University of the Virgin Islands Cooperative Extension Service



2006 Annual Report

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OVERVIEW STATEMENT FY 2006 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 FY2006 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 following goals and objectives, CES developed 15 strategic innovative projects and activities that positively impacted and changed the lives of many Virgin Islanders. These were communicated to our clientele through five radio stations and three local TV stations. A total of 22 radio programs were broadcasted by CES staff. The staff also appeared on seven television shows. A total of 440 publications were distributed and two booklets published. CES also sent out 138 press releases.

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 eight academic institutions, and governmental and non-governmental agencies were established in providing workshops and shortcourses to targeted clientele. Fifteen workshops and shortcourses were conducted during this period on various sustainable agriculture practices. One of these workshops was on the Alternative Energy Initiative. This workshop was given to policymakers regarding the Virgin Islands Sustainable Agriculture Bill. This workshop was instrumental in the passage of a new sustainable agriculture bill and also a 30% increase in funding for the Department of Agriculture. There was also a workshop on apiculture as an alternative agricultural enterprise to assist beekeepers in the business of beekeeping. As a result of knowledge received, producers were able to make improvements and also increase production, thereby increasing income. The program also conducted workshops on natural resource conservation, soil conservation and irrigation. A total of 32 participants from local and federal agencies and farmers' organizations gained knowledge of soil conservation practices. As a result of these educational activities, participants increased their knowledge and awareness about fundamental concepts and practices to reduce the incidence and effects of soil loss. Producers derived cost savings as a result of conservation practices gained from this workshop.

The computer literacy and recordkeeping course has modernized the efficiency of producers that participated in the program. Forty-two percent of producers attending the computer training have acquired their own computers and have been able to purchase inputs online, conduct web-based research, and communicated with fellow farmers and outreach staff

via email. These advances have resulted in significant time savings and decrease the producers' dependency on external assistance. A collaboration with a private integrated pest management company had twenty-three agriculture outreach staff and members of farmers' organization receiving hands-on training regarding research-based pest control practices. Producers were trained in organic and alternative pest control practices. This workshop increased the knowledge of producers in basic principles and applications of the integrated pest management concepts. These trainings and workshops on pesticide use and application have further decreased the application of pesticide usage by 30% and produced six certified organic farmers in the Virgin Islands.

The Beef, Dairy and Small Livestock Program continued to implement activities and workshops on animal care and productivity. The five farms enrolled in the Beef Cattle Improvement Program and the three farms enrolled in the Dairy Herd Improvement Program continued to receive technical assistance from CES' staff during this reporting period. Program staff continued to assist local producers in the selection and exportation of registered Senepol cattle to the US mainland, Puerto Rico and South America. A total of 200 animals were exported this year, as breeding stock giving farmers additional income in the livestock enterprise. Livestock identification continues to be a problem in the Virgin Islands; therefore, staff assisted producers in the identification of their livestock to maintain compliance with the current Virgin Islands Code requirements for animals. Ear tags, tattooing and branding were used as methods of identification bringing a cost savings to farmers. A total of 600 animals were tagged in this operation.

In collaboration with the University of Puerto Rico - Food Safety Institute and the V.I. Department of Agriculture, a workshop was conducted on the bird flu epidemic. This workshop brought livestock producers and professionals together to assess the threat of bird flu to the Virgin Islands economy. Out of this workshop a program was designed to provide producers with information on bird flu, its risks, and methods of prevention and eradication. Thirty-five persons attended this workshop.

In collaboration with the UVI/Agricultural Experiment Station, CES' staff continue to address the needs of the local livestock farming community. Training and technical assistance were provided in the areas of beef, dairy and small livestock through workshops, seminars, and demonstrations. AES' personnel performed breeding soundness, examination on bulls for both dairy and beef producers as part of the breeding guidelines provided by CES staff. CES staff was able to make pasture and forage recommendations to producers, thereby saving them money on feed purchases for their livestock.

CES' staff also provided leadership to three Caribbean organizations with which we are affiliated. These organizations, the Caribbean Food Crops Society, the Caribbean Association of Researchers and Herbal Practitioners (CARAPA), and the Caribbean Council of Higher Education in Agriculture (CACHE), have worked collaboratively with CES during the year. CES provided technical assistance to the British Virgin Islands (BVI) Department of Agriculture in the different aspects of horticulture and vegetable crop production. A total of 86 producers took advantage of these workshops. CES staff provided water quality training for six staff members of the BVI Department of Agriculture. They were trained in in-door/out-door air

quality, non-toxic households, general water quality practices and septic system management. A total of 104 families benefited from these workshops. Two hundred and fifty-six scientists and producers gained knowledge from workshops conducted by CES staff on Caribbean and tropical agriculture.

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. An annual workshop on food safety cosponsored by CES and the V.I. Department of Licensing and Consumer Affairs, trained EFNEP staff on food safety practices. The food safety program continued to be one of our priority programs in the Virgin Islands and collaboration continues with the Department of Health to provide food safety education for food vendors and persons who participate in food and cultural activities in the Virgin Islands. A total of four workshops were held 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. Also, during this year, a series of workshops were conducted for high school and elementary school students on food safety and practices. A total of 352 clients attended classes on food safety and received information on the nutritional value of various foods, budgeting, meal planning, and food preparation. As part of our summer program, the EFNEP program provided assistance to 60 youth teaching them how to select and prepare nutritious meals and to reduce their risk of obesity.

GOAL 3: A Healthy Well-Nourished Population

Improving Nutrition, Diet and Health is the main focus of this program. Virgin Islanders were educated in the fields of basic nutrition and nutrition diseases. Specific programs targeted diabetics and hypertension patients. A total of 17 seminars, workshops, and demonstrations were conducted and focused on childhood obesity, diabetes, and hypertension. Over 920 people were impacted by this program. CES continues 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. The program also assisted participants in learning about starchy foods, recognizing the appropriate portion size of local foods, and reducing portion size of starchy foods. Participants also increased their consumption of vegetables. Staff also worked with the Army National Guard on how to safely lose weight and prevent weight gain. Participants were also given information on portion size of local starches and the caloric content of the most commonly eaten fast food products. About 200 adults participated in this program. Ninety-five percent of the participants after the training reported gaining increased knowledge regarding weight loss strategies, 58% of the respondents indicated that they plan to drink eight glasses of water per day, 65% plan to start eating breakfast daily, and 51% plan to start exercising daily for 30 minutes a day four times per week. Staff worked in conjunction with the maternal and child health program in the local health department and they assisted in planning and organizing a workshop on childhood obesity. Strong emphasis was placed on childhood diabetes and joint problems. Staff also provided information on the importance of limiting calorie dense foods in children's diets including sodas, fast foods and sugary cereals.

GOAL 4: Greater Harmony between Agriculture and the Environment

CES continued 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 25 workshops, short courses, and demonstration for residents, in the areas of Urban Forestry, Urban Gardening, and Water Quality Protection. In collaboration with the Department of Planning and Natural Resources (DPNR), CES also conducted a series of workshops in Natural Resource and Environmental Management.

Staff continued to assist different elementary schools and high schools to implement and maintain their school gardens. CES' staff, in collaboration with the VI Department of Planning and Natural Resources (DPNR), conducted a nonpoint source pollution workshop and training for people in Region 2 of the United States. Over 2,175 teachers, business persons, local government personnel, decision makers and development professionals increased knowledge of nonpoint pollution issues through training, conferences, and technical assistance and consultations. Staff continued to supply information on the Magens Bay Septic Rehabilitation project and continues to give feedback on the protection of the coral reefs. 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. A major publication entitled Remarkable Big Trees in the U.S. Virgin Islands was published. The 136page book provides historical and cultural information about particular tree species and individual specimens, and serves as a self-tour guide showing where interested big trees are located. CES staff strengthened partnership with the VI Experimental Program to Stimulate Competitive Research (EPSCoR), Conservation Data Center (CDC), and Center for Marine and Environmental Studies (CMES). A St. Croix Environmental Repository was established at CES. Hard data related to St. Croix's environment were collected and digitized and a reference library was established. Since its opening, the Repository has become a popular reference center used by students and the general public. A total of 521 persons used the facility during the year.

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. A total of seventy-three clients completed the six-week clothing construction program. Computer

courses and computer literacy trainings were provided to these clients to help them acquire basic computer competency skills. CES continues to work in collaboration with the VI Department of 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 from all over the three islands in basic skills, computer technology, entrepreneurship and agricultural programs. This year new activities were added to the program, including steel band, small engine repair and energy programs to attract more young males to the summer camp. A total of 232 youth participated in the summer camp program. 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.

A new grant program, Healthy Lifestyles, was provided to 100 youth attending the UVI/CES 4-H Summer Academy. This program provided an opportunity for the youth to learn valuable lifestyle information. Students received training on good nutrition, developing healthy habits, and the importance of increasing their level of fitness. Eighty percent of the youth attending this training expressed a commitment to change nutritional habits over the next six months.

GOAL 1: AN AGRICULTURAL SYSTEM THAT IS HIGHLY COMPETITIVE

Program 1 – Sustainable Agriculture

2006 SSAWG Conference

Two representatives from the local SARE network, including one producer, attended the 2007 Southern Sustainable Agriculture Working Group Conference which was held in Louisville, Kentucky. Participation in this professional development activity resulted in increased knowledge and awareness in many areas of Sustainable Agriculture, including biological pest control, farm planning, financial management, and organic production practices. As a result of professional networking, new institutional linkages were formed to facilitate future joint initiatives. The producer developed many new contacts with fellow farmers as well as regional vendors of alternative and organic farm inputs.

Alternative Energy Initiatives

A presentation was delivered by the Executive Director of the Virgin Islands Energy Office to a group of approximately forty (40) legislators, agriculture outreach professionals, and representatives from farmers' organizations. This presentation was one of several that were delivered to provide input to senators regarding a proposed "Virgin Islands Sustainable Agriculture" bill. Information was disseminated about opportunities for the use of alternative, renewable energy sources for farm operations. As a result of this activity, trainers and policy makers increased their knowledge and awareness of feasible applications of solar and wind energy to enhance the sustainability of local farm enterprises.

Apiculture Initiative

The USVI SARE team continued to promote the adoption and/or inclusion of alternative agricultural enterprises to enhance the sustainability of local farm operations. During this reporting period trainers continued to advocate Beekeeping (Apiculture) as a viable alternative enterprise for producers. The Cooperative Extension Service in collaboration with V.I. Department of Agriculture, the V.I. Resource Conservation & Development Council, Inc., the USDA Natural Resources Conservation Service, and Kentucky State University provided an opportunity for local trainers to attend a national meeting and professional development activity. This partnership provided travel scholarships for three (3) local producers to participate in the 2006 Heartland Apicultural Society meeting which was held in Vicennes, Indiana. The trainers were exposed to theoretical and hands on presentations on a wide range of topics on the science, art, and business of Apiculture.

During the 2007 calendar year, the USVI SARE network will organize educational activities during which the trainees will conduct professional development activities for other farmers and professionals in agriculture. The ultimate goal of this initiative is to improve existing beekeeping operations in the territory, and increase the total number of commercial producers who are engaged in Apiculture.

Computer Literacy & Record Keeping

The UVI-CES Agriculture and Natural Resources Program concluded the fourth and final training session in a series of shortcourses for farmers on Computer Literacy and Record Keeping. The objective of this initiative was to assist producers in improving the efficiency and sustainability through the development and application of computer literacy and record keeping skills. As a result of this two year project, approximately seventy-five (75) crop and livestock producers in the territory completed the training and are better prepared to develop or improve the business aspect of their production and management systems. Participants in the program have acquired new skills, including communication by email, on-line ordering of products, word processing, and record keeping. These advancements have resulted in increased farm operation efficiency due to savings in time and money. The project was funded by a grant from the Southern Region Risk Management Agency.

Natural Resources Conservation Workshop

The UVI Cooperative Extension Service, in conjunction with the Urban & Community Forestry Council, the V.I. Resource Conservation and Development Council, provided scholarship opportunities for seven (7) students from secondary schools throughout the territory to participate in a one-week training program in Cochran, Georgia. This annual activity is sponsored and conducted by the USDA's Natural Resources Conservation Service. The objective of this training was to expose young adults to issues and career opportunities in the disciplines of food production, forestry, and natural resources.

The one-week intensive program consisted of classroom and field activities which covered a wide range of subjects, including soil science, wildlife habitats, farm operations, forest inventory and management, water conservation, and geology.

As a result of this initiative, all the participants expressed increased knowledge of issues regarding natural resources; all students also expressed potential interest in pursuing careers in forestry and natural resources.

Soil Conservation Workshop

Thirty-two (32) professional outreach staff from local and federal agencies and trainers from farmers' organizations participated in a one-day workshop on soil conservation practices. The training format consisted of indoor lectures on theoretical concepts and soil loss calculations while outdoor exercises focused on data collection techniques and the use of a soil survey map. As a result of this educational activity, participants increased their knowledge and awareness about fundamental concepts and practices to reduce the incidents and effects of soil loss.

