, 9% were teens. Eighty-five per cent (85%) expressed a commitment to utilizing the principles involved in preparing nutritious dishes and doing so in a safe manner.

Source of funding: USDA: Smith-Lever

Scope of Impact: Territory-wide

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

Staff received additional training on entering EFNEP client data into the ERS4 system.

During the year, staff attended a conference in Trinidad, which focused on the role of home economics education in breaking the poverty cycle. Emphasis was placed on assisting youth in avoiding the pitfalls of dropping out of school and other societal ills often tied to dysfunctional family structure leading to continued poverty from generation to generation. Staff also participated in a workshop and received knowledge on preparation of Indian style curry dishes. Seventeen islands were represented and home economics professionals exchanged information on issues related to some of the cultural ramifications associated with this region.

Also, visits were made to the St. Thomas Lindberg Bay area Head Start Centers to recruit teachers and parents; and a total of ten (10) parents, eight (8) females and two (2) males, ranging in age from twenty-five to thirty-five were present. A visit to the Head Start Center in the Tutu area, also, allowed staff to demonstrate the importance of good, nutritious snacks during lunch hours. Four parents (3 females and 1 male) participated along with 8 boys and 18 girls, as well as seven teachers and one volunteer.

During the later part of the year, St. Thomas staff worked with two Head Start Centers to demonstrate how to make nutritious pizza; seven (7) parents and four (4) teachers participated.

Staff continued to work with EFNEP participants on basic food safety and healthy eating habits. In St. Croix, seven (7) women were enrolled - six (6) participants were over 25 years of age, and one between 18 and 25 years of age. In St. Thomas, staff worked with six (6) women enrolled in the program, 50% were over 25 years of age, and 50% were between 18 to 25 years of age.

#### Impacts/Outcomes:

1. Three (3) staff received additional training on the ERS4 system.
2. To foster staff development, staff attended a conference in the Caribbean region to learn more about working with families and poverty.
3. Thirteen (13) EFNEP clients received information and demonstrations on the five basic principles of food preparation, basic food safety practices, personal hygiene and basic kitchen safety with emphasis on maintaining practices learned.
4. Head Start Center staff and clients received valuable information on preparation of healthy lunch snacks; the 123s of feeding youngsters in a nutritious way were emphasized. In St. Thomas, fourteen (14) parents participated through Head Start programs along with eight (8) boys and eighteen (18) girls, seven (7) teachers, and one (1) volunteer.

Source of Funding: USDA Smith-Lever

Scope of Impact: Territory-wide

## GOAL 3: A HEALTHY WELL-NOURISHED POPULATION

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

The 34<sup>th</sup> Annual Agriculture and Food Fair was held in St. Croix, during February, which provided an excellent venue for displays focused on the benefits of eating a nutritious diet. Fair participants viewed a table set with napkins and a tablecloth with decorative place settings. Appetizing plates of food with balanced diet selections and nutritious portions formed the display.

This year's theme was "Keeping Agriculture Alive through Technology in 2005" with a subtheme of "From the Farm to the Table". Three dishes provided the crux of the display under the nutrition tent area; this included goat water, chicken salad and vegetable soup. Approximately 500 persons took part in the food demonstrations over the three-day event. Evaluations indicated that this was rated one of the best exhibitions in years. Recipes were distributed.

March was nationally designated as nutrition month; therefore a nutritious breakfast was prepared for CES and AES staff. Also, during the month of March, "Confronting Childhood Obesity through Education" workshop was held which focused on the causes of obesity, working with obese children, and the importance of physical activity and parental involvement. Professional dietitians, nutritionists, and community health workers shared their knowledge and experience regarding the issues surrounding childhood obesity. Nineteen (19) persons, all females were participants from various head start centers in St. Thomas.

During the year, the Week of the Young Child was observed. The Frederiksted Head Start Program began by visiting the Agricultural Experiment Station sheep and fish farm. Teachers and parents from Prince Street, Mt. Pleasant, Concordia and Frederiksted Head Start programs made healthy snacks with their preschoolers and received basic nutrition information. Among parents, forty-four (44) females and twelve (12) males participated. Fifteen (15) teachers participated, along with the eighty (80) preschoolers.

In St. Thomas, preschoolers preparing local drinks and identifying local fruits and vegetables observed the Week of the Young Child. Four Head Start Centers - Bovoni, Minetta Michael, Tutu and Lindberg - participated and included 4 foster grandparents, 15 teachers and 109 preschoolers.

Students and teachers from John H, Woodson Jr. High School had an opportunity to spend a day in the nutrition class and acquired knowledge of basic information on baking. This experience resulted in their baking healthy oatmeal cookies. Twenty-two (22) students, 32% of who were males, participated along with 4 teachers.

Ten participants took advantage of the healthy eating workshop held in the Extension lab. Of the 10 participants, 10% were males. The information focused on how to prepare healthy and economical meals.

Staff conducted a healthy snack lecture at Frederiksted Health Center for eight (8) females; seven were over 25, and 1 was between 18 and 25 years of age.

During the year, a combined closing program was held which included clothing construction, computer technology and nutrition program participants. The effort to continuously integrate programs allows the same participants to experience, in a synergistic manner, several of the courses offered at CES.

