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OPERATION BREADBASKET: A U.S. VIRGIN ISLANDS COMMUNITY OUTREACH AND ASSISTANCE PARTNERSHIP PROGRAM

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ABSTRACT: Operation Breadbasket was a program of the Virgin Islands Farmers Cooperative (VIFC). The primary goal of this program was to reverse the 45-year decline of agricultural production in the U.S. Virgin Islands by reducing the risk of farming through training and community outreach. The technical staff of the University of the Virgin Islands (UVI) Cooperative Extension Service, UVI Agricultural Experiment Station, UVI Small Business Development Center, Virgin Islands Department of Agriculture and the Virgin Islands Bureau of Internal Revenue partnered with the VIFC to conduct risk management training in vegetable crop and small livestock production, farm business development and income tax preparation. The nature of the training was hands-on, onsite; practical applications, instructions and demonstrations for the purpose of having the producer reduce risk, and utilize improved sustainable production methods. Training was conducted on various farms on the island of St. Croix. On each of the farms an assessment was conducted to evaluate and strengthen the producer's knowledge of their farm operations and the utilization of emerging technologies and practices. The program used seven crops (watermelon, tomato, eggplant, okra, cucumber, bell pepper and cantaloupe), small livestock production (sheep, goats and pigs), improved forage management, farm business planning, recordkeeping and tax preparation to provide the participants with the tools needed to successfully manage an efficient farming enterprise. The training was intended to help transition limited resource, socially disadvantaged farmers into productive and profitable farmers through the creation of new farming enterprises and the increased availability of high-quality, locally-grown food. The program provided practical training in farm management, financial management, marketing, production, crop insurance and other risk management tools to educate U.S. Virgin Islands farmers on how to increase their production and income. The program trained producers in various methods of sustainable farming to reduce risks and increase crop, livestock and forage production. The program sought to use the agriculture training as a means to: create a social and economic stimulus while improving the image of farming to attract and develop new farmers. The anticipated outcome is an improvement in our local food system, food security, and overall quality of life in the territory.

Keywords: Farmer training, risk management, limited resource farmers, farming enterprises, community outreach, vegetables, small livestock

Background

The U.S. Virgin Islands were the Danish West Indies prior to their purchase from Denmark by the United States in 1917. Between 1760 and 1960 the Virgin Islands produced most of the food it consumed and St. Croix, the largest and most fertile island, was known as the "Breadbasket of the Caribbean" – (Danish Caribbean) during Danish rule and after the U.S. purchase. Sugar was king, in the islands' agricultural production of a single crop, until 1966 when the last sugar factory on the island of St. Croix was closed. Local farmers were then encouraged to diversify and expand their efforts to provide locally grown food. The diversification attempts included a variety of crops including cotton, citrus and a range of other tree crops. None of these crops endured and cattle, small ruminants, poultry and pig rearing replaced them. The introduction of sorghum as a versatile grain crop for a fledging livestock industry failed, which led to a downturn in poultry and pig production. The grass-fed animals industry survived and dairy farming became a dominant value-added enterprise until the dairy industry closed in 2006.

Today, the economy has changed substantially. A few relatively large tracts of farmland are still utilized for commercial production while home gardens also supply produce to the local markets. However, 95 to 99% of the food consumed in the islands is imported. It is clear that a revitalized, efficient local agriculture industry can provide significant employment opportunities for the residents of the U.S. Virgin Islands (USVI). This Community Outreach and Partnership Assistance Program in farm management, financial management, marketing, production, crop insurance and other existing and emerging risk management tools was conducted to put in place risk management tools for the resurgence of St. Croix's agricultural industry.

Operation Breadbasket

The overall risk of farming in the USVI is a challenging venture: farms are small; land, labor and financial resources are limited; crop insurance is expensive; high cost of agricultural equipment and other inputs; competition from low-priced imported produce; and the increasing age of farmers. Because of these circumstances many producers are unable to sustain a profitable operation.

Agriculture has therefore gained a poor reputation for income generation, dependability and contributing significantly to the local economy. Improving the image of farming is necessary to attract and develop new farmers while at the same time improving our local food system and food security.

Operation Breadbasket was introduced to reduce the risk of farming in the USVI, increase the territory's agricultural production, maintain permanent agricultural employment and create an economic stimulus to improve the quality of life of all in the USVI. This initiative was undertaken through training, community outreach and promoting the resurgence of the agricultural industry. The project educated producers in methods of sustainable farming while providing the training to manage the existing and emerging risks of their farming operation. Operation Breadbasket provided a unique opportunity to transition limited resource, socially disadvantaged farmers into productive and profitable farmers.