Agencies which benefited from this informative presentation included the V.I. Department of Agriculture and the V.I. Department of Planning and Natural Resources. Participants from federal agencies included the USDA's Natural Resources Conservation Services and the Farm Service Agency. Research and Extension personnel from the University of the Virgin Islands' Land Grant Programs also completed this training. All trainees will subsequently share their knowledge on soil conservation practices with clientele and fellow staff of their respective agencies. The participants from farmers' organizations will disseminate this information to other members of their respective groups.

Monthly Farmers Market

The staff of the Cooperative Extension Service's Agriculture and Natural Resources Program, in conjunction with the staff of the Small Business Development Center, delivered two presentations during the Estate Bordeaux monthly farmers' market activity entitled "How to Start a Farm Enterprise." Approximately thirty five (35) producers received training regarding the critical steps involved in establishing and sustaining a farm business initiative, including financial, marketing, and production planning. Suggestions were also offered regarding how to improve and sustain a farm enterprise once established.

A follow-up group session was held at the farmers market which targeted a group of eight (8) secondary school students. As a result of this second presentation, these students increased their knowledge and awareness about environmental issues, technological advances in food production, and careers in Agricultural Science. Five of these students also expressed an interest in career opportunities in these academic disciplines.

Caribbean Food Crops Society

Ten (10) members of the local SARE team participated in the 42nd annual meeting of the Caribbean Food Crops Society which was held jointly with the Caribbean Agro-Economic Society in San Juan, Puerto Rico. This year's meeting focused on the theme of "Food Safety and Value-Added Production and Marketing of Tropical Crops." Technical sessions based on this theme addressed issues in crop and livestock production and marketing. Several optional technical tours were offered. One tour provided insight into opportunities and challenges in agricultural production and exportation from the Caribbean.

Of special interest this year was a workshop on "Invasive Alien Species" which was sponsored by the Tropical and Sub-Tropical Agriculture Research (TSTAR) Program. This interactive session provided an opportunity for a meaningful exchange of information and recommendations regarding regional food security.

The participants at this year's conference benefited from the professional networking and exchange of current scientific information on issues and research initiatives of concern to producers and the scientific community in the Caribbean region. During this year's meeting regional, national, and international partnerships were strengthened and previous linkages were enhanced to stimulate future joint projects in sustainable agricultural research and education.

Project on Agriculture and Tourism Linkage

Progress was made on a three-year research project which is jointly being conducted by the UVI Cooperative Extension Service and the University of Arkansas' Department of Agricultural Economics, the V.I. Department of Agriculture, the V.I. Department of Tourism, and the University of the Virgin Islands' Eastern Caribbean Center. The primary aim of this study is to identify constraints that limit or prohibit the development of a successful linkage between the local agricultural and tourism sectors. Subsequently, recommendations will be made to address the identified constraints.

During calendar year 2007, data will be collected, analyzed, and presented to local and regional scientific and farming audiences. In addition, recommendations will be documented, published, and distributed regarding strategies to overcome constraints to linkages between the agricultural and tourism sectors. A two-day conference is planned to present the results of the project during the next reporting period.

Careers in Agriculture

The SARE Coordinator delivered a presentation on career opportunities in Agricultural Science to a group of fifty-nine (59) secondary school students. This presentation covered a wide range of professional fields in food production, environmental science, and natural resources. In addition, students were informed about academic preparation for careers in Agricultural Science. All students increased their level of knowledge and awareness of career opportunities in food production sciences, and 40% of them expressed a potential interest in pursuing studies in related fields.

Integrated Pest Management Workshop

The UVI Cooperative Extension Service, in conjunction with FINTRAC, a private agribusiness establishment, conducted a workshop on integrated pest management for twenty-three (23) agricultural outreach staff and members of farmers' organizations. This activity was designed to provide on-going training regarding research-based pest control practices. In addition, the majority of the CES clientele have requested training and information on organic/alternative pest control practices. The workshop participants increased their knowledge of the basic principles and application of the integrated pest management concept. Sustainable alternatives, including organic methods, biological control, and cultural practices were presented using a variety of pest and crop species.

Poultry Production Workshop

The V.I. Department and the UVI Cooperative Extension Service sponsored a Poultry Production workshop for farmers and professionals in agriculture. This training was primarily conducted to disseminate research-based information regarding establishing or improving a poultry production operation. This activity was also organized to promote poultry farming as a potentially viable agricultural enterprise for the territory. During the past three decades the level of local poultry production in the territory has declined.

Agriculture & Food Fair Exhibits

Two agriculture and food fair exhibits provided opportunities for disseminating information on sustainable agriculture during the Agrifest activity on St. Croix. The Agrifest activity 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 was visited by numerous trainers and outreach staff during the three day event.

The St. Thomas – St. John Agriculture & 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 fifty (50) trainers increased their knowledge base regarding local and national initiatives of the SARE program.

Partnership Enhancement

The UVI Cooperative Extension Service formed a new partnership with FINTRAC, an agribusiness enterprise which conducts ag-related projects in foreign countries. As a result of this collaboration, training programs were conducted in organic pest management for thirty-nine (39) farmers and outreach staff. Our partnership with Kentucky State University Cooperative Extension Service was enhanced through a joint project on Apiculture. Both of these partnerships will be further strengthened during the following fiscal year in the form of educational initiatives for farmers and professional staff.

Model State Program

The local SARE team made progress in working toward the development of a Model State Program for the US Virgin Islands. Specifically, the prototype of a website was developed as a training and outreach tool of the local SARE network.

Unfortunately, a new search has begun for a Program Assistant, following the resignation of the prospective candidate identified during the previous reporting year.

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.

Outputs/Outcomes:

- 1. Sixty-five percent of legislators attending the energy seminars sponsored a Sustainable Agriculture bill. Also, senators voted to increase funding for the Department of Agriculture by 30%.
- 2. Three local producers changed their operations based on knowledge and skills gained from attending the apiculture conference.
- 3. Forty-two percent of producers attending the computer training bought their own computers.
- 4. Eighty-six percent have been using the computer to access agriculture-related information to help their enterprise.
- 5. Sixty-six percent have ordered items online.

- 6. Ten farmers enrolled in a conservation and natural resources plan as a result of attending the workshop.
- 7. Seventy percent of the students who participated in the training program in Georgia have decided to pursue further education in agriculture.
- 8. Sixty-two percent of producers attending this workshop reported gaining skills in scouting for pests.
- 9. Thirty-five percent reported that they will start using organic methods for pest control.
- 10. Six trainers and twenty-six farmers increased their knowledge of poultry management and production practices.
- 11. Five farmers decided to establish a poultry operation after attending the poultry workshop.
- 12. Eight farmers decided to join the breeders' exchange program offered by CES to take advantage of quality breed stock.

Funding Source:

Sustainable Agriculture Research & Education Program; USDA Natural Resources Conservation Service; Heartland Apicultural Society; Southern Region Risk Management Agency; Urban & Community Forestry Council; Smith-Lever

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 Puerto Rico. 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 200 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 were also collected to include gender, color, navel fold condition, head condition, height, scrotal circumference, and type of birth. All data were 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. Staff assisted in the official transfer of the entire Castle Nugent Farms Senepol cattle herd to the University of the Virgin Islands Agricultural Experiment Station. Evaluation of all the animals was made to determine the animals to be transferred, sold or culled as well as assistance in the transfer of all records associated with the herd. Extension personnel continue to work closely with the Experiment Station staff in developing management protocols, techniques and procedures that will be used in the ongoing maintenance of the herd.

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's livestock programs. Total numbers of animals identified were in excess of 500.

Personnel from CES worked closely with the VI Department of Agriculture and the USDA APHIS program to continue to educate farmers as to the dangers of the Tropical Bont Tick, its 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 550. The number of animals examined was over 4,000 with approximately 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 comprises 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 were compiled and processed through the main program system at North Carolina State University. Resulting data were 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. Due to economic and logistical circumstances, one of the farms liquidated in June and the other two closed their doors in August. Extension staff assisted the farms up to and through their closings with all of the necessary record management and technical support. Assistance was given in the areas of selection, sale and export of the animals to dairies in Puerto Rico or culling to butcher. Staff also assisted in the record transfers of the milking

animals to the new owners. Total number of milk tests performed was forty (40) and the total number of animals tested was approximately 2,000.

Extension staff continued to assist livestock farmers on St. Croix with activities in conjunction with 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.

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 workshop entitled "the ABC's of Bird Flu." The workshop was offered to poultry and livestock professionals. It was designed to provide these parties with information on what exactly is bird flu, what are the risks and possibilities for the Virgin Islands and methods and mind-sets required to minimize those risks. Thirty-five (35) persons attended the workshop.

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 fifteen (15) 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.

Extension personnel provided technical on-farm demonstration to six (6) small livestock producers in the proper techniques of elastrator castration of goats so that they might improve their breeding and selection practices within their own flocks.

Staff of the Cooperative Extension Service teamed up with staff from the Agricultural Experiment Station to address the needs and concerns of the local livestock farming community. Training, information, and technical assistance were provided in the areas of beef, dairy and small livestock through workshops, seminars, shortcourses and demonstrations. Small livestock farmers were able to observe proper management techniques and facilities through tours of the AES sheep facility and were encouraged to discuss options available to them with both AES and CES staff. AES personnel performed breeding soundness examinations on bulls for both beef and dairy producers as part of the breeding guidelines provided by CES staff. CES staff was also able to make pasture and forage management recommendations to producers due to ongoing forage research and trial being conducted by AES programs.

Outputs/Outcomes:

1. Six small livestock farmers learned how to castrate their surplus male goats. This helped in improving the genetic base of their breeding flocks and increased the marketability of their goats by fifty percent (50%).

- 2. Thirty-five poultry producers and farmers increased their knowledge of the latest information and research regarding bird flu. Sixty percent (60%) of farmers attending the workshop made improvements in their physical facilities and management techniques to lessen their risks, should an outbreak occur.
- 3. Fifteen (15) farmers increased their knowledge of swine husbandry practices. Ninety percent (90%) of the farmers made changes to their swine operations.
- 4. Forty-five (45) farmers increased their knowledge of the Tropical Bont Tick and its associated problems. Sixty (60%) of these farmers were able to identify the Bont Tick and reported it to the federal program for eradication.

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 for the four agricultural organizations that have linkages in the Caribbean region: The Caribbean Food Crop 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. The Caribbean Community and Herbal Forestry Group was also assisted during this reporting cycle.

CES provided leadership in assisting the local organizing committee in the preparation of the 42nd Annual Caribbean Food Crops Society Meeting held in San Juan, Puerto Rico. This meeting brought scientists from the Eastern Caribbean, southern United States, and other foreign countries. A total of 91 papers and 26 posters were presented with a unique farmers' forum. At total of 267 participants attended this conference. CES staff also participated in providing leadership in organizing the 11th Caribbean Urban and Community Forestry Conference in St. Croix. There were a total of ninety (90) people in attendance. The participants represented Puerto Rico, the Virgin Islands, various states of the United States, and other countries in the Caribbean.

During this year, CES staff continued to assist CARAPA in maintaining the membership drive, and also publishing the conference proceedings. CES staff attended CACHE meetings and provided leadership in the organization. CES is planning to host fifteen (15) students from different CACHE countries at the University.

Staff from the agricultural program in CES provided training in different aspects of horticulture and vegetable crop production to farmers in the British Virgin Islands. A series of workshops to help farmers improve their crop production and storage through post-harvest technology was conducted for eighty-six (86) farmers. Six staff members of the British Virgin Islands Department of Agriculture were also trained as part of this program. Water Quality staff from CES also provided workshops on indoor/outdoor air quality, non-toxic household, general

water quality practices and septic system management. A total of 104 families participated in these workshops. Personnel from the British Virgin Islands Department of Agriculture were also trained to carry on the activities of this program.

CES staff also assisted the British Virgin Islands Department of Agriculture in preparation for the Farmer's Day in the Annual Agriculture and Food Fair.

Outputs/Outcomes:

- 1. Two hundred and sixty-five scientists and producers gained knowledge in Caribbean and tropical agriculture.
- 2. Ninety persons increased their knowledge in community forestry development and two persons used their knowledge gained in a design for two community projects on St. Croix and on Puerto Rico.
- 3. A total of eighty-six (86) producers gained knowledge in the vegetable and horticulture production. Sixty-five percent of these eighty-six (86) participants reported that they will include the practices shown in their farm operation. Thirty percent of producers who attended the vegetable and horticulture workshops started to implement a new irrigation system in their farming operation.
- 4. Eighty percent of the people surveyed that attended the non-toxic household workshop reported that they will use the new products recommended for their daily household chores.
- 5. Thirty percent of the people who attended the septic system management workshop indicated that they will maintain a good drain field in their septic system management.

Source of Funding: CES/USDA: Smith Lever

Scope of Impact: Caribbean region

GOAL 2: A SAFE AND SECURE FOOD AND FIBER SYSTEM

Program 4 – Food Safety Education

The annual holiday baking workshop was held and participants learned to bake sweetbread and tarts. On St. Thomas, a total of thirty-three (33) females and five (5) males participated in the sweetbread workshop; while twenty-six (26) persons of which 13% were males, participated in the tart workshop.

On St. Croix, a three-day holiday baking workshop included instruction in preparing sweet bread, fruit cake, tart, coquito and tembleque. Over the three-day period, eighty-one (81) adults participated.