During the summer, 13 teens enrolled in the 4-H Summer Academy received information on the new Food Guide Pyramid and how to read and follow recipe instructions. They also were introduced to abbreviations and definitions of foods. Proper table manners and etiquette when dining out in a restaurant were also stressed. Many of the teens indicated that they did not like vegetables so they were exposed to different ways of incorporating vegetables into the diet. Potato croquettes were suggested as a substitute for French fries. Additional healthy recipes included fruit bowls with low fat yogurt, whole-wheat cookies, and many other interesting recipes. As part of the program, teens prepared lunch for their parents which included seasoned rice, baked chicken, salmon balls, vegetable lasagna, cornbread and pineapple upside down cake.

Staff also, made presentations to 25, 8-10 year olds participating in the 4-H Summer Academy at the off-site location. Youth were taught how to calculate the sugar content of some of the favorite beverages such as Brown soda, sprite and passion fruit juice. Youth, also, received information on the new food guide pyramid and the importance of eating calcium rich foods on a daily basis. Thirty-six percent of the youth were males.

A workshop was conducted in St. Croix, which focused on Diabetes, a disease that seems to be increasing in epidemic proportions in the Virgin Islands. The local press included an article in the newspaper extolling the importance of residents learning to control portion sizes, and the importance of analyzing carbohydrate content of local foods to reduce the incidence of diabetes. Thirty-eight (38) individuals participated and 11% were males.

Another Diabetes workshop was held in St. Thomas (2 sessions were held) where individuals were exposed to interaction of local tea with medications, how often to test blood sugar, how to set up a diet plan and controlling blood sugar naturally. Sixty-four (64) adults attended the two sessions, 16% were male.

Staff also participated in the Virgin Islands State Diabetes Public Health System Assessment. The overall purpose was to review the performance assessment of the VI State Diabetes Public Health System, examine identified system gaps, develop performance objectives and strategies; and examine how success will be measured.

Staff also conducted a seminar on Hypertension to the National Guard. The seminar provides importance of controlling blood pressure, and what foods to consume and avoid were noted. Sixty (60) persons participated, 67% were males.

Staff conducted nutrition workshops that focused on the importance of good nutrition in preventing and managing chronic diseases in conjunction with the VI Partners in Parenting program. The conference was entitled, “Empowering Families: Mothers and Fathers Together as One”. Thirty-nine (39) persons participated, including 30% males.

During the month of September, staff planned for the fiscal year by preparing lesson plans, revising recipes and handouts to be disseminated for the next year.

Output/Outcome:

1. Over four hundred and seventy (470) persons participated in nutrition and health workshops during the fiscal year; approximately 35% of all participants were youth. Participants indicated that they learned the importance of healthy eating, food safety, and alternative ways of preparing appetizing and healthy foods and exercise.
2. Seventy-five per cent (75%) of participants expressed a change in behavior as a result of learning about the food groups, pyramid, diabetes, etc. which lead to healthier food preparation and exercise.

Source of Funding: USDA: Smith-Lever

Scope of Impact: Territory-wide

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

##### *Program 7 – Urban Forestry*

In fulfillment of the program’s objective to increase knowledge and awareness of residents about the benefits and importance of properly planting and maintaining urban trees, the Extension staff conducted several workshops for residents territory-wide.

The V.I. Housing Authority (VIHA) has embarked on a program to increase the level of knowledge of its maintenance crew. UVI/Cooperative Extension Service conducted a Tree Pruning Workshop for thirteen (13) VIHA landscaping crew on St. Thomas. This workshop emphasized the importance of safety, utilizing the right tools, using the proper pruning techniques, and tree shape and form. A workshop for the St. Croix crew is scheduled for the next program year.

In order to help V.I. residents to minimize the damage to their trees during the hurricane season, CES, in partnership with the V.I. Department of Agriculture, St. Croix Environmental Association, UVI/Agricultural Experiment Station, and the U.S. Department of Agriculture, sponsored tree pruning workshops and field demonstrations in both the St. Croix and St.

Thomas/St. John districts. A total of 30 residents gained practical experience in selecting the correct tools, and applying the proper pruning techniques to trees and shrubs.

An inventory of Remarkable Big Trees of the Virgin Islands was completed during this past year. Extension staff has been working with Dr. Robert Nicholls in selecting 15 of the most noteworthy “landmark trees” for inclusion in the Virgin Islands Registry of Historic Buildings, Sites and Places. Also, Extension staff has assisted Dr. Nicholls in developing an eco-heritage guidebook identifying the islands’ most remarkable big trees. The guidebook will have maps, historic and contemporary photos, and descriptive and cultural information.

#### Outcome/Output:

1. Initially 80% of the participants reported that their level of knowledge of pruning was fair to good. At the end of the workshop 90% of participants reported that their level of knowledge of pruning, tool selection and tree biology had increased to between very good and good. Ninety-five (95%) percent of the participants indicated that they would also continue to seek more information on the subject. The VIHA supervisor in attendance indicated that they would like to have on going training in this area on a regular basis. A total of 30 residents gained practical experience in selecting the correct tools, and applying the proper pruning techniques to trees and shrubs.
2. The level of knowledge of the sub topics for 95% of the participants was very poor at the start of the workshop. By the end of the workshop, 95% percent of the participants reported that their level of knowledge of most (60%) of the sub-topics had increased to very good. All of the participants reported that they would continue to seek more information on the subject of pruning and 80% would be interested in attending other workshops on the subject.