Training Activities

The training activities were conducted over a period of one year. The Project Director scheduled and coordinated all events in conjunction with the training team, partners, and consultants to prepare for the project's mobilization of all the tasks. The training was provided primarily for all members of the Virgin Islands Farmers Cooperative but was also available to other farmers and interested persons.

Farm Financial Planning and Management

The training program provided instructions, practical application and demonstration of how to operate a farm enterprise (Fig. 1). This training was intended to raise the awareness of agribusiness education.

The University of the Virgin Islands (UVI) Small Business Development Center (SBDC) provided risk management training on how to develop farm businesses plans and operating farmer enterprises. The nature of the UVI SBDC training was practical applications, instructions, and demonstrations of farm management and financial management of a farm enterprise.

The topics covered included:

- Farm Management and Financial Management
- Business of Farming in the VI
- Farm Business Plan development
- Farm Planning
- Developing financial statements
- Recordkeeping training
- Develop recordkeeping templates

This training provided farmers with the tools necessary to begin the development of their farm financial, business plan and the methods of maintaining records of their farm operations.

Income Tax Preparation for Farmers

In an effort to bring farmers in compliance with our local government tax laws, and having farmers licensed annually, the Virgin Islands Internal Revenue Bureau provided training in tax preparation.

The topics covered included:

- Preparation of an individual tax return (1040) with a schedule F
- Internal revenue guide to farming operation
- Farming Tax Exemptions

Vegetable Crops and Small Livestock Production

The UVI-Cooperative Extension Service, UVI-Agricultural Experiment Station and the Virgin Islands Department of Agriculture collaborated to conduct the training classes. The collaborating partners also provided risk management training courses for vegetable crop production (Fig. 2-5) and small livestock (Fig. 6-7) developing a program to reduce producer risk to maintain and enhance the development of the Virgin Islands meat and vegetable crop industry. The trainers provided onsite practical applications, instructions, demonstrations, farm assessment, practices in small livestock and crop management and existing or improved sustainable farming practices in order to reduce the risk of small livestock and crop producers in the Virgin Islands. The hands-on

activities allowed producers to 'learn by experience' and become knowledgeable in emerging farming technologies and practices.

Training was conducted on various farms on the island of St. Croix. On each of the farms an assessment was conducted to evaluate and strengthen the producer's knowledge of their farm operations and the utilization of emerging technologies and practices. The program used seven crops (watermelon, tomato, eggplant, okra, cucumber, bell pepper and cantaloupe), small livestock production (sheep, goats, poultry and pigs), improved forage management, farm business planning, recordkeeping and tax preparation to provide the participants with the tools needed to successfully manage an efficient farming enterprise. The program provided practical training in farm management, financial management, marketing, production, crop insurance and other risk management tools to educate Virgin Islands farmers on how to increase their production and income. The anticipated outcome is an improvement in our local food system, food security, and overall quality of life in the territory.

The crop production training included:

- Farm Layout
- Recordkeeping for Crop Production
- Soil and Water Conservation Practices
- Sustainable/Organic Crop Production and Management
- Nutrient Management
- Crop Rotation
- Integrated Pest Management for Vegetables
- Integrated Pest Management (Pest Scouting)
- Drip Irrigation

The livestock production training included:

- Farm Layout
- The Business of small Livestock Management
- Small Animals for Small Farms
- Small Livestock Identification and Record Keeping
- Pasture Management
- Livestock Nutrition/Health
- Veterinary Services
- Poultry Production and Management
- Sheep Production and Management
- Goat Production and Management
- Swine Production and Management
- Small Livestock Enterprise Budgets (sheep, goats, swine)
- Abattoir Procedures, Rules and Regulations

Conclusion

The training helped limited resource, socially disadvantaged farmers transition into productive and profitable farmers through the creation of new farming enterprises and the increased availability of high-quality, locally-grown food. The program trained producers in various methods of sustainable farming to reduce risks and increase crop, livestock and forage production. The program used the agriculture training as a means to create a social and economic

stimulus while improving the image of farming to attract and develop new farmers. The anticipated outcome is an improvement in the local food system, food security, and overall quality of life in the territory.



Fig. 1. Farm and financial management training.



Fig. 2. Vegetable seedling production training.



Fig. 3. Drip irrigation installation training.



Fig. 4. Transplanting vegetable seedlings training.



Fig. 5. Integrated pest management training.



Fig. 6. Poultry, swine, sheep, and goat production training.



Fig. 7. Veterinary and abattoir services training.