"Agriculture and Tourism: A Perfect Mix for 2006" was the theme of the annual Agriculture and Food Fair held on St. Croix. The Family & Consumer Sciences' nutrition booth display focused on Diabetes. With the rampant rate of diabetes in the territory, every opportunity was taken to educate the community about prevention, whenever possible. The display demonstrated appropriate portion sizes of the more common starches consumed such as yam, sweet potato, beans, corn, green bananas, etc. Displays of actual food and food replicas graced the tables. Additionally, the sugar content of commonly consumed beverages, cereals, and snacks was on display. Over 2,000 individuals viewed the display and asked questions regarding healthier eating.

Outputs/Outcomes

- 1. Thirty percent (30%) of the sweetbread workshop attendees indicated that they would bake for the holidays based on their newly acquired information and skills.
- 2. The twenty-six (26) individuals who attended the tart workshop expressed an interest in making tarts to give as gifts, and to generate more family income.
- 3. Over 140 individuals from the general community took advantage of holiday baking information during the year.
- 4. Over 2,000 individuals viewed the nutrition booth display at the annual Agriculture and Food Fair where they indicated a desire to improve their ability to make informed healthy food choices.

Source of Funding: USDA/Smith-Lever

Scope of Impact: Territory-wide

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

St. Thomas EFNEP staff visited potential clients to recruit for the EFNEP Program by going door-to-door in community housing developments. Head Start Centers in the Lindberg Bay and Tutu areas were visited and eight (8) teachers enrolled. Two additional Head Start Centers were visited in Savan and French Town for recruitment purposes, and the Kirwan Terrace Housing Development where three (3) persons signed up for the EFNEP Program. Additionally, four (4) persons signed up from the TuTu Highrise. The WIC Program was visited but without any participation, to date.

In St. Croix, as part of the community-based Children, Youth and Families-at-Risk (CYFAR) tutorial and after-school program, staff taught basic nutrition information to youth under eighteen (18) years of age. These thirty (30) participants, (67% males) were also taught how to prepare easy and simple recipes such as homemade cookies and nutritious cheese sticks.

In order to teach youth about the importance of controlling portion sizes, staff discussed appropriate portion sizes for commonly consumed starches/carbohydrates. When parents and youth figured out the amount of sugar found in various commonly consumed sodas, they were surprised. Eleven (11) participants planned to drink more nutritiously with natural fruits and juices.

During March, staff attended the Board on Human Sciences and EFNEP Coordinators' Spring Meeting in Washington, D.C. The four major issues of concern included: EFNEP funding and what it means to 1890 schools, combating obesity, an evaluation system to measure program impact; and Senate briefings to encourage funding for EFNEP.

Also, during this period, youth at the Kirwan Terrace Housing Community received a nutrition basics workshop. Seventeen (17) youth – eleven (11) females and six (6) males – examined important reasons to be concerned about eating for a healthier life.

In observance of the Week of the Young Child, staff conducted demonstrations using local fruits such as watermelon, banana and pineapple to make fruit drinks. The two Head Start Centers at French Town and Lindberg - sixty (60) and twenty (20) - respectively, now understand the advantage of using fruit juice to make delicious-tasting drinks. Participants included males and females, Blacks, Hispanics and people of Middle Eastern descent. On St. Croix a nutrition lesson was conducted at the Croixville CYFAR Center which focused on the sugar content of soft drinks and breakfast cereals. Twelve (12) youth took advantage of this opportunity to learn about the importance of being concerned about limiting their daily intake of sugar.

In keeping with an emphasis on exercise, staff facilitated a workshop on ChiWalking. This workshop was conducted by a certified ChiWalking and ChiRunning coach. Practical ways of improving walking technique aimed at reducing injury and improving performance were emphasized. Twenty-seven percent (27%) of the eleven participants were males; and 18% of Hispanic heritage. Analysis of completed evaluation forms yielded the following results: 86% of respondents saw the workshop as excellent, seventy-one percent (71%) rated the presenter as excellent; and 71% gave an excellent rating to the overall quality of the workshop.

Staff presented lectures on Childhood Obesity at the Best Beginnings Conference on St. Croix and St. Thomas. Participants were primarily day care center employees who focused on numerous topics associated with early childhood. The childhood obesity interest was great in light of the issues of childhood obesity in the territory. Considerable focus was placed on tips to help adults work to prevent childhood obesity. Over a two-day period, fifty-three (53) persons on St. Croix; and twenty-five (25) persons on St. Thomas participated in the conference workshops. On St. Croix, of the fifty-three (53) adult participants, four percent (4%) were male and six percent (6%) were Hispanic. On St. Thomas, twenty-five (25) adults participated in the conference workshop; four percent (4%) were male, and 4% Caucasian. The remaining participants were females of African descent.

Nutrition program staff made plans to participate in the 4-H Summer Academy, a sixweek summer camp for 5-14 year olds. Nutrition staff prepared for the 4-H Summer Academy by

developing booklets which consisted of recipes, coloring books and nutritional crossword puzzles targeting the youngest campers. The coloring books were used to identify different fruits and vegetables; and youth had to identify from which plants the vegetables and fruits were derived.

Developing of lesson plans, contacting various agencies and guest speakers, and arranging field trips were a part of the nutrition component's preparation. Additionally, junior and senior counselors in an orientation received an overview of the nutrition information to be shared with youth over the six-week period. The EFNEP curriculum was offered at the off-site location in St. Croix; counselors and staff were oriented and instructed on how to implement and infuse nutrition information throughout the various topics to be covered in the six weeks. As part of the Summer Academy, the nutrition component played a crucial role in the Farm Safety Day observance by discussing the importance of food safety. Considerable emphasis was placed on the importance of hand washing and avoidance of cross-contamination. This event was a one-day activity to expose youth to the importance of safety in the home, school, farm, and throughout the entire community.

Also, as part of the 4-H Summer Academy staff created a "nutrition" play which was based on the four basic food groups and portion sizes. Topics included cleanliness, money management, food safety, naming foods from the food groups; and identification of accompanying nutritional value of foods. Also, a mobile was made presenting a variety of fruits in various shapes. A demonstration focusing on how to make a variety of drinks from watermelon, mango, strawberries and soursop was well received. Youth played a nutrition game which required that they achieve accurate food recall, portion sizes and etiquette.

Staff assisted with the 4-H Summer Academy during the summer in various ways. A total of thirty-two (32) youth participated at the University of the Virgin Islands site. Eight (8) youth participated in cooking classes, and with the assistance of the nutrition assistant, youth learned how to measure solids and liquids. Many learned how to identify kitchen utensils and to classify their use. As measured by a pre and post test, many youth learned to identify an electric mixer, flour sifter, griddle, hand beater and colander, cooking tools with which most were not familiar at the beginning of the summer camp experience. In analyzing the results of converting measurements information, gains were made in looking at what constitutes a tablespoon, cup, pint, ³/₄ cup and 2 tablespoons. To examine nutrition knowledge, youth were asked to identify foods high in fiber, low in fat, and food safety concerns. There was an increase in knowledge across all respondents. Other questions included reasons food companies advertise, reasons for stomach ache, reasons for not skipping meals; and how to correctly thaw chicken. The largest gain in knowledge was evidenced in the topic on how to correctly thaw chicken.

As part of the closing activity, youth made lunch for parents and guardians utilizing newly-acquired recipes, and demonstrated their newly-acquired skills of properly hosting and serving, as well as table setting. In the closing program for the 4-H Summer Academy, nutrition class participants presented a skit on the importance of eating breakfast regularly.

Other topics covered in the summer academy included dressing for success, etiquette, setting of tables in both formal and informal settings. Youth also received information on

violence prevention. Money management and a discussion on good touch, bad touch rounded out the curriculum.

Also, during the summer, thirty-five (35) youth participated at the Moravian Church site. In examining behavior change based on EFNEP lessons, at the end of camp youth were asked if they ate breakfast each day -72% of participants indicated that they had started to eat breakfast more often. Fifty percent (50%) of the participants indicated that they were eating three or more food groups at breakfast since the camp experience, and sixty-seven percent (67%) of the participants reported that they wash their hands more often since the beginning of summer camp.

Also, a nutrition workshop was held for members of the Antiguan Salvation Army; thirteen (13) women participated, along with three (3) youth.

During this same period, staff participated in a workshop sponsored by the Department of Human Services where they discussed childhood obesity and caloric content of commonly consumed fast foods and local starches. Seventy (70) females and twelve (12) males participated.

Outputs/Outcomes

- 1. Recruitment efforts involved visitations at several housing developments in St. Thomas Lindbergh Bay, Tutu Highrise and Kirwan Terrace. Head Start Centers were also approached.
- 2. As a part of the ongoing CYFAR/NCP after school program, thirty (30) youth attended a nutrition workshop and received information which increased their knowledge of healthy eating habits. Sixty-seven percent (67%) were males who participated in activities learning to make easy and simple recipes, such as homemade cookies and nutritious cheese sticks.
- 3. Thirty (30) CYFAR youth received information on basic nutrition, including how to prepare simple, easy and nutritious recipes. Sixty-seven percent (67%) were males. Youth also received information and demonstrations on controlling portion sizes especially when eating commonly consumed starches and carbohydrates. Examination was made regarding the amount of sugar in commonly consumed sodas. As a result, almost 50% of youth indicated a plan to adopt more healthy drinking choices by consuming natural fruits and juices.
- 4. Staff knowledge was enhanced by attendance at the Board on Human Sciences and EFNEP Coordinators' Meeting in Washington, DC where discussions were held relative to EFNEP funding, combating obesity, program evaluation and Senate briefings to encourage funding for EFNEP.
- 5. Seventy-two percent (72%) of seventeen (17) youth at the St. Thomas, Kirwan Terrace Housing Development increased their knowledge of the ABCs of nutrition basics through workshop participation.

- 6. In Observance of the Week of the Young Child, Head Start Center youth received an opportunity to improve their health choices through intake of pineapple, watermelon and banana fruit drinks. Sixty-five percent (65%) indicated a desire to adopt new habits toward healthier selections for their families.
- 7. To reinforce the importance of exercise, a workshop was conducted by a certified ChiWalking and ChiRunning coach. Emphasis was placed on acquiring knowledge to improve walking technique and reduce injury. Seventy-one percent (71%) of participants evaluated the overall workshop excellent.
- 8. Nutrition program staff participated in the 4-H Summer Academy planning and implementation. Curriculum developed included information on the four steps to accurately follow recipes and practice in solving nutrition themed crossword puzzles. Eighty percent (80%) of participants were able to identify four (4) of five (5) different fruits and vegetables; and from which plants, vegetables and fruits are derived following the six week program.
- 9. Youth promised to adopt new methods to improve hand washing practices at home and school. Ninety percent (90%) indicated improved knowledge and skill following this session.
- 10. Fifty-five percent (55%) of youth accurately identified all of the four basic food groups along with their concomitant nutritional value. Eighty percent (80%) were able to identify accurate portion sizes; and 90% could identify practices of good etiquette.
- 11. As a result of the 4-H Summer Academy day camp nutrition sessions, fifty-two percent (52%) of the participants indicated that they started eating breakfast more often. Sixty-eight percent (68%) of youth indicated that they started to eat at least 3 food groups at breakfast since the camp started. Eighty-four percent (84%) of participants indicated that they now wash their hands more often.

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

Fourteen (14) participants were interested in improving their overall health status with emphasis on better cooking skills, and introducing new foods/recipes into their diets. This included incorporating recommendations from the food guide pyramid into their daily meal plan; more specifically - incorporating more vegetables - and preparing foods without using a lot of salt or oil. The fourteen (14) participants consisted of thirteen (13) females and one (1) male; by

race/ethnicity – eleven (11) Black, one (1) Caucasian, and two (2) Hispanics; fourteen percent (14%) were teenagers.

St. Croix staff prepared for World Food Day; however the event was cancelled due to inclement weather. Subsequently, staff prepared for holiday baking workshops with considerable focus on pumpkin as a holiday treat.

An educational session was provided by nutrition staff to the CYFAR Advisory Council members. The lecture included information on reasons to increase fruit/vegetable intake, importance of unsaturated foods in the diet, and the ill-health effects of eating fried/heated oils regularly. This proved to hold a high level of interest for members as indicated by the numerous questions asked throughout this interactive exchange. Members got an opportunity to experience the type of information provided to Children, Youth and Families at-Risk/New Communities Program (CYFAR/NCP) youth and families.

As part of the annual Agriculture and Food Fair held in St. Thomas, staff shared nutrition and health information with attendees. An oral health presentation was made by a local dentist, who focused on the importance of taking care of one's teeth at an early age. Twelve (12) youth participated, both males and females. All were given tooth brushes and floss packages.

Another local nutritionist discussed the effects of over-consumption of carbohydrates in the diet with twenty (20) individuals. As a part of this session, handouts were distributed on appropriate portion sizes for various local foods. Children had their knowledge of the food pyramid and the various food groups tested. Accurately answering questions at the end of the presentation resulted in receipt of prizes.