Source of Funding: Renewable Resource Education Act (RREA) Grant

Scope of Impact: Territory-wide

#### ***Program 9 – Urban Gardening***

The Cooperative Extension Service partnered with the Virgin Islands Department of Education’s (VIDE) State Office of Special Nutrition Program (OSNP) in the development and implementation of a project entitled the Changing the Scene Training Grant. This grant was a part of the previous VIDE 2003 grant that aimed at improving the schools and physical activity nutrition environment and promoting agriculture in the schools. CES’ role was to implement that portion entitled *From Garden to Table* program. Funding from the grant was set aside for competitive bidding among Territory-wide public elementary schools for \$2000-\$3000 to develop the garden infrastructure and purchase of the material to teach gardening and nutrition. CES assisted in the selecting of the following six (6) public elementary schools: St. Croix - Juanita Gardine, Ricardo Richards; St. Thomas – Peace Corp, Joseph Sibilly, Leonard Dober; and on St. John – Julius Sprauve. After the selections were made, CES provided technical

assistance to these schools through on site and telephone contact. Approximately one hundred (100) students were involved Territory-wide. Four (4) of the schools were able to develop and maintain active gardens and nutrition education programs with the help of extension staff.

The American Federation of teachers holds an annual conference for public school teachers through out the Territory called Teacher Quest. This conference is professional development for teachers and paraprofessionals. CES was invited to make a presentation on the subject *Using Agriculture in the Learning Process*. Extension staff presented ideas such as using the percentage of seeds that germinate to teach math, and the origin of certain plants to teach geography among other subjects. Approximately, fifty-five (55) teachers and paraprofessionals participated in the one hour session.

Extension staff appeared twice on WGOD Radio Station on a program entitled *A Woman's Heart*. The hour-long program allowed extension staff to answer questions and provide technical advice to the listening audience. CES has received request for information from all three (3) islands as well as Tortola as a result of those appearances.

The Department of Human Resources sponsored the *Best Beginnings Workshop; Early Childhood Conference* on May 26, 2005 at the UVI Sports and Fitness Center. Extension staff made a presentation to 75 child care workers on the theme of *Gardening for the Children/Preschoolers*.

CES conducted its annual lecture and plant distribution to the 270 campers of the 4-H summer academy. Each year Extension staffs make presentations to the campers about various aspects of agriculture by means of lectures, garden visits, and hands-on demonstrations. Campers are also given a plant or two to nurture for the duration of the academy. Some campers also created little box gardens at the camp site, growing and maintaining the vegetables, or herbs that they have selected.

#### Outcome/Output

1. Ninety-nine percent (99%) of respondents to a post seminar evaluation indicated that they learned more ways to incorporate agriculture into the teaching/learning process than before the seminar. Forty percent (40%) signed up to request more information on school gardening and requesting follow-up individual class visits.
2. Sixty-six percent (66%) of the participating schools actually created a garden. Fifty percent 50% of the schools augmented the gardening with nutrition information. Two of the schools conducted a nutrition fair utilizing the crops grown in the garden. By the end of the workshop, 95% percent of the participants reported that their level of knowledge of most (60%) of the subtopics had increased to very good.
3. Seventy-five percent (75%) of the heads of public day care centers have already asked CES to make presentations to their clients. Twenty-five percent (25%) of the attendees have sought advice regarding the placement of gardens at their facilities. Extension staff has been providing seminars and garden tours on an annual basis.

4. At the end of the summer academy, the campers were required to bring the plants they had cared for to the closing ceremony. Approximately seventy-five percent (75%) of the campers returned a live plant. A survey of the campers that participated in the project indicated that 65% of them learned something new about growing some vegetables and herbs. Fifty (50%) of the respondents said that they would try to grow at least one plant within the next twelve months.

Source of Funding: USDA Smith-Lever, USDA grant administered through the V.I. Department of Education State Office of Special Nutrition Program

Scope of Impact: Territory-wide

### ***Program 10 – Water Quality Protection***

***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 continues to be the primary technical assistance resource for the Magens Bay Authority (MBA), 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. CES worked in partnership with MBA and the VI Department of Planning and Natural Resources (DPNR) to retrofit two failing septic systems with alternative waste water treatment systems (AOSDS) with funding from the DPNR Division of Environmental Protection. CES also provided MBA with technical assistance during the construction of a third AOSDS at a new bathhouse.
2. Extension continues to be 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. CES fulfilled its contract with DPNR-CZM with the completion of three publications focusing on NPS issues including urban sprawl vs. smart growth, porous paving, and BMPs to mitigation stormwater runoff pollution. Extension participates 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; contributes to the Committee's quarterly newsletter, funded by a separate \$319 grant; and helped coordinate the Committee's 9<sup>th</sup> Annual Nonpoint Source Pollution Conference on St. John, December 6-8, 2005.

3. Extension provided technical assistance to and was a primary participant in numerous government/NGO advisory committees, including the Urban Forestry Council, VI RC&D, Great Pond Advisory Committee, St. Croix East End Marine Park Committee, Environmental Association of St. Thomas – St. John, St. Croix Environmental Association, Marine Park Advisory Committee, VI Department of Agriculture Forest Stewardship Committee and Urban and Community Forestry Assistance Program, Anti-Litter & Beautification Commission, and The Nature Conservancy. CES staff has also been nominated to serve on the *VI Endangered Species Commission* pending ratification by the VI Legislature.

Source of Funding:

V.I. Newsletter – \$19,570 \$319 grant

V.I. Nonpoint Source Committee – \$6,600 \$319 grant (continuing project renewed yearly)

Smith-Lever, Regional Water Quality- Cornell University

Smart Growth - \$18,000 subcontract to DPNR-CZM for NOAA-CSC grant (FY 2002-2004 project)- completed

Scope of Impact: Territory-specific

***Program 11 – Natural Resources and Environmental Management (NREM)***

***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 eco-tourism), 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 2900 youths 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 eco-tourism through workshops; classroom, youth & community group presentations, hikes, site visits, fairs, exhibits, media outreach (TV & radio talk shows, radio PSAs), and individual contacts. About 80 % indicated (through testing, letters and personal communications) that they became more aware of natural resource management issues and the value of adopting BMPs to protect native trees and habitats, and resource conservation. Over 100 surveys were completed to determine what environmental issues are of most concern on St. Croix.

2. Over 60 business people, local government personnel (including teachers), resource managers, professional landscapers, community groups, decision-makers and development professionals increased knowledge and awareness of habitat protection, environmental management, natural disaster preparedness and resource conservation issues through demonstrations, conferences, training and technical assistance consultations, site visits, and at least 35 adopted BMPs to protect native plant communities, planted native trees on public and private properties, or indicated that they would introduce this information to their students. Environmental master plans were also developed and implemented. With the assistance of CES.
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 maintain campus beautification and informal learning projects, collaborated with UVI researchers & students on projects to propagate and label native trees on the UVI St. Thomas campus, and inventoried landmark 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 herbicide application. CES established new partnerships with UVI VI-EPSCOR Program sponsored by the National Science Foundation (NSF) and UVI's Center Marine and Environmental Studies to study the VI land – sea interface with the goal of developing resource conservation and management programs.
4. CES, in partnership with UVI's Conservation Data Center completed and is distributing a 214-page field guide depicting Virgin Islands vegetation and marine communities and classification systems. CES has co-researched and completed a 20-page publication featuring Virgin Islands landmark trees including natural and cultural history a tree inventory and tree tour. This publication is in the pre-press preparation phase of development.
5. CES expanded its investigation of traditional medicinal use and the potential for natural product development in the Virgin Islands, as well as providing information to clients through consultations and workshops. CES continued to serve as technical advisor for a NSF grant-funded natural products research project investigating possible beneficial synergistic effects of five V.I. plants with various standard antibiotic prescription drugs in

collaboration with Sweet Briar College in Virginia. In cooperation with the Santo Domingo-headquartered Enda-Caribe's TRAMIL research project (Traditional Medicine in the Islands), CES was part of a UVI team that submitted a grant proposal to the National Science Foundation's (NSF) VI-EPSCOR (Experimental Program for the Stimulation of Competitive Research) program to upgrade primary research of medicinal plants used in the Virgin Islands as well as education, training and economic development of plant resources.

**Source of Funding:**

Smith-Lever

Urban & Community Forestry VI Habitats Field Guide grants – \$40,000

**Scope of Impact:**

Territory-specific; also consultation with Sweet Briar College and University of Santo Domingo researchers, assistance/ information provided to New York, Florida, Georgia, Puerto Rico, British Virgin Islands, Harvard Univ., USDA-NRCS, US-FWS.

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

***Program 12 - Limited Resources Individuals and Families***

**Clothing Construction & Home Decor**

During October, fourteen (14) participants completed the Beginner's Sewing/Clothing Construction class, which included twelve (12) females and two (2) males. The Intermediate/Advanced class consisted of ten (10) participants. Participants completed skirts, blouses, shirts, pants, lingerie and dresses. Ten (10) participants focused on making home décor and gift items for the holidays. Items made included decorative towels, curtains, ribbon woven throw pillows, place mats, tablecloths, napkins, bag dolls, canvas crafts and floral arrangements. This workshop focused on utilizing recyclable objects found in any home, for example – paper towel and toilet tissue cylinders and egg cartons, were used. A prominent part of the workshop was the closing program where family and friends had an opportunity to view the many items completed.

From January to February 2005, ten (10) participants worked on completing recyclable items for display at the Agriculture and Food Fair. Over 30,000 persons visited the annual fair over a period of 3 days. As part of the Family & Consumer Sciences display, participants in the clothing construction and arts and crafts classes provided items for review by the fair's participants. Materials used included plastic bottles, toilet paper and paper towel cylinders, foam, egg cartons, cardboard, newspapers, scrap fabric, cans, wire hangers and other discarded items. From these discarded items produced baskets, flowers, place mats, wall hangings, piggy banks, rugs, rag dolls, handbags, throw pillows, pot holders, mocko jumbies, origami, wind chimes and swans.