During this period, a presentation was made on how to protect against hypertension, cholesterol, diabetes and obesity. Participants learned to prepare vegetables and beans in many different ways. The majority of the seven (7) female, adult participants expressed an interest in changing their eating habits. Eighty-six percent (86%), and fourteen percent (14%) of participants were Black and Hispanic, respectively.

A pumpkin workshop was held to teach participants the many ways to prepare pumpkin; and also how to save money while making goodies for the holidays. Pumpkin bread, cake, pies and soup were on the menu. Most participants had never prepared dishes like the ones presented and were therefore amazed at their ability to make such tasty items.

Within a thirty-day period, nutrition program staff made presentations to the youth and adults at the St. Croix CYFAR/New Communities Program. Sessions included information on portion sizes, the food pyramid and healthy snacks.

The next quarter, staff in conjunction with the Maternal and Child Health Program in the local Health Department, planned and organized a workshop on Childhood Obesity. This workshop focused on getting information out to the media for the entire community and especially Head Start Centers in St. Thomas. Strong emphasis was placed on childhood diabetes and joint problems. Additionally, staff provided information on the importance of limiting

calorie dense foods in children's diets including soda, fast foods and sugary cereals. The eight (8) adult, Black participants included 75% females.

Later in May, staff participated at the Charles Harwood Memorial Complex in the National Employee Health and Fitness Day observance. The nutrition lecture given centered on Successful Weight Loss Strategies. Participants were exposed to the sugar content contained in some commonly consumed foods and beverages leading to one staff person deciding not to consume soda at lunch. Other topics focused on the importance of exercise, water and breakfast consumption. The twenty (20) adult attendees included 25% males, with 25% Hispanic participation.

Staff participated in a university Health Fair held during this period which focused on the sugar content of commonly consumed foods and beverages. Seven (7) adult individuals participated, of which eighty-six percent (86%) were females.

Staff attended the St. Thomas/St. John school district's Wellness Policy Conference after being requested to assist in development of this federally required policy. It is an important new tool to address childhood obesity; and to promote healthy eating habits, and physical activity through changes in the school environment.

In St. John, a workshop entitled, "What you need to know about diabetes" was jointly organized by staff across all three islands. The workshop focused on appropriate portion sizes of commonly consumed starchy vegetables - such as, rice, beans, tania, corn, etc. A post workshop evaluation indicated that participants thought the workshop was excellent but too short. The fifteen (15) participants included an audience that was 100% Black, sixty-seven percent (67%) female; and ninety-three percent (93%) adults.

The local Army National Guard received information on how to safely lose weight; and prevent weight gain. Participants also were shown appropriate portion sizes of local starches and the calorie content of the most commonly eaten fast food products. Of the two hundred adult attendees, sixty percent (60%) were males; ten percent (10%) Hispanic, four percent (4%) Caucasian and eighty-seven percent (87%) Black. One hundred and thirty-four (134) of the 200 participants turned in surveys at the end of the session. Ninety-five percent (95%) reported increased knowledge regarding weight loss strategies. Respondents indicated that they planned to change their dietary habits as follows: fifty-nine percent (59%) indicated that they plan to drink eight glasses of water per day; sixty-five percent (65%) plan to start eating breakfast daily; fifty-one percent (51%) plan to start exercising for 30 minutes, 4 times a week. Additionally, sixty-five percent (65%) indicated that they plan to start getting 7-8 hours of sleep a night; sixty-five percent (65%) of the participants plan to increase their intake of non-starchy vegetables; seventy percent (70%) plan to reduce their portion servings of starchy foods by half; fifty-nine percent (59%) of respondents indicated their plan to reduce their intake of sugary foods. Finally, forty-three percent (43%) plan to limit their intake of fried and greasy foods.

During this period, a First Annual Bishop's Health Fair for the Episcopal Churches of St. Croix was held; and nutrition staff participated. All attendees were weighed to ascertain body fat; followed by calculation of their body fat index. Fifty-four (54) individuals took part in this

workshop; of which eighty-three percent (83%) were female; one hundred percent (100%) Black; and ninety-one percent (91%) adults. However, the age range extended from five (5) to eighty-nine (89) years of age with the average being 51 years; with an average weight of 181 pounds. Furthermore, more specifically, the female participants' average percent body fat was 37.3, or 5.1 percent above the recommended 32 percent. Male participants had an average percent body fat of 26.5 percent which is under the recommended 27 percent. The average body mass index (BMI) of all participants was 30.2kg. These results indicate that 85.7 percent of the participants screened were overweight.

Later in the year, similar activities were conducted at the St. Croix Seventh-Day Adventist School Fair where thirty-five (35) persons participated. The age range was from 16-72 years with the average being 47. The average weight for all adults was 173 pounds. Female participants' average percent body fat rate was 37.2, 5.2 percent above the recommended 32 percent. The male participants' average percent body fat was 22.0 percent which is within the recommended percentage of 27 percent. The average body mass index of the participants was 28.9 kg. Overall, 71.4 percent of the participants screened were overweight.

A workshop was held for a church youth group, the nutrition lesson focused on the sugar content of soft drinks, identification of foods from each food group, and the new food guide pyramid. Thirty-three (33) participants included thirty percent males, three (3) adults and thirty (30) youth. A similar nutrition class was held at a local high school, the St. Croix Educational Complex where twenty-six (26) youth, all females, participated.

The Frederiksted Health Center observed Nurses' Week by holding a session on Successful Weight Loss Strategies. The important role of calcium, fiber, exercise, water and breakfast consumption was stressed, and seven (7) nurses participated.

Outputs/Outcomes

- 1. In one nutrition workshop, fourteen (14) participants acquired knowledge of the food guide pyramid and seventy-five percent (75%) committed to inclusion of more vegetables in their daily diet after receiving this information.
- 2. CYFAR Advisory Council Members received a nutrition lecture to demonstrate the type of information CYFAR participants receive at the housing development. Of the twelve (12) attendees, 60% indicated that the information was quite helpful especially the utilization of food models to teach about portion sizes.
- 3. In St. John, workshop participants were given information to assist in understanding appropriate portion sizes of commonly consumed starches. Fifty percent (50%) of participants were able to demonstrate appropriate portion sizes at the end of the workshop.
- 4. The local National Guard training focusing on weight lose and prevention of weight gain was attended by 200 participants. Respondents to the post evaluation measure indicated plans to change their dietary habits. Fifty-nine percent (59%) indicated a plan to drink

eight (8) glasses of water per day; sixty-five percent (65%) plan to adopt the habit of eating breakfast daily. Fifty-one percent (51%) plan to start exercising for thirty (30) minutes, four (4) times a week. Sixty-five percent (65%) plan to increase their intake of non-starchy vegetables; seventy percent (70% plan to reduce their portion servings of starchy foods by 50%. Additionally, 59% of respondents indicated their plans to reduce their intake of sugary foods. Forty-three percent (43%) plan to limit their intake of greasy and fried foods. Sixty-five percent (65%) will endeavor to get seven-eight hours of sleep per night.

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 early 2005 a survey of Water Island's residents revealed that 99% of the respondents had not received any training in the care and culture of trees. The 1% that had some training received that education through reading and getting advice from neighbors. A meeting was set with the Water Island Civic Association and a date was established for the first of two tree pruning workshops that was held. Forty (40) homeowners participated overall in the workshops.

After reading about a tree care workshop conducted by the CES, the city manager of Tortola, British Virgin Islands invited CES staff to conduct a seminar for city landscape workers as well as the general public. Tree Pruning, Tree Preservation During Construction, and Top Trees for the Virgin Islands were the subjects covered in the one-day event. Thirty-three (33) individuals participated in the seminar. A pre-seminar survey revealed that ninety-five percent (95%) of participants received their knowledge of tree pruning and care by trial and error and asking other gardeners. Ninety percent (90%) had pruned a tree within the last three years. Thus, the majority of the participants have been involved in tree care without formal training.

As a follow up to a tree pruning workshop conducted earlier in the year for the V.I. Housing Authority's (VIHA) landscape maintenance crew in St. Thomas, CES staff conducted a similar workshop on St. Croix. Ten (10) members of the maintenance crew participated in this half day event. None of the participants had any formal training in tree care. The majority of the crew pruned trees with inspecting the trees. About eighty percent (80%) didn't have knowledge of the basic tree forms and structure.

Development of economic opportunities through the use of forest products is one of the goals that Renewable Resources Extension Act (RREA) and the Urban Forestry Program have decided to achieve. One objective of the program is to assist residents with developing marketing strategies for wood products. CES in partnership with the Small Business Development Center

(SBDC) conducted two seminars entitled the Business of Working with Wood. Master woodworkers Avelino Samuel and Clarence "Nick" Cook made presentations on marketing wood products. Twenty-nine (29) residents attended the seminars. Included in the attendees were woodworkers of all skill level, homeowners with large tracks of forested land, and interested citizens. Approximately eighty-five percent (85%) of attendees had never had any formal training in marketing of any products.

Outputs/Outcomes:

- 1. A pre-workshop survey revealed that ninety-seven percent 97% of respondents rated their knowledge of subjects such as What is Pruning, Tools of the Trade, Reasons for Pruning, as fair to poor. At the end of the second workshop, sixty-five percent (65%) of the participants rated their increase in knowledge of the subjects presented as good. Fifty-percent indicated that they had received enough information to prune on their own. The same number indicated that they would continue to seek information on the subject.
- 2. Seventy-five percent (75%) of the participants reported that they will seek more information about caring for trees. Sixty percent (60%) indicated that they will inspect their trees before pruning and buy additional safety equipment. Forty percent (40%) of the participants plan to prune their trees earlier.
- 3. At the conclusion of the workshop all of the crew indicated that they learned more about tree care at that workshop than they had ever learned on their own, including tools used in pruning and spotting hazardous tree situations. They all felt that they were better prepared to better care for the trees in the public housing communities. VIHA plans to schedule more workshops of this kind for the landscape crews in the future.
- 4. As a means of providing an avenue for demonstrating some of what was taught in the seminars, CES partnered with the V.I. Department of Agriculture to put on a woodworkers show in each district. Twenty-one (21) woodworkers participated in the show. All had indicated that they had benefited greatly from the seminars. Fifty percent (50%) of the participants actually used some of the techniques learned in the marketing seminars.
- 5. Twenty-five percent (25%) of those that attended the seminar indicated that they had gained a better appreciation for the use of forest products and the economic opportunities that could be derived by proper management of the forest resources. Seventy-five percent of the homeowners plan to seek more information on the management of the tree populations in their area.

Source of Funding: USDA/RREA, USDA/Smith Lever

Scope of Impact: Territory

Program 9 - Urban Gardening

Extension staff gave a lecture to CYFAR participants about the benefits of gardening in their public housing community. The tenants were provided with information on the types of crops that can be grown and information on other resources that can assist them in being successful gardeners. Twenty percent (20%) of the attendees have gardens but have never obtained any formal training. The learning consisted of obtaining knowledge from other gardeners and by trial and error.

CES conducted its annual lecture and plant distribution to the 100 campers and staff 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 were also given a plant or two to nurture for the duration of the academy.

Outputs/Outcomes:

- 1. All of the eight residents that attended indicated that they gained a better understanding of caring for plants and the resources that are available to them through CES. Fifty percent (50%) of the participants plan to apply some of the knowledge gained into their management plan
- 2. At the end of the summer academy, the campers were required to bring the plants they had cared for to the closing ceremony. Approximately ten percent (10%) of the campers returned a live plant. Unfortunately, thieves stole some of the plants that were being taken care of at the camp site. 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

Scope of Impact: Territory

Program 10 – Water Quality Protection

Key Theme: Water Quality

Educational programs targeting the general public, youth, students, businesses, professionals, government agency personnel, homeowner associations and community organizations were conducted to teach individuals septic system operation and maintenance, pollution prevention on construction sites, nonpoint source pollution, wastewater management, least-toxic household products, watershed management and land use, and coastal water quality. Training and demonstration projects in erosion, sediment and stormwater control, and alternative

onsite sewage disposal system design and installation provided excellent "hands-on" experiences for local government personnel and professionals.