During the next quarter, a Beginners' Sewing Class was initiated with seven (7) participants; followed by an Intermediate/Advanced class with eighteen (18) participants. Clothing construction participants continued to work on garments including skirts, blouses, pants, dresses, pajamas, baby coverlets, bonnets and dresses for displaying and modeling at the closing program.

A two day workshop was held entitled, "Knowing the Serger/Overlock Machine." This workshop was held in May where a total of twenty-two (22) participants including one male were exposed to knowledge regarding various machine feet, threading, hems, sewing techniques including curves, elastic, gathering, T-shirts, and other projects utilizing the serger.

Over 260 youth were involved in the Summer Academy from St. Croix, St. Thomas and St. John. Based on the camp schedule, youths had an opportunity to select various courses, and ten (10) St. Croix youths received information on basic sewing machine operations, sewing machine techniques and related skills as a part of the curricula. Some students had not attempted to sew previously but were able to make -dresses, skirts, capris, shorts, skirts, shirts, blouses, tank tops and pullovers- by the end of the summer. Many decorated potholders throw pillows and hair scrunches. Participants got an opportunity to model their items before family and friends at a closing program. Certificates of participation were also given.

#### Impacts and Outcomes:

1. Over ninety (90) persons gained information and skills in gift item and home decoration making and clothing construction; ten percent (10%) were youth. Low-income families were targeted for marketable skill development. Tremendous savings were anticipated by families whose youth planned to make clothes for the coming school year.
2. All participants, both at the beginners and advanced level acquired new skills and techniques, over 50% had not sewn previously.
3. Over 20% of the home decorating items were displayed at the Agriculture and Food Fair due to their uniqueness and the creativity demonstrated, i.e. potholders, pillowcases, aprons, decorative towels.

Source of funding- USDA: Smith-Lever

Scope of Impact: Territory-wide

### **Program 13 – Marketable Skills**

#### **Computer Technology and Skill Development**

Staff assisted in maintenance of computer connectivity and telephonic activities for all CES units including computer purchase and related technology recommendations and equipment set-up throughout the year. Also, fielded telephone follow-up questions with staff and workshop participants, approximately 80 calls.

During the year, an adult basic computer short course, over an eight-week period, was held at the UVI campus. Thirteen (13) participants learned about basic computer maintenance, e-mail, Internet searches, and Microsoft word. Of the thirteen participants, twenty-three percent were males and ranged in age from 16-50 years of age.

During the year, 4 computer robotics workshops were held over the three-day Agriculture and Food Fair observance focusing on computer programming and maintenance. Five (5) volunteers assisted in the workshops that were held to benefit thirty-seven (37) youth, ages 10-15, 30% females, and 70% males.

John H. Woodson Jr. High School students received a workshop on basic computer maintenance. The fifteen (15) youth, 10-15 years of age, were 40% males and 60% females, participated in and were exposed to information about the ABC's of maintaining computer and related technology.

Also, a basic computer-training course was held for nine (9) adults. One hundred percent (100%) females, ages 30-60 years were exposed to the basics of computer usage including Internet surfing, Microsoft word, basic computer maintenance, e-mail receipt and construction, and beginning power point capabilities. Prior to this course 80% of the participants had never utilized a computer. A robotics and technology workshop was held for 11 youth, 11-14 years of age, with 45% males, and 55% females.

In June 2005, thirty-eight (38) youth, 11-14 years of age, completed a basic computer-training course at the University's Summer Academy. Twenty-six (26%) males and seventy-four (74%) females participated in this six-week session. Objectives included exposure to Microsoft word, basic computer maintenance, Microsoft power point and Microsoft paint, and Internet operations.

The Central High School, Summer Academy site received two special workshops for fifty-one (51) youth, ages 6-1 years. The basic computer training course and conflict resolution class was held in collaboration with the Farm Safety Day observance. The Farm Safety Day was a first time event held in collaboration with the Summer Academy.

Two basic computer short courses were held. The day class had eight (8) participants with 100% females, and ranged in age from 20 to 60years. The evening class had sixteen (16) participants with 25% males, from the ages of 11-6 years. There continues to be a waiting list for the basic computer courses.

#### Impacts/Outcomes:

1. The approximated 50 adult basic computer-training participants, many of whom had not attempted to use a computer previously, achieved new skills. Eighty percent (80%) completed the eight-week course and can now use Microsoft Windows 2000, Internet and e-mail and computer maintenance.

2. Over 150 youth received basic computer robotics technology training, with the assistance of five (5) volunteers.

Source of Funding: USDA Smith-Lever  
Scope of Impact: Territory-wide

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

Volunteer/Teen Leader Training was held on a monthly basis during the first part of the year. The meetings covered 4-H goals and objectives, leader roles and responsibilities and several exciting projects.

Also, the VI Healthy Start Initiative - Healthy Lifestyles Grant was implemented in conjunction with the VI Pace Runners. Two Fun Run, Walk, Stroll(s) were hosted on Saturdays, and are an ongoing part of the 4-H Health and Fitness project.

World Food Day participation, again, included the "Kids CAN Make a Difference" Food Drive. 4-H members and eight (8) schools contributed and collected approximately 2,500 pounds of canned and nonperishable food items. Through collaboration with My Brother's Table and Rotary Club, the Haiti Relief Fund was the primary benefactor. The House of Cans event was canceled due to rain.

Also, during this quarter, a Thanksgiving Food Drive was held in cooperation with Plaza East Supermarket. Eight (8) large boxes and cash donations were collected for purchase of non-perishable foods along with 12-14 pound turkeys and other frozen items. Ten (10) 4-H members assembled Thanksgiving baskets, which contained all of the traditional Thanksgiving holiday food and goodies. Through the local department of Human Services, 15 needy families were identified to receive these baskets. As 4-H members delivered the baskets, they seemed to enjoy the project as much as the recipients.

A Christmas Ornament Extravaganza was re-instituted due to a dedicated 4-H volunteer leader. Over fifteen (15) youth assembled a variety of Christmas ornaments. Each participant made a set for their own use and prepared an additional one for donation to the Christmas Spoken Here event at the St. George Village Botanical Garden. This was a first for the 4-H club and other youth groups in St. Croix.

The 4-H CYBER Boot Camp received a small grant from the Neighborhood Grant Program sponsored by First Bank VI. A reception was held at a branch of the bank, which provided additional visibility for the 4-H club in the general community.

During the year, the 4-H Program continued to hold its volunteer/teen leader training. Nine (9) teen 4-H club members and two (2) adult volunteer leaders coordinated a 4-H Pizza Garden demonstration for the 4-H exhibit which served as the centerpiece for the CES component of the Agriculture and Food Fair. The pizza garden centerpiece was well received by

the public and served to spark fair participants' interest in the accompanying display of the Family and Consumer Sciences Program. A total of 181 direct contacts were recorded - 64 youth, 72 adults, and the remaining 45, did not respond to this item.

4-H took part in the AgFair at many different venues. Thirteen (13) members and two (2) adult volunteer leaders of the "Happy Hoppers" 4-H club exhibited eight (8) rabbits, two (2) guinea pigs, two (2) lambs, and one (1) goat and were awarded trophies and ribbons for their participation in Fitting and Showmanship. The "Leatherback Clovers" 4-H Club presented an exhibit booth highlighting their project work. Their efforts captured second place in the youth group category.

The 4-H Leadership/Community Service project continued with 28, 9<sup>th</sup> and 10<sup>th</sup> graders from the St. Croix Vocational School Honor Society and "Learning through Service" Club. Youth became involved in this project to fulfill high school requirements for graduation. Also, along with the community service aspect of the project was a leadership development component. This group of young people planned and implemented a variety of fun and educational activities for the AgFair where over 400 youth took part.

Staff participated in the 2005 National Extension Conference on Volunteerism: "Strong Connections...Strong Communities" held April 11-14, 2005 at the 4-H Center in Little Rock, Arkansas. Sessions included: volunteer core competencies; getting volunteers and extension educators on the same page; ideas for volunteer recognition; point of light neighboring program; and determining the value of volunteers, among others.

Two Mini-Society workshops were held to train teachers, counselors, CES staff, members of the faith community, government agencies, and community groups and leaders. In St. Croix, thirty-eight (38) persons and in St. Thomas, twenty-seven (27) persons were trained to work with youth to spread the Mini-Society goals and objectives throughout the community.

#### Impacts/Outcomes:

1. Over five hundred and ninety-four (594) youth, staff, and seventy –six (76) adults and volunteers (representing 13%) participated in volunteer and youth leadership development activities during the year. Leadership development and the importance of community service were the most prominently emphasized topics.
2. Youth were quite involved in the holiday season through St. Thomas members caroling at the Queen Louise Home for Children. St. Croix 4- Hers collected 2,500 lbs of food for dissemination during the Thanksgiving holiday to 15 needy families.
3. During the World Food Day observance the youth participated in the "Kids CAN Make a Difference" Food Drive. Ten (10) members and (2) volunteers spearheaded the collection of canned and nonperishable food from eight local schools. Youth were exposed the steps in planning and implementing this type of effort involved in trying to serve the less fortunate.

4. Donation of Christmas 50 ornaments to the St. George Botanical Garden was a first for the St. Croix 4-H clubs.
5. Sixty-five (65) individuals learned about the Mini-Society Program and made commitments to include it in their youth activities at their respective locales.

Source of Funding: USDA Smith-Lever, Kaufmann Foundation

Scope of Impact: Territory-wide

### ***Program 15 – Club System***

During this quarter, efforts were undertaken to set up 4-H clubs at St. Mary's School, Free Will Baptist School, School of the Good Shepherd and Evelyn M. Williams. The existing eight (8) 4-H clubs in St. Croix, St. Thomas and St. John had a total enrollment of 460 members, 28 adults and 8 teen leaders.

The 4-H clubs in St. Croix had a total enrollment of 280 members, with 18 adults and 4 teen leaders. The 4-H project development activities are centered on bicycles, biotechnology, computers, environmental science, foods, rabbits, pocket pets and horses.