Outputs/Outcomes:

- Over 500 youth and 453 adults increased their knowledge and awareness of NPS pollution issues and best management practices to protect and improve surface and ground water through workshops, Understanding Your Septic System and Home*A*Syst/Healthy Homes presentations and workshops, three (3) fairs, two (2) conferences, media outreach (TV & radio talk shows and PSAs), CES publications, site visits, demonstration sites, and individual contacts. Over 80% of clients reported verbally that they adopted best management practices, such as using native or water-conserving plant materials, soil conservation methods, protecting watercourses, environmental landscaping, proper septic system maintenance, proper herbicide and pesticide use to protect water resources, hydroseeder operation and maintenance, use of least-toxic household products, and reducing NPS pollution. The number of subscribers to the quarterly NPS newsletter produced in partnership with the V.I. Resource Conservation and Development Council (VI RC&D) has grown to nearly 1700. Many subscribers have verbally expressed that they rely upon the information and notices in the newsletter. More than 290 copies of Non-Toxic Household Recipes and National Safe and Healthy Home and over 700 of the CES poster Guts... VI Natural Treasures were given to clients upon request. The healthy homes, healthy in-door air quality and water quality workshops/presentations increased from 2004-05 with over 340 individuals attending ten (10) presentations. Based on evaluation forms completed after presentations, over 90% indicated that they would use some new practices presented in the workshops. In addition, based on the positive responses to a CES presentation made to primary and secondary teachers from the British Virgin Islands (BVI), representatives from the BVI National Parks Trust and the BVI Conservation and Fisheries Department, CES was invited to present a healthy homes workshop to 90 attendees in the BVI in October 2006.
- 2. Over 2175 teachers, business people, local government personnel, decision-makers and development professionals increased knowledge and awareness of non-point source pollution (NPS) issues through training, conferences (NPS Conference) and technical assistance consultations. Over thirty-two (32) VITELCO employees attended three training workshops and 95% responded in evaluation forms that they would adopt at least one BMP to protect and improve surface and ground water by implementing erosion and sediment control practices, retrofitting failing septic systems, stream restoration, using least-toxic household products or properly disposing of household hazardous waste. CES also continued to serve as a technical advisor to Innovative Telephone and Cable TV Co. and Maho Bay and Concordia Ecoresorts during the construction of AOSDS facilities on St. Thomas and St. John.
- 3. A St. Croix Environmental Repository was established at CES. This project was funded by a grant from the Environmental Protection Agency and developed by grant partners: CES, Resource Conservation and Development Council (RC&D), and the St. Croix Environmental Association (SEA). Hard data relating to St. Croix's environment was collected and digitized; and a reference library was established. A website, brochures and

TV and radio brochures were also developed to promote the use of the Repository. Staff and student interns have been trained in data collection and processing methods. Since its opening, the Repository has become a popular reference center used by students and the general public.

- 4. CES strengthened its partnership with UVI's Experimental Program to Stimulate Competitive Research (VI-EPSCoR), Conservation Data Center (CDC) and Center for Marine and Environmental Studies (CMES). As a result of this partnership, a grant proposal ("Pilot Study to Integrate the Effects of Watershed Activity Patterns and Coastal Processes on Near-Shore Coral Reefs") was developed and funding was awarded by the EPSCoR incubator grants program to a UVI research team (CES, CDC, CMES) who are utilizing the latest oceanographic and GIS technologies to analyze baseline data and data collected from field work.
- 5. To assist small livestock farmers with their animal waste problems, a small animal demonstration project was initiated and will be constructed on a small swine operation as a model for farmers to use to solve their animal waste problem. A workshop has been planned for March next year with the other partners with the regional water quality project to provide the engineering assessment and drawings for the project on small farms.

Sources of Funding:

CSREES Regional Water Quality Coordination Grant – \$83,000 (FY 2005-06)

V.I. Newsletter – \$19,570 §319 grant

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

Smith-Lever

Urban and Community Forestry VI Habitats Field Guide grants – \$20,000

VI EPSCoR Incubator Grant Program - \$27,000

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:

Soil erosion continues to be a considerable water quality and environmental threat in the Virgin Islands. Poor land clearing and landscaping practices are negatively impacting 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 Islands 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).

Outputs/Outcomes:

- 1. During over sixty-five (65) site visits, staff encouraged clients to implement soil erosion control practices including: forest conservation, mulch matting installation, planting of ground covers, environmental landscape planning, slope stabilization and proper silt fence installation. Via telephone and office visits, over fifty (50) clients requested technical advice about erosion and sediment control practices. At least 80% of these clients verbally expressed that they would adopt recommended bmps. Fifty (50) copies of the CES *Sediment and Erosion Control on Construction Sites Field Guide* were distributed to clients. The nearly 1700 subscribers to the *NPS Newsletter* received technical information about erosion control. CES provide 25 VI Dept. of labor summer students and St. Thomas-St. John Environmental Association volunteers with roadside maintenance training to prevent soil erosion. As a result, land cover and erosion control improved in targeted areas.
- 2. As part of their required course work, over 300 UVI freshmen enrolled in science 100 (*The Natural World, The Caribbean*) visited the informal displays at the erosion demonstration garden and rock archive site established by CES and UVI faculty at a central location on the St. Thomas campus. Vetiver grass demonstration plots for preventing erosion and the porous pavement parking lot at the CES St. Thomas home demonstration garden were also visited by clients.
- 3. The St. Thomas hydroseeder was loaned out on three (3) occasions to stabilize disturbed areas at local school, government and privately-owned construction sites. The continuing demand, use and maintenance of the hydroseeder by the landscaping and construction industry in St. Thomas indicate the ongoing success of this project.
- 4. The CDC-CES book, From Island Peak to Coral Reef: A Field Guide of the Vegetation and Marine Communities of the Virgin Islands (described in the NREM section), attracts attention to VI soil erosion control problems caused by human impacts. Information on the effects of soil erosion and sedimentation in storm water runoff is graphically integrated and contrasted with more popular topics such as VI plant and marine communities displayed in over 500 color photographs. More than 1500 individuals have received the book, and many have voiced favorable responses to the book's focus on the negative effects of soil erosion and the positive emphasis on land-use bmps. The VI National Park, VI EPSCOR, Island Resources Foundation, St. Croix Environmental Association and others have expressed approval of the section in the book devoted to the impact that sediment-laden storm water runoff has on coastal water quality.

Source of Funding:

CSREES Regional Water Quality Coordination Grant – \$83,000 (FY 2005-06) Urban and Community Forestry VI Habitats Field Guide grants – \$20,000 VI EPSCOR incubator grant program - \$27,000

Scope of Impact: Territory-wide; technical assistance also provided to local government agency personnel and professionals in Puerto Rico and the British Virgin Islands.

Program 11 – Natural Resources and Environmental Management (NREM)

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 and 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.

Outputs/Outcomes:

- 1. Over 1,375 youths and 380 adults increased their knowledge and awareness of V.I. Natural Resource Management issues and best management practices (bmps) to preserve and protect native plants and habitats, implement environmental landscaping, conserve resources and promote ecotourism through workshops; classroom, youth and community group presentations, hikes, nature trail-building, site visits, fairs, exhibits, media outreach (tv and radio talk shows, magazine articles), 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.
- 2. Over 3,000 business people, local government personnel (including teachers), resource managers, professional landscapers, community groups, decision-makers development professionals increased knowledge and awareness of habitat protection, environmental management, and resource conservation issues through demonstrations, conferences, training and technical assistance consultations, site visits. At least 100 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 or colleagues. CES increased its interaction with community groups, nongovernmental agencies and government agencies to promote the use of environmental management practices in public natural areas, to establish conservation areas, to increase the number of property owners enrolled in the forest stewardship program, and to develop and implement master plans for natural areas. CES initiated the development of Succeed, Inc., a new coalition committed to smart growth for St. Croix. CES also stimulated interest in ecotourism development, especially on St. Croix, where 475 individuals and over twenty (20) Tourism Department employees participated in four (4) workshops for training ecotour guides. CES also exported ecotourism concepts to Barbados and St. Maarten during presentations to community groups and teachers.

- 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, continued to maintain and expand a native plant demonstration garden on campus, and collaborated with UVI faculty and administration to supervise the labeling of over 150 native and rare trees on the UVI St. Thomas Campus.
- 4. Two books were completed and released. From Island Peak to Coral Reef: A Field Guide of the Vegetation and Marine Communities of the Virgin Islands and Remarkable Big Trees of Cultural Interest in the USVI: An Eco-Heritage Guide were produced in partnership with CDC and UVI Education Division faculty. Both were partially funded by grants from the VI Dept. of Agriculture Urban and Community Forestry Assistance Program. From Island Peak to Coral Reef presents information about the VI plant and marine communities. Serving as a field guide, this full-color publication supplies a (16"x 18") GIS map insert of the Virgin Islands locating these natural communities. The VI National Park Service, VI Office of Historic Preservation, St. Croix Environmental Association, Island Resources Foundation, VI EPSCOR and the VI Dept. of Education Office of Curriculum and Instruction had endorsed and are distributing this book. VI Dept. of Education Office of Curriculum and Instruction is considering using it as a base for curriculum development and teacher training. The publication was also featured at the 11th Caribbean Urban and Community Forestry Conference on St. Croix, June 19-22, where it received the Urban Forestry Project of the year award. It has also been selected by the University of Maine and Eckert College to be used as a text book for students doing research at UVI's Environmental Research Study Station (VIERS) on St. John in January 2007. Remarkable Big Trees of Cultural Interest has already stimulated interest in preserving urban trees as evidenced by newspaper articles, client calls and requests for presentations.
- 5. Traditional medicinal plant use is a popular subject in the VI, and CES continued to provide students, medical professionals, health fair attendees and the general public with scientific and documented cultural information about medicinal plants and the potential for local natural products development. In partnership with Sweet Briar College, CES continued to serve as technical advisor for a National Science Foundation (NSF) grantfunded natural products research project investigating possible beneficial synergistic effects of five V.I. plants with various standard antibiotic prescription drugs. To date, research findings are positive and suggest that at least one investigated VI plant has the potential to strengthen certain standard antibiotics against resistant bacteria. CES also continued to develop regional contacts with Caribbean-based researchers by working with them to edit the TRAMIL (Traditional Medicine in the Islands) from Spanish to English version of *The Caribbean Pharmacopoeia of Medicinal Plants* (468 pp.).

Source of Funding:

Smith-Lever

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

VI EPSCOR incubator grant program - \$27,000

Scope of Impact:

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

Key Theme - Environmental Public Policy

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.

Outputs/Outcomes:

- 1. CES staff served as technical consultants and liaisons regarding watershed planning and water resource protection for various local agencies involved with environmental regulation and stewardship including: the Magens Bay Authority, a semi-autonomous government agency that manages Magens Bay Beach and Park property on St. Thomas; VI Department of Housing Parks and Recreation, Coastal Zone Management commissioners, and the Nature Conservancy involved with the development of the East End Bay Marine Park on St. Croix; and the VI National Park Service that oversees the development of the Salt River National Park on St. Croix.
- 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 & Fish and Wildlife Service in regards to policy issues related to wetland habitat protection, technical review of environmental assessment reports, watershed and wetland 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 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 9th Annual Nonpoint Source Pollution Conference, December 6-8, 2005.
- 3. Extension provides technical assistance to and participates in numerous government/NGO advisory committees that deal with watershed and water quality protection, including the Urban Forestry Council, VI RC&D, Great Pond Advisory

Committee, St. Croix East End Marine Park Committee, St. Croix Hiking Association, 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.

Source of Funding:

V.I. Newsletter – \$19,570 §319 grant

V.I. Nonpoint Source Committee – \$6,600 §319 grant

Scope of Impact: Territory-wide

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

Program 12 – Limited Resources Individuals and Families

Clothing Construction & Home Décor

During this quarter, a beginner's clothing class was held on Mondays and Wednesdays for a period of eight weeks with ten (10) Black, female, adult participants. Thirty percent (30%) were referred by the VI Department of Human Services. At the Harborview Housing Development, seven (7) participants were enrolled in the sewing short course. Participants made several items including scarves, skirts, blouses, slacks/pants and shirts.

The home décor and gift items class had nine (9) adult, black females who focused on making decorative items for the home, i.e. pillows, pot holders, place mats, napkins, lamp shades, jewelry holders, purses, decorative towels, wastebaskets, dolls, etc. Many of the items were made from recyclable materials in keeping with fostering the island's commitment to maintaining an ecological balance between progress and the pristine environment in the Virgin Islands. Many of the items were suitable for gift giving and were sold to generate income.

During the next period, participants prepared items for display at the annual Agriculture and Food Fair in St. Croix. The display was entitled, "One of a Kind" which contained articles of clothing, crafts and home décor.

The following quarter, another Beginner's class was held with a total of thirteen (13) participants; eleven (11) Black females, one (1) Hispanic female, and one (1) Black male. The Intermediate/Advanced class included eleven (11) persons; comprised of ten (10) Black females, and one (1) Black male. Many of those in attendance received refresher information or reinforcement after taking an earlier sewing/home décor classes.

A workshop was held at Croixville Apartments to teach residents how to decorate towels. This workshop was a part of the weekly educational sessions held on-site for CYFAR/NC youth and parents/guardians. Later, fifteen (15) youth learned about madras fabric and other cultural artifacts associated with the Caribbean region during a cultural activities session.

A closing program was held following each short course to provide an opportunity for family and friends to view what participants had completed; including the chance to model fashions. The course completion rate for all clothing and home décor classes is approximately ninety percent (90%). Many of the participants return to take advantage of computer classes offered by CES.

The 4-H Summer Academy gave eight (8) youth an opportunity to learn sewing and craft skills. Youth were taught how to utilize a sewing machine, including identifying its parts and functions, making different seam finishes, identifying fabric parts, yardage, grain lines, sewing tools, equipment and measurements. Many had not sewn before but at the end of six weeks were able to make skirts, pants, blouses and skorts. Some youth made pillows and pot holders, as well.

Other Involvements

Staff served on the agency's EEOC committee; as well as the decoration committee for the Agriculture and Food Fair.

Outputs/Outcomes:

- 1. Over sixty (60) individuals attended clothing construction and home décor short courses and classes, 13% were youth.
- 2. Twenty percent (20%) of the clothing construction and home décor workshop attendees also signed up for the basic computer class offered by CES.
- 3. Fifty-two percent (52%) of participants in the beginner's clothing construction classes had not sewn previously; however, by the closing session they could make simple blouses, skirts, tops and slacks.
- 4. Eighty percent (80%) of the twenty-three (23) participants in clothing construction short courses applied newly-acquired skills to make clothing from patterns.
- 5. Seventy-five percent (75%) of the nine (9) participants in the home décor short course made at least one unique decorative item for the home after acquiring craft skills.
- 6. Six (6) of eight of the 4-H Summer Academy youth were able to recall eight (8) of ten (10) parts of a sewing machine after two weeks of instruction.
- 7. Seventy-five percent (75%) of eight (8) youth in the 4-H Summer Academy were able to identify five (5) of seven (7) sewing tools used to make simple garments.
- 8. Sixty percent (60%) of eight (8) youth learned how to purchase fabric and make necessary measurements for accurate yardage in the 4-H Summer Academy.

- 9. Ninety-five percent (95%) of eight (8) youth committed to utilizing new sewing skills to assist with clothing repairs, i.e. hemming garments, replacing buttons, etc. around the home for a cost savings each year due to not having to purchase new ones.
- 10. Most short course and Summer Academy participants, approximately 75%, indicated a desire to venture into some entrepreneurial endeavors by making clothes and home décor items for others within the next year.
- 11. Ten percent (10%) of the nine (9) participants in the home décor short course anticipate making items for the tourist trade.
- 12. At the end of six weeks of summer camp, 100% of youth in the sewing class, were able to make garments to model at the closing program.

Source of Funding: USDA/Smith-Lever

Scope of Impact: Territory-wide

Program 13 – Marketable Skills

Computer Technology and Skill Development

Staff assisted in the communication processes related to technology at the Cooperative Extension Service including maintenance, implementation of computer technology and connectivity aspect of CYFAR programs.

During this period, three basic computer trainings designed to increase participants' knowledge and usage of computers, were held. Topics covered basic computer maintenance, Microsoft Word 2003 (including selecting text, paragraph formatting, spelling and grammar checking and character formatting), Microsoft Power Point, exploring the internet and how to use e-mail. Twenty-four (24) mostly adults took advantage of the evening classes. Eighty-seven percent (87%) of the participants were female, Blacks constituted 87% of the class, with Hispanics accounting for the remaining 13%. Follow-up technical assistance related to computer technology was provided by telephone to twenty (20) individuals.

Staff participated in preparations for the Agriculture and Food Fair including computer set-up and arranging for internet connection. Also, staff provided computer workshops on internet searches, etc. Participants were asked to research topics related to nutrition, cultural arts, agriculture, healthy lifestyles, environmental issues and workforce preparation. Additionally, staff provided leadership in working with 4-H/CYFAR students to demonstrate global positioning systems (gps) and computer robotics. Over 400 youth were engaged in these activities over the three days of the Fair. The youth ranged in age from 10 – 18 years. The majority were Black, and the remaining participants, Hispanic youth.

Later in the year, two additional basic computer training classes were held. Nineteen (19) individuals participated. Twenty-six percent (26%) were males; and all were adults of Black descent.

During the 4-H Summer Academy, computer technology staff conducted basic computer training for thirty-two (32) youth, ages 11-14 during the six-week program. Staff also provided technical assistance in development of a weekly newsletter generated by UVI and off-site campers. A small group of youth (11) received instruction in global positioning systems and computer robotics. The computer instruction was designed to complement the other summer camp subjects. During the closing program, youth demonstrated their newly acquired ability to make contact throughout the globe accessing any point without geographical barriers through Google Earth.

Also, as part of the summer program, a conflict resolution workshop was held for 11-14 year olds. This workshop was conducted in conjunction with Farm Safety Day. The workshop entitled, "Suppressing the Hulk in Me Will lead to a Better Community!" included role playing and fun activities.

Two additional basic computer trainings were held at the end of this fiscal year. Twenty-one (21) UVI physical plant employees participated; and the group included sixty-two percent (62%) females, and ninety percent (90%) were Black. Hispanic participants constituted 10% of the audience. The second workshop consisted of fourteen (14) individuals, ages 11-60 years.

Outputs/Outcomes:

- 1. Over eighty (80) individuals received information on the ten (10) basics of computer operation.
- 2. Eight (8) individuals participated in a basic computer training class where (49%) indicated that they most often use computers at home to do word processing as a result of the class.
- 3. In utilizing the internet, seventy-five percent (75%) of the eighty (80) participants conducted research on information about various topics.
- 4. The greatest gains in computer skills were achieved in learning to type a document in Microsoft as demonstrated by seventy-five percent (75%) of the eighty (80) individuals in the classes.
- 5. The next largest gain in computer skills involved the ability to save files in Microsoft Word as demonstrated by sixty percent (60%) of the 80 individuals in the classes.
- 6. In another basic computer skills class of eight (8), there was a 90% increase in knowledge and acquired computer skills based on participants self-ratings after eight weeks of instruction.

- 7. Eighty-five percent (85%) of eight (8) youth in the 4-H Summer Academy experienced new information on global positioning systems and the 1-2-3 basics of robotics.
- 8. Seventy percent (70%) of sixty (60) youth in the 4-H Summer Academy received information on conflict resolution, committed to applying this new information at school and in their respective communities during the year.

Source of Funding: USDA/Smith-Lever

Scope of Impact: Territory-wide

Program 14 - Volunteer and Youth Leadership

In addition to the twenty (20) students enrolled in the UVI *Foundations of Guidance* graduate education class, seven (7) volunteers received basic information about 4-H and the experiential education model at a volunteer leader open house during this quarter. Leaders from UVI, IQRA Academy, St. Croix Christian Academy, Alfredo Andrews School, and the Leatherback Clovers 4-H Club were able to network and share information and experiences that were mutually beneficial to all participants.

The first quarterly volunteer leader training was attended by nine (9) volunteers representing the Leatherback Clovers 4-H Club, St. Croix Christian Academy "Starz" 4-H Club, St. Mary's School 4-H Robotics Project, 4-H Leadership Project, IQRA Academy 4-H Club, and the "Happy Hoppers +" 4-H Club.

These two events included forty-three percent (43%) Black, twenty-nine percent (29%) Caucasian, and twenty-one percent (21%) Asian participants which included eighty-six percent (86%) female.

With cooperation from the Guidance Departments at the St. Croix Educational Complex and Central High School, the 4-H program recruited and provided nine (9) high school students with a total of 270 hours of community service. This volunteer/teen leader training was given to an additional eleven (11) UVI students and 4-H alumni who provided leadership and assistance in organizing and implementing the various 4-H and youth activities at the annual VI Agriculture and Food Fair.

During this quarter, in partnership with seven (7) high school students enrolled in the Advanced Carpentry Program at the St. Croix Career and Technical Center, 4-H was able to construct a fun, interactive version of the popular television game show, *Jeopardy*, to involve and educate fair visitors about the 4-H program. The exhibit engaged seventy-nine percent (79%) Black fair participants, ten percent (10%) Caucasian, seven percent (7%) Hispanic, one percent (1%) Asian, and three percent (3%) of other descent. Eighty percent (80%) of the "game show" participants were youth under 18 years of age; and forty-one percent (41%) male.

4-H Club Leadership Training was conducted with two (2) mini workshops for members and club officers at the St. Croix Christian Academy and Leatherback Clovers. Twenty-one (21) youth and two (2) adults learned about different leadership styles using the Leadership 2000 curricula from Mississippi State University's 4-H/Youth Development Program. Participants used the 4-H club checklist to assess the effectiveness of their club meetings and activities. Overwhelmingly, participants concurred and recommended that there needed to be a structured educational component to make meetings more interesting, and a Recreational Leader needed to be added, as well.

Later in the quarter, another 4-H Club Leadership Training was conducted through one (1) mini workshop for members and club officers of the "Happy Hoppers +" 4-H Club. Fourteen (14) youth and three (3) adults worked cooperatively to establish a proposed 4-H club plan for the 2006-2007 project year. The plan was presented at the first club meeting in October, 2006. Special emphasis was placed on encouraging and promoting greater youth leadership, incorporating a more focused educational component at each monthly meeting, including more opportunities for family involvement and recruiting and expanding club membership.

In September, a 4-H/CYFAR Teen Mentor Training was conducted. Two (2) workshops were held for teen members wanting to assist with the CYFAR/NC After-school Program at Croixville Apartments. In addition to the UVI Student Assistant, and three (3) seniors at the St. Croix Educational Complex, who volunteered with the program last year, nineteen (19) youth, one (1) parent and two (2) adults attended the first Orientation and Training session. It focused on opportunities for leadership and community service, and the roles and responsibilities of being a mentor. The second workshop was attended by a total of fourteen (14) young people. During the second workshop, participants were introduced to the different characteristics and needs of the different age groups. They were also able to role play how a variety of learning activities might be delivered to different audiences. It was evident that additional team building, cooperation and leadership training is needed to properly prepare the majority of those trained to date to actually serve as teen mentors. Eighty-six percent (86%) of the participants in the teen mentoring trainings were eleven to eighteen years of age. Of this group, 50% were male; eighty-six percent (86%) Black and fourteen percent (14%) Hispanic.

Throughout the year, 4-H staff provided leadership and support to the CYFAR After-school Program at Kirwan Terrace and Croixville Apartments. This support included homework assistance and tutoring with 5-14 year olds. Youth and adult participants also received educational sessions each week focused on nutrition, agriculture, computer technology, environmental education, diet and healthy lifestyle, cultural arts, entrepreneurship, workforce preparation and personal development.

Outputs/Outcomes:

1. Seven (7) volunteer leaders attended an open house and received information on basic information about 4-H and the importance of knowing and practicing the three keys to good leadership skills.

- 2. Nine (9) high school youth completed a total of 270 hours of community service which included working with CYFAR youth in tutoring and mentoring young children.
- 3. AgFair attendees learned the history and tenets of 4-H through a "Jeopardy" game designed to acquaint new volunteers and club members with the 4-H Program approximately 2,000 participated.
- 4. Leadership training provided to 4-H club officers and members assisted in assessment of their leadership styles. Eighty-percent (80%) of twenty-one (21) youth participants were able to identify differences in relationship and task-oriented leaders as a part of the mini-workshops at the St. Croix Christian Academy and the Leatherback Clovers.
- 5. To assist in the preparation of teen mentors trainings were held which focused on increasing youth skills in cooperation, teambuilding and leadership training. Although seventy-five percent (75%) of the youth acquired new skills, the training indicated a need for considerable more training in those areas. Contrary to most trainings, male participation involved 50% of the group.

Source of Funding: USDA/Smith-Lever

Scope of Impact: Territory-wide

Program 15 - Club System

During October, staff worked on setting up clubs at St. Mary's School, Alfredo Andrews School, 4-H Teen Leadership Project and CYFAR/4-H in Croixville and Harbor View. Presentations were made at a St. Mary's Parent Action Committee meeting, an Alfredo Andrews PTA meeting, and a St. Croix Educational Complex PTA meeting. Presentations were given to 55 adults. Eighty-two percent (82%) of the participants were Black, seven percent (7%) Caucasian, 10 percent (10%) Hispanic, and one percent (1%) of other descent; and fifty-eight percent (58%) of the participants were female.

In collaboration with the CYFAR/New Communities Program, the 4-H program introduced 4-H After School is Way Cool! four (4) Thursdays in October. These sessions involved approximately thirty-six (36) young people residing in the Croixville Housing Community; workshops conducted included math enrichment using Tangrams, Healthy Snacks, Stress Management and a 4-H Pizza Garden Project. Eighty-four percent (84%) of the participants were Black, and sixteen percent (16%) Hispanic. Seven adults (or 14%) participated in the sessions. Females constituted the largest percentage of all participants at 59%; and 5-14 year olds, constituted 86%.

Also, during this quarter, 4-H conducted a Lights on After-school (LOA), in conjunction with the national Lights on After-school (LOA) campaign. An LOA light bulb art activity in the Harbor View Community Center was held on October 20. Thirty (30) youth and their parents attended and expressed their creativity in decorating their very own special recycled art using

expired incandescent light bulbs provided by the V.I. Energy Office. Thirty-six (36) participants included seventy-eight percent (78%) Black, 5% Caucasian, and 17% Hispanic. Twenty-eight percent (28%) were males; and eighty-three percent (83%) were 5-18 years of age. Seventeen percent (17%) were adults.

In partnership with the U.S. Coast Guard (USCG) and the St. Mary's School, 4-H has introduced the Lego Robotics Project as part of their after school program. Through their community outreach, the USCG has provided a volunteer leader for this pilot effort. The Information Technology specialist with the Coast Guard and IT contact for St. Mary's supports this effort by facilitating availability of the necessary laptops.

Twenty-nine (29) children, grades 4-8, were enrolled in and divided into two smaller more manageable groups. Two (2) adults worked with both groups that took part in preliminary workshops to acquaint them with logic modeling and understanding of how computers work. The first group successfully completed the first two missions; the second group completed this first phase during the next quarter. A team was selected to conduct a 4-H Robotics demonstration at the annual fair in February 2006. Those five (5) youth participating in this activity included ninety-four percent (94%) of youth ranging in age from 8-14. Ninety percent (90%) of the youth were males; and sixty-one percent (61%) Black, with 23% Hispanic and six percent (6%) Caucasian. The remaining 10% of the youth included Asians, and those of other descent.