In addition to community service, project work included: arts and crafts, bicycles, biotechnology, communication arts, computers, foods and nutrition, gardening, health and fitness, horses, leadership development, pocket pets, rabbits, and sewing. St. Thomas/St. John 4-Hers participated in similar activities and focused on the annual King and Queen of the band competition and Children's Carnival Troupe. The 4-H troupe has won an award for the past 11 years! Also, during the holiday season, St. Thomas/St. John 4-H members completed an annual visit to the St. Croix Queen Louise Home for Children to share gifts and to bring cheer to the less fortunate.

Also, during this quarter, the 4-H Program in partnership with the St. Croix Animal Welfare Center initiated plans for a pet puppy ownership project. This is a project designed to educate youth between the age of 10-15 years old and their families about pet ownership. A virtual pet will be used to imitate real life scenarios, which might be encountered. Participants will be "certified" as potential "adoptive parents".

At the AgFair, over 200 school-aged youth participated in the poster, essay and poetry display competition representing 34 schools and youth groups. Youth focused on educational programs and activities at their respective schools.

During the year, as a result of contacts made at the Fair, two more schools expressed an interest in establishing 4-H clubs: IQRA Academy and the Seventh-Day Adventist School. Five youth became 4-H members in the "Happy Hoppers" and "Leatherback Clovers" 4-H Clubs.

During the year, staff served as a judge for three (3) science fairs: St. Croix Seventh-Day Adventist School, Lew Muckle Elementary School, and Juanita Gardine Elementary School. Also, a 4-H presentation was conducted for the parent organization at St. Mary's Catholic School where 23 parents attended.

Preliminary meetings were held with parents and volunteers from the Leatherback Clovers 4-H Club and the Happy Hoppers. The following 4-H projects are being planned for the next year: biotechnology, cloverbuds (5-8), environmental science, fancy birds, health and wellness, horseless horse, international foods, pocket pets, rabbits and veterinary science/small livestock.

In conjunction with the Children, Youth, Families at Risk/New Communities Program expansion into Croixville in Estate Grove Place, the 4-H Program gave a jump-start to the after school efforts. Also, 4-H has played a major role in the expansion into Kirwan Terrace in St. Thomas, as well. Youth received, but were not limited to: homework tutorials and subject specific information related to several topics including cultural arts, agricultural projects, job readiness and workforce development skills, nutrition, budgeting and entrepreneurship, environmental education, healthy lifestyles, computer technology, personal development and 4-H membership. These youth ages 5-14 years also became 4-H club members increasing the membership by 50 new enrollees of at-risk youth.

#### Impacts/Outcomes:

1. Over seven hundred (700) youth participated in the 4-H program over the past year. The eight (8) 4-H clubs in the territory (St. Croix - 5, St. Thomas- 2 and St. John -1) had a total enrollment of 460 members, 28 adults and 8 teen leaders. Two hundred and seventy-eight (278) members of 4-H clubs, 19 adults and 5 teen leaders participated in 4-H activities on St. Croix. Other clubs also participated in similar activities in St. John and St. Thomas. One hundred percent (100%) of the youth and adult participants increased their knowledge through 4-H project work as exemplified by the positive feedback. Youth indicated or demonstrated an improvement in self-esteem and the desire to stay in 4-H. Twenty-two (32%) of the youth strengthened their communications skills by presenting illustrated talks/demonstrations at a club meeting or other 4-H activity. Other 4-H participants reported that they were able to successfully sell produce from their gardens, utilize their computer skills in putting together a Power Point presentation, and use the science information and research techniques to strengthen their science fair entries.
2. Twenty-three (23) parents received a tailored workshop on the numerous benefits of 4-H for their young persons.
3. The 4/H and CYFAR collaboration has increased the enrollment of 4-Hers in the territory and harnessed the resources of 4-H to share with at-risk CYFAR participants.

Source of Funding: USDA Smith-Lever

Scope of Impact: Territory-wide

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

During the second quarter, the 4-H Summer Academy proposal was prepared and implemented for St. Croix, St. John and St. Thomas.

Additionally, staff prepared two mini-grants: one with the Department of Health (Federal Safe and Drug Free Schools and Communities) which focused on video production for 60 youth, ages 11-14 years, enrolled in the Young Scholars and Shining Stars Programs. Participants had an opportunity to learn about digital videography and developed personal portfolios using computer and technology applications. Many submitted articles, produced a camp newsletter and participated in educational field trips.

Another unique component of the Summer Academy involved a writing project. The Young Scholars (32), ages 11-14 years, wrote a letter to a former CYFAR participant who was stationed in Iraq during the summer. This 19 year old young man e-mailed the 4-H/CYFAR office with gratitude; and expressed his intent on returning within a few weeks after the conclusion of the camp. We anticipate having him participate in some manner in the next summer camp.

The second grant, with the VI Energy office (Energy Education Mini-grant program), assisted in providing forty-six (46), 8-12 years of age students from St. Thomas and St. Croix with the opportunity to participate in science and energy related activities.