World Food Day was scheduled to be held in October but had to be cancelled due to inclement weather. However, the "Kids CAN Make a Difference" Food Drive was a tremendous success. Along with 4-H, eight (8) schools collected nearly 2,500 pounds of canned and non-perishable food items. Major benefactors of this community service project were My Brother's Table, The Bethlehem Shelter in Kingshill, and Caribbean Catholic Charities.

Later during the year, a 4-H Christmas Ornament Festival was held. This has become an annual holiday event and provided an opportunity for forty-one (41) 4-H members across St. Croix to discover the elf in themselves. Manned by adult and teen volunteers and parent elves, stations were set up so that participants could create a variety of fun, whimsical Christmas ornaments. At the end of the day, Santa's forty-one (41) workshop participants had crafted over 250 ornaments and each child donated at least one ornament to adorn miniature 4-H Christmas Trees. Special effort was made by volunteer leadership in organizing this event; and forty-one (41) youth and twelve (12) adults participated. Females constituted 68% of the participants, with 68% of African descent, Hispanics and Caucasians 11%, respectively; and other 9%.

The Christmas Gifts for the Needy Community Service Project included 4-H members from the Leatherback Clovers and Happy Hoppers + 4-H Clubs. Instead of their typical annual Christmas party with customary gift exchange, they decided, in the spirit of the season, to donate a gift to one of seventeen (17) children identified by the Department of Human Services. Special efforts were made to identify families with younger children that would normally have fallen through the cracks during the Christmas season. 4-H club members put together Santa's sack of toys for these girls and boys. Using the UVI-CES van as a sleigh, bags of goodies accompanied by a miniature tree adorned with ornaments, made at the Christmas Ornament Festival were

specially delivered to these families. This has provided a way for the young people to share and experience firsthand the joy of giving and to witness the joy of receiving!!! Twenty-two (22) individuals participated in this project. Youth up to seventeen years of age made ornaments. Fifty-nine percent (59%) were female, with fifty-nine percent (59%) of African descent, and forty-one percent (41%) of Hispanic descent. Five adults participated to make this a successful experience.

The six (6) St. Thomas 4-Hers visited an orphanage on St. Croix in keeping with the holiday spirit. The Queen Louise Home for Children benefited from the individual gifts designated for each child. Additionally, the 4-H club members spent the entire day with the children, ages 3 months to 19 years of age, many of whom had physical and mental disabilities. Another 4-H club participated in an annual talent/fashion show with residents at the Queen Louise Home for the Elderly where poems, songs and dances were performed to the merriment of all.

Throughout the year, in addition to the above mentioned activities, 4-H provided ongoing technical assistance and support to 4-H project leaders conducting educational projects in the following areas: Arts and Crafts, BioScience, Cloverbuds, Environmental Education, Horseless Horses, and International Foods and Friends.

The St. Croix Christian Academy "Starz" 4-H Club has a membership of 36 youth led by three (3) adult volunteers. As part of Coast Weeks 2005, "Starz" 4-H members joined hands with the St. Croix Environmental Association (SEA) to clean up the beach at the Southgate Coastal Reserve. An article and photo appeared in the local newspaper. This 4-H club, under able volunteer leadership, has participated in every activity, training or event 4-H has sponsored. This club truly embodies the slogan "to make the best better."

Revitalizing a long-standing relationship, 4-H assisted the V.I. Pace Runners by hosting their annual interscholastic cross-country championship series on the UVI St. Croix Campus. This partnership mutually benefited both organizations, and the university, by providing a positive, healthy activity for young people to become engaged. A series of three runs involving seven (7) public and private schools from St. Croix and St. Thomas, two (2) private track clubs and eight (8) 4-H members, were held. The final leg of the championship was held on Veteran's Day. Approximately 117 elementary, junior varsity, varsity and open (adult) entries competed in the annual interscholastic cross-country championship series.

A snacking healthy workshop was conducted with the St. Croix Christian Academy "Starz" 4-H Foods Project members. Members learned safe food preparation skills, compared and contrasted methods such as baking versus frying, to make foods more nutritious. To sample this difference and appreciate the benefits of baking, participants prepared and baked Cheesy Breadsticks. The fourteen (14) Black participants were mostly females (86%) who worked with one (1) adult.

As one of the major community service projects, Clean-Up Day at the Agriculture and Food Fair involved over thirty (30) 4-H members and their parents who assisted the Director of Livestock in scraping, painting, rejuvenating and preparing the livestock display area. This area

housed approximately twenty-four (24) large livestock entries, sixteen (16) sheep and goats, over fifteen (15) swine, and a wide array of rabbits, chickens and other fancy fowl.

During the annual St. Croix Agriculture and Food Fair, a 4-H Robotics Demonstration proved to be quite popular with young fairgoers. The demonstration was conducted by one (1) adult volunteer and seven (7) members of the 4-H Robotics Project at St. Mary's who developed a Lego Robotics challenge.

Fourteen (14) members of the "Happy Hoppers +" 4-H Club showed twelve (12) rabbits and two (2) cavies in the 4-H Small Livestock Fitting and Showmanship Competition, earning a total of four (4) first place awards, (4) second place awards, (4) third place awards, and two (2) honorable mentions for their efforts. In addition to trophies for first place winners, each awardee also received a gift certificate redeemable at one of three local feed stores. The dollar value of these certificates totaled over \$400. Sixty-four percent (64%) of participants (ages 5-18) were female; 64% of African descent, 7% Hispanic, and 29% other.

Four (4) teen leaders from the "Happy Hoppers" 4-H Club used their knowledge gained and skills learned to conduct a rabbit skill-a-thon for interested fairgoers. Twenty-two (22) participants were able to rotate between six stations to learn more about how to identify a rabbit, how to hold a rabbit properly, what a rabbit should or should not eat, locate at least six parts on the rabbit, and different characteristics of three rabbit breeds.

For the first time, the 4-H Teen Leadership Project coordinated a Family Fun Day and Mini Rodeo on Sunday afternoon at the fair. A popular radio personality, and "Jay Jay" the Clown provided entertainment as the opening "rodeo cowboy" act, and provided hilarious entertainment between events. The ten-event rodeo was capped off with a "bottled baby" calves round up for the Catch a Calf Event. A total of forty-eight (48) youth contested ten events.

The following are other youth activities at the annual Agriculture and Food Fair:

- ➤ A total of forty-five (45) schools and youth groups presented educational display booths which depicted the fair theme. Each entry was given the opportunity to present a team of three youth accompanied by one adult to participate in an interview judging format to determine what the children learned, how they helped plan the booth, and their role(s) in bringing their display to fruition. Displays were categorized into five different divisions. Ribbons, trophies and cash awards totaling over \$1,200 were awarded to the winning entries.
- Forty-eight poster entries were received; 113 essays were received and an all-time high 142 poems were entered from elementary, junior high and senior high schools across St. Croix. The winning poem was published in the V.I. Agriculture and Food Fair Opening Ceremony Program.
- ➤ Thirty-two (32) youth and three (3) adults used their creativity, fashion savvy and sewing skills to make and model a handmade outfit for the Fair Wear Fashion Show. Each participant received a Certificate of Participation; and winners in each of four divisions received cash awards in the amount of \$600. First place winners also received

scholarships to attend local modeling classes.

➤ To celebrate the hard work and achievements of the many young people, teachers and volunteers who contributed their creativity and hard work to the success of this year's youth activities, an awards program was hosted at the UVI Research and Extension Center. Fifty-six (56) youth and adults representing 16 schools and organizations were presented with trophies, ribbons and cash awards.

Later in the year, project support and development was fostered through assistance by the "Happy Hoppers +" 4-H Club who organized a car wash to raise funds to defray the costs of an upcoming Easter Camp Out.

The Easter weekend campout included fourteen (14) 4-H members and five (5) adults and parents of the "Happy Hoppers +" 4-H club planned and implemented a fun-filled, sun-filled campout at Dorsch Beach in Frederiksted. In addition to promoting family fun, 4-H'ers enjoyed team building games, beach hikes and environmental education as part of the weekend's activities.

Eight (8) members of the 4-H Bioscience project group conducted DNA extractions, used electrophoresis to identify proteins, and evaluated plant growth using a variety of growth mediums.

Twelve (12) 4-H members enrolled in the Foods and Nutrition project visited Italy, China, Japan, Mexico and Puerto Rico through foods often associated with those areas. Menus included stuffed cannelloni, fried rice, sushi, tacos and breadfruit flan. Members increased their geography literacy by locating each country on the globe and using the Internet to discover something unique about each country. Members were also encouraged to maintain a record book of the many different recipes they tried.

Seven (7) of the youngest 4-H members (ages 5-8) or the Cloverbuds met each month under the creative and watchful eye of two volunteers. Members learned all about 4-H and made creative clovers; discovered themselves in "All About Me" and did some gardening as they planted seeds many different ways.

Seven (7) members in the 4-H horseless horse project were able to dream a little as they drew pictures of what their horse might look like. Members visited a Computer Lab and learned various ways to conduct information searches to find different breed associations. Each person chose a breed they were interested in and composed and sent a letter requesting information, posters, etc. for them to use in developing an educational display. Members also had the opportunity to visit Cane Bay where they were able to climb in the saddle for a short beach ride. They also learned how to do exercises on horseback to help them maintain a good seat and then they got to help with grooming the horses.

During the year, a grant proposal was submitted to National 4-H Council for consideration for the Healthy Lifestyles Grant funded by Kraft Foods. Receipt of this grant provided low-income, at-risk clientele identified in partnership with the Virgin Islands Perinatal

Inc., (VIPI) with hands on, experiential activities promoting healthy lifestyles aimed at decreasing the incidence of obesity locally. Members of the Leatherback Clovers 4-H Foods and Nutrition Project provided leadership and included VIPI clientele in their regular monthly workshops. Over this period, three (3) workshops were held on the following topics: 1) Food Safety and Preparation; 2) Tacos – A Healthy Meal for Everyone; and 3) Foods, Fun and Fitness – A Healthy Combination. Twenty-four persons participated in these workshops; sixty-seven percent (67%) were youth, 33% adults, and seventy-five percent (75%) female. Ninety-two percent (92%) were of African descent.

During the spring, the St. Croix Christian Academy "Starz" 4-H Club members at the school prepared and presented an exhibition of their 4-H project work. Each member was required to make and display at least one arts and craft project. Members were then given the opportunity to make additional items that they could in turn sell to parents, teachers and friends. Over fifty items including plastic canvas planters and dolls, recycled bags and other unique products were showcased. Once again, volunteer leadership guided this effort.

In partnership nationally with the Army and Air Force, 4-H was able to receive and distribute Hero Packs to over 150 children of deployed V.I. National Guardsmen. With the assistance of the National Guard Family Support Unit, 29 children on St. Croix received Hero Packs in a special ceremony held at the National Guard Armory. In similar ceremonies on St. Thomas, approximately 110 children received Hero Packs. Hero Packs included a canvas back pack, a Ty Beanie Baby 4-H Bear, a 4-H cap, Frisbee, ruler, journal, wrist band and a refrigerator magnet. Contact information for local 4-H programs was also included. As a result of these presentations at least eight (8) National Guard youth enrolled in the 4-H summer programs.

Two additional healthy lifestyles workshops were held for the Virgin Islands Perinatal Inc. (VIPI) and Leatherback Clovers consistent with meeting the objectives of the Healthy Lifestyles grant. Seven (7) youth were able to take advantage of full scholarships valued at \$175 to attend the UVI-CES 4-H Summer Academy.

Three (3) teen leaders, two (2) junior counselors and (1) adult volunteer organized and conducted a variety of youth games and activities at the annual Mango Melee and Tropical Fruit Festival held annually. Over fifty (50) youth ran, jump, hopped and scooped as they participated in the fun and games.

A planning meeting was held with volunteers and teen leaders from the Leatherback Clovers 4-H Club in preparation for the closing activity for the Healthy Lifestyles grant. In partnership with nutrition staff, 4-H and the Healthy Start Initiative prepared to present a demonstration workshop incorporating EFNEP principles and making healthy snacks that kids will love to eat as part of World Food Day.

The Happy Hoppers and More 4-H Club facilitated a Basic First Aid and Safety Demonstration. This was conducted by a licensed, emergency medical technician from the St. Croix Rescue Squad for four (4) adults and nine (9) youth members of the Happy Hoppers.

Staff served as a guest speaker at the St. Croix Christian Academy's Parent Teacher

Association meeting to help recruit additional volunteer support as they endeavor to organize the 4-H club for the new program year. Parent Interest Surveys were passed out; four (4) parents completed and returned their survey at the meeting. Thirteen (13) parents signed up indicating their interest in learning more about how they could help the 4-H effort at the school.