Also, in partnership with the VI Energy Office, the 4-H program received funds to purchase materials and supplies in furtherance of our science education initiative. This specialized camp was held with twenty-eight (28) junior high school students in St. Thomas and St. Croix. This five-week program included instruction in energy, and environmental and marine science, which was, called CAMP KEEP.

The VI National Guard participated in the Summer Academy through provision of an instructor and facility to support seven (7) youth receiving hands -on instruction about small engine repair.

Nine (9) local senators from St. Croix and St. Thomas participated in the Hire-A-Youth Program providing junior counselors for the summer program.

The CES Agriculture and Natural Resources program collaborated with the Summer Academy staff to implement the first Farm Safety Day as a part of the Summer Academy experience. Over 210 children enrolled in the program and received information and training in eight safety-related areas: fire safety, hazardous materials, safety signs and symbols, look alike products, food safety, identification of the bont tick, conflict resolution and animal safety. A computer station provided youths with the opportunity to make their own safety signs. Many of the younger children seemed most excited about the chance to sit on a real fire engine.

The Department of Human Services certified eighteen (18) Summer Academy program staff. Training covered basic first aid and safety, and child CPR. Food handler's cards were also received.

Over two hundred sixty (260) youth, ages 5-14 attended the summer day camp program in St. Thomas, St. John and St. Croix. Three site coordinators, twenty senior counselors, twenty-five junior counselors, five instructors, and twelve volunteers served as the staff for this past summer camp. Forty-two (42) educational field trips were undertaken. Summer Academy attendees visited the Fort Frederik Museum, St. George Village Botanical Garden, Whim Museum, UVI Agricultural Experiment Station, VLBA Telescope, St. Croix Animal Shelter, Christiansted historical district, Tropical Ten Pins Bowling Center, Richmond Fire Station, Eugene Phipps farm, St. Croix Dairy Products, and Windsor Dairy Farm, Paradise Bottling Company, Butler Bay and Estate Nicholas hike, Creque Dam hike, Mt. Victory Camp and hike, Estate Blue Mountain hike, Virgin Islands Rum Industries, Heritage Trail/Island tour, Nature Conservancy, WJKC Isle 95, WTJX Channel 12, Territorial Court and HOVENSA.

At the request of the senior counselor for the Super Kids camp, 22 youth received a presentation on community service and self-esteem. Youth were asked to identify helping behaviors and how they made them feel. At the conclusion of the session, all participants made "warm fuzzies" for each person.

An integral part of our youth development efforts focused on over 80 youths on all three islands, ages 8-12, who took part in the Mini-Society program. Participants began the program by experiencing scarcity situations that ultimately motivated them to establish their own society, complete with name, flag and currency. Within this self-organizing, experience-based society, they independently evolved businesses to meet market opportunities. As a result, they developed and utilized critical thinking, problem solving, practical arts and cooperative learning skills.

Other areas of note in our summer program included: videography, computer technology, clothing construction, nutrition, art, modeling and personal development, English, writing, mathematics and science.

#### Impacts/Outcomes:

1. Two mini-grants were received from the Department of Health (Federal Safe and Drug Free Schools and Communities) and the VI Energy office to assist in the Summer Academy program.
2. Over 260 youth participated in the Summer Academy program on St. Croix, St. Thomas and St. John. Over 53 staff, teachers and primarily college students, served as counselors, and volunteers.
3. Eighteen (18) staff became certified in basic first aid and safety, and child CPR. Food handler's cards were also received.

4. Youth were exposed to the four principles of digital videography sharpen their minds enough for 20% of the youth to express an interest in TV news and journalism, and small film production. Youths created a CD, which captured highlights of the summer experience.
5. Each summer camp participant was exposed to a minimum of three educational field trips to enhance their camp experience.
6. Youth learned the four steps to developing a business plan, working with a make-believe country, setting up currency, and other aspects of starting a business.

Source of Funding: USDA Smith-Lever; Kauffman Foundation Grant; VI Energy Office;  
CYFAR Grant, (Hire-a-Youth Program and Department of Labor/In-kind)  
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 membership in the CES Advisory council was increased in line with the recommendations made by the Civil Rights Review team. The new CES Advisory Council is comprised of 15 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 assist in the development of new activities; assist in communication between CES and its stakeholders. These 15 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 of the University of the Virgin Islands.

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.

During the year, CES gave three (3) presentations to our local legislature and the V.I. community on programs and activities we held to assist producers and the local community.

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 Agriculture, the Department of Health, the Department of Human Services, the Department of Labor, the Virgin Islands Housing Authority, UVI Social Sciences and Humanities Divisions, 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, the Beef Dairy and Livestock Program, and the Small Livestock Production and Management Shortcourse. 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. Also, UVI/CES, the University of Florida-Institute of Food and Agricultural Sciences collaborated in conducting training and exchange of personnel in fulfillment of a Capacity Building Grant in Internationalizing Extension. Other collaborations were between the University of Puerto Rico and the University of the Virgin Islands in a grazing management and sustainable agriculture project. CES have joint projects with the University of Kentucky, University of Arkansas, North Carolina A&T University and the University of Puerto Rico.

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, the Department of Agriculture and the Legislature of the Virgin Islands.

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.