Outputs/Outcomes:

- 1. Meetings were held to set-up 4-H clubs at three schools. Parent associations received information on 4-H club mission, principles and tenets to increase their volunteerism as well as recruit new members.
- 2. 4-H After School is Way Cool! a four-part workshop series was initiated in Croixville Apartments. These workshops focused on mathematics, healthy snacks, stress management and a pizza garden project. Twenty-four (24) participants discovered new information and seventy-five percent (75%) of CYFAR youth participated in all of the sessions held covering these topics.
- 3. As part of the national Lights on After-school (LOA) campaign, thirty (30) youth and six (6) parents acquired increased skills and enhanced awareness on the importance of recycling. This activity utilized expired incandescent light bulbs to tap the artistic imagination of young people while reinforcing the importance of taking care of the environment.
- 4. 4-H, in partnership with the U.S. Coast Guard and St. Mary's School, provided instruction in a Lego Robotics project and provided laptops for the school's after school program. Twenty-eight (28) youth, ages 9-13 learned basic computer programming, developed a simple program, built three types of robots using Robotics kits, and 100% of participants demonstrated what they earned by successfully using their computer program to maneuver their robot through a series of obstacle courses.
- 5. Fourth-to-eighth graders were exposed to logic modeling and computer technology. Of the twenty-nine (29) youth participating all were exposed to information which included the difference in inputs, activities, outputs, outcomes and impact. Fifteen percent (15%) of eighth graders committed to applying this model to reports for classes.
- 6. Eight (8) schools, along with the 4-H program, participated in a food drive and collected 2,500 lbs of canned and non-perishable food items. Youth learned to be more sensitive to the needs of those less fortunate when giving the food to local "soup kitchens" which feed the homeless and other less fortunate individuals and families in the community.
- 7. A Christmas Ornament Festival was held which allowed youth the opportunity to make creative ornaments; the forty-one (41) youth acquired a new skill and had fun doing so.
- 8. Ninety-nine percent (99%) of twenty-two (22) youth participated in collecting toys for youth identified by the Department of Human Services who might otherwise have a very meager Christmas. The families received the ornaments made in the ornament festival.

- Mini-Christmas trees were also given to the families along with the collected toys. Youth learned the joy of giving, and receiving.
- 9. Eleven (11) St. Thomas 4-Hers visited Queen Louise Home for Children to learn about the importance of serving others through giving of one's time. This activity was designed to uplift the spirit of twenty-five (25) young people 3 months to 19 years of age; many with physical and mental disabilities, enjoyed the one day visitation.
- 10. Thirty-six (36) youth, in conjunction with learning about the importance of keeping the environment clean, applied this new information to a beach clean-up activity designed to minimize the impact of littering on sea life and enhance island beautification.
- 11. Eight (8) 4-H club members participated in a cross-country race in conjunction with VI Pace Runners. Youth learned the importance of keeping in shape through physical activity and the ups and downs of competition. One hundred percent (100%) completed their respective races.
- 12. Thirty (30) 4-H members and parents participated at the annual AgFair preparation and clean-up activity where youth learned to prepare facilities and care for 24 large livestock, 16 sheep and goats, 15 swine and an array of rabbits, chickens, and fowl.
- 13. Ninety-five percent (95%) of the seven (7) members of the St. Mary's Robotics project completed the challenge demonstration at the AgFair.
- 14. Fourteen (14) members of the Happy Hoppers participated in the 4-H Small Livestock Fitting and Showmanship Competition where they earned four 1st, 2nd and 3rd place medals with two (2) honorable mentions.
- 15. Four (4) teen leaders shared their information and skills learned about proper rabbit care with Fairgoers. Twenty-two (22) participants rotated through six stations focusing on several aspects of rabbit care, i.e. feeding rabbits, identifying rabbit parts, proper holding of animal, etc.
- 16. Fifty-one (51) essays and over eighty (80) poems reflected creativity and research conducted on the importance of Agriculture and Tourism: A Perfect Mix for 2006. The winning poem was printed in the fair booklet.
- 17. Thirty-two (32) youth demonstrated their newly acquired sewing skills to make and model garments for the Fair Wear Fashion Show.
- 18. The six (6) 4-H Bioscience project members learned to conduct DNA extractions, used electrophoresis to identify proteins, and evaluated plant growth using a variety of growth mediums.
- 19. Twelve (12) 4-H members took an around the globe tour as they learned about making foods from Italy, China, Japan, Mexico and Puerto Rico. This allowed members to

increase their geography literacy. Ninety-percent (90%) were able to recall a unique characteristic of each country "visited".

- 20. Horse ownership and care peaked the interest of seven (7) members of the horseless horse project. Youth improved their horseback riding skills by learning to maintain a good seat, and also learned the ABC's of good horse care.
- 21. A National 4-H Council grant afforded the 4-H program the opportunity to work in partnership with the Virgin Islands Perinatal, Inc. program to provide experiential activities promoting healthy lifestyles aimed at decreasing obesity in local low-income, at-risk communities. Participants received knowledge on food safety and preparation, tacos, foods fun and fitness a healthy combination. Twenty-four (24) individuals completed 90% of the activities provided.
- 22. 4-H club members acquired skills to in the 123s of Basic First Aid and Safety. The St. Croix Rescue Squad's emergency medical technician trained four (4) adults and nine (9) youth.
- 23. Over 1,500 youth participated in a variety of activities throughout the year designed to enhance their intellectual and physical growth which will allow them to become productive citizens.

Source of Funding: USDA/Smith-Lever

Scope of Impact: Territory-wide

Program 16 – 4-H Summer Day Camp

The UVI-CES 4-H Summer Academy plans were initiated for the annual summer program. The 4-H program endeavored to provide a six-week summer program in a safe, nurturing, educational environment for 132 school aged youth at the Alexander Henderson School and the UVI St. Croix campus; and 100 youth at the St. Thomas and St. John sites. Youth received information and skills in several areas including, but not limited to: writing, computers, art, modeling, nutrition and healthy lifestyles, sea and marine environment, sewing and crafts, cultural arts, work preparation and entrepreneurship, and Mini-Society, to name some of the topics. Guest speakers and educational field trips broadened the horizons for many of the summer program participants.

To assist in the purchasing of science related supplies for the summer programs on St. Thomas/St. John and St. Croix, staff secured mini-grants from the V.I. Energy Office for each district. These materials were utilized as youth learned about energy conservation and science.

Counselor Orientation & Training were held before camp started on St. Croix. Eight (8) certified teachers were employed to provide leadership as Site Coordinator and Senior Counselors. Special areas of concentration included: Super Kids (ages 5-7); Creative Kids I

focusing on Agriculture and Environmental Education; Creative Kids II focusing on Science, Technology, Engineering and Math (STEM curricula); Shining Stars focusing on Workforce Preparation and Career Preparedness; and Young Scholars focusing on Academic and College Preparation. Nineteen (19) college and high school students were employed to work as Junior Counselors. Four (4) Foster Grandparents supplemented the counselor teams.

A parent orientation was attended by fifty-five (55) parents/guardians representing seventy-five (75) children at the Alexander Henderson site. Parents received important information regarding summer program goals and objectives, policies and procedures and 4-H in general. Approximately twenty-five (25) parents/guardians attended the orientation at the UVI St. Croix campus representing thirty-two (32) youth.

Staff participated in the planning and implementation of educational field trips. Summer Academy participants were able to take part in educational field trips to twelve (12) different venues including: Bohlke Airlines, Tropical Ten Pins Bowling Center, Creque Dam, Isle 95 Radio Station, Fun Zone, Very Long Base Array Telescope, Nature Conservancy, Annaly/Wills Bay, HOVENSA, V.I. Water and Power Authority, Richmond Fire Station and Estate Mt. Washington.

During this same period at the summer camp, in accordance with the Healthy Lifestyles grant proposal, all 100 youth attending the UVI-CES 4-H Summer Academy at the Alexander Henderson site were provided the opportunity to learn some valuable healthy lifestyle information. Teaching was focused on good nutrition, developing healthy food habits, and the importance of increasing their level of fitness. Youth attended these sessions on a daily basis.

As part of the summer camp, in collaboration with the CES-ANR Farm Safety Program, 132 youth on St. Croix and 100 youth on St. Thomas/St. John attended Farm Safety Day Camp. Twenty-five (25) guest presenters representing seventeen (17) organizations and agencies provided invaluable safety information. Stations included: Animal Kindness and Safety; Germ Control/Proper Handwashing; Understanding the Tropical Bont Tick; Identifying Safety Symbols; Electrical Safety; Tractor Safety; Basic First Aid and Emergency Response; Food Safety & Cross Contamination; Conflict Resolution; Bicycle and ATV Safety; K-9 Corps; Hazardous Material (HAZMAT); Chemical Look-a-Likes; Safety Information on the Internet; Disaster Preparedness, and Drug Abuse and Prevention.

St. Croix youth were selected to be featured in the USDA Partners Magazine. Youth were interviewed and photographed participating in the many camp activities. DVDs should be ready for distribution in May 2007. This was the first time the Virgin Islands had been selected for this award winning video publication.

Following the 4-H Summer Academy, participants, parents, and counselors on all three islands received an opportunity to provide feedback focused on several aspects of the summer program. Selected results follow: when youth were asked if they would recommend the camp to their friends – the response was overwhelmingly positive. When parents/guardians were asked if they would send their children back next year 99% responded in the affirmative. One striking difference in perception was noted between the youth and parents' response to whether or not

what was learned during the day was discussed at home. Parents responded that this occurred 100% of the time; yet youth noted it occurred less than 80% of the time!

Other Staff Involvement

4-H staff assisted in the development of grant proposals, served on AgFair steering committee and board, also served on the CYFAR Advisory Council and provided leadership in implementation of Carnival troupe.

Outputs/Outcomes:

- 1. Over two hundred (200) youth participated in the 4-H Summer Academy on St. Croix, St. Thomas and St. John. Over fifty (50) staff, teachers, college students and volunteers assisted in the planning and implementation of the Summer Academy.
- 2. Over sixteen (16) staff received basic first aid and safety training, along with adult and child CPR. This certification required acquisition of information and skills regarding basic first aid and CPR which enhanced the security and safety of the young campers.
- 3. Several of the one hundred and thirty-two (132) youth participated in the production of a video for the USDA's Partners Magazine entitled, "Our Children." This is an award winning video magazine which is focusing on the Virgin Islands for the first time. Pictures were taken of youth in various summer camp activities, including a nature trail walk, Mini-Society, workforce preparation and other activities conducted throughout the six week program. Distribution is scheduled for May 2007.
- 4. Eighty percent (80%) of the 232 youth received basic computer literacy training at all sites.
- 5. Parent orientation held at the beginning of the camp, shared with parents/guardians twenty expectations for a successful camp experience.
- 6. 4-H Summer Academy counselor orientation and training was conducted for forty (40) site coordinators, senior and junior counselors to provide leadership to the special areas of concentration and age groups: Super Kids (5-7), Creative Kids I and II (8-10), Shining Stars and Young Scholars (11-14). Orientation and training focused on rules and regulations associated with the day-to-day operation of the camp, curriculum and supply needs.
- 7. Farm Safety Day provided over 200 youth with the opportunity to learn and acquired skills Relative to home, school and farm safety. Through experiential activities and demonstrations, youth learned the basics of safety provided by seventeen local organizations including the university, health department, fire department, nutrition, proper hand washing, tractor safety, to name a few.
- 8. One hundred (100) youth received healthy lifestyles information focused on healthy food

habits, good nutrition and increasing level of fitness. Eighty percent (80) expressed a commitment to change nutrition habits over the next six months.

- 9. Approximately 45% of the fifteen local senators sponsored youth as junior counselors which is one indication of the collaboration and support enjoyed by this program in the general community. Residents recognize the importance of wholesome, varied, educational youth activities.
- 10. Based on an evaluation instrument developed specifically for the 4-H Summer Academy, ninety-nine percent (99%) of parents/guardians of Summer Academy youth indicated that they would send youth back to the Camp next year

Source of Funding: USDA/Smith-Lever, VI Energy Office; VI Senators (Hire-a-Youth

Program) & Departments of Labor and Human Services

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. It was expanded again to include two new members from the St. Thomas/St. John district. The new CES Advisory Council comprises 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 the 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 five (5) 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's Social Sciences and Humanities Divisions, and the office of the Governor to help address at-risk issues in the community.

All CES programs were advertised on five radio stations throughout the islands. CES staff participated and conducted 22 radio programs where the V.I. community can call in their concerns. A total of seven television shows featured CES' staff.

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

Three 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.

Total FTE's

	Professional	Paraprofessional
Goal 1		
Program 1	1.8	1.5
Program 2	2.0	1.0
Program 3	<u>1.5</u>	1.0
Total	5.3	3.5
Goal 2		
Program 4	0.5	0.8
Program 5	<u>0.5</u>	<u>1.0</u>
Total	1.0	1.8
Goal 3		
Program 6	<u>0.6</u>	<u>0.8</u>
Total	0.6	0.8
Goal 4		
Program 7	0.9	0.3
Program 9	1.1	0.6
Program 10	2.5	1.0
Program 11	<u>2.5</u>	0.0
Total	7.0	1.9
Goal 5		
Program 12	0.2	1.2
Program 13	0.2	1.2
Program 14	1.4	0.6
Program 15	1.2	0.8
Program 16	<u>1.4</u>	<u>0.6</u>
Total	4.4	4.4
TOTAL FTE's	18.3	12